

A detailed rendering of the USS Enterprise NCC-1701-A from Star Trek: The Motion Picture, shown from a three-quarter perspective against a starry space background. The ship's saucer section is prominent, with the text 'USS ENTERPRISE' and 'NCC-1701' clearly visible on its top surface. The nacelles and secondary hull are also visible.

Debt Issuance/Capital Planning and the Star Trek (Kobayashi Maru)

Ohio APT Debt Seminar

[Star Trek Original Series Intro \(HQ\) – YouTube](#)

June 6, 2023¹

<https://www.youtube.com/watch?v=hdjL8WXjIG>

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Introduction

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[Star Trek Original Series Intro \(HQ\) - YouTube](#)

CAPITAL PLANNING

OAPT Seminar

June 6, 2023

Capital Planning

- Consider municipal infrastructure projects, facilities improvements, real property acquisition and capital outlay (equipment, vehicles, etc.)
- Need a capital project **forecast**, at least five years out; prioritizing the projects and outlining tentative construction/completion dates
- Determine/assign useful life (in years) to each project; ORC 133.20
- Estimated costs should be obtained from City Engineer, Service Director, department heads, etc.
- Priority project order is usually determined by the administration (Mayor & Council)

It is your responsibility (Finance Department) to provide the administration with sound financial opinions and support (data, schedules, etc.) as to the feasibility of each planned project or purchase. It is your duty to not be a “yes person”you must often be the “no person” with regard to spending and borrowing.

When determining how to pay for capital projects, you should consider all of the options below, and be very resourceful when searching for funds; i.e., talk with people both inside (department heads, engineer, others) and outside (MA, bankers, other governments and state agencies, peers, other) of your entity. The larger and more complex the project is, the more resourceful (creative perhaps) you must be. Financing alternatives for capital spending include, but are not limited to:

Funding Sources/Alternatives

Cash is King

Pay as you go; determine which fund(s) are appropriate for the specific project or purchase; General Fund may be used, with the necessary authority, for most if not all projects; good practice to transfer funds from the GF to the capital project fund, or the appropriate fund where the purchase will be recorded; other funds often involved in paying some or all of various capital projects, particularly infrastructure improvements include ARPA, Utility (Enterprise) Funds, Tax Increment Financing Funds, Capital Project Funds, etc. Again, you should maintain financial forecasts so that you can evaluate the impact on each fund that you are considering using toward certain projects

Discuss Advances vs Transfers

Resolution of Intent to Reimburse with Debt



Funding Sources/Alternatives

Grant Funding

- With assistance from the city engineer or others, see if the city is eligible for grants that may help pay for a portion of your project. There are a multitude of grants offered for many different purposes, available through many federal and state agencies, among other private entities as well, that can help fund substantial segments of your projects. It can be very tedious and confusing researching grant information, and subsequently completing grant applications. Many entities rely on their engineer or economic development people for grant application and research. Others employ a third party for this work.

***OWDA, SIB, NOACA, OPWC, ODNR,
ODOT/Federal Highway, etc.***

Funding Sources/Alternatives

State Agency Sponsored Loans

- Ohio Public Works Commission
www.pc.ohio.gov
- Ohio Water Development Authority
[Ohio Water Development Authority, Columbus, Ohio, USA \(owda.org\)](http://ohiowaterdevelopmentauthority.com)
- State Infrastructure Bank Loans
[State Infrastructure Bank \(SIB\) | Ohio Department of Transportation](http://ohioinfrastructurebank.com)

Joint Projects with other entities

- School District, neighboring municipality, third-party private entities, voluntary special assessments, other

Issue Debt

Combination of some or all of the above

Once the Project/Expenditure is Approved

- **Steps to Prepare for the Bid Award**
- **Certification of Funds**
- **Steps Following the Award of the Bid**
- **Documentation to Obtain and Maintain**
- **Other Factors – Financial Implications**
- **Project Close-out, Finalization**

City Of Middleburg Heights, Ohio



Five-Year Capital Improvement Plan

Last Updated 11/16/2022

City of Middleburg Heights, Ohio

FIVE YEAR CAPITAL IMPROVEMENT PLAN

UPDATED 11/16/2022

Capital Planning

The City of Middleburg Heights recognizes the importance of planning. It recognizes that prudent financial planning considers the multi-year implications of financial decisions. The City strives to maintain a long-term focus on its financial planning and stay mindful of the long-term objectives of the City. As such, the City's Capital Improvement Plan (CIP) is a five-year plan that has been developed to provide the City's highest capital priorities with a sustainable financing schedule. The CIP was developed to meet the needs of Middleburg Heights residents that depend upon reliable services for public health, jobs from economic development and the lifestyle amenities that define the quality of life within our community.

The multi-year focus creates the continuity needed to focus resources on long term strategic objectives in a decision environment that is typically dominated by the short-term pressures of the annual budget cycle. This continuity does not mean that the CIP is rigid and non-adaptive. Rather, the CIP provides a platform to understand the choices and consequences of possible budgetary changes before making decisions – which is what sound fiscal management and strategic planning is all about.

Ultimately, the CIP ensures elected officials and citizens that major capital decisions are fully considered before they are approved and funded.

Capital Improvement Funding

Capital improvements can be financed with operating revenues, bond proceeds, reserves (fund balances), lease purchase agreements, special assessments, and state/federal grants. The use of operating revenue to finance capital projects or equipment is sometimes referred to as “pay-as-you-go” financing and has been Middleburg Heights’ traditional method of addressing the community’s capital improvement needs.

At present, the City does not possess sufficient financial resources to both adequately meet its capital needs and maintain current levels of municipal services. Strategically, the City must either: 1) defer selected capital improvements; 2) deplete operating reserves

(fund balances) to fund immediate capital needs; 3) increase revenues; 4) issue debt; or 5) a combination of two or more of the above. These options demonstrate the inter-relationship that exists between revenues, operating expenses, and capital needs.

Current Capital Funding Sources

The City's capital improvements are largely funded by a portion of the City's income tax collections. The first 1% of the tax rate is split 80% to the General Fund, 10% to the Capital Improvements Fund, and 10% to the Streets/Infrastructure Improvements Fund less the amount of the debt service on the 2013 Neighborhood Streets Bonds. In rough numbers, that translates to \$1,200,000 to the Capital Improvements Fund which is used for machinery, equipment, facilities and land improvements. Roughly \$800,000 is deposited in the Streets/Infrastructure Improvements Fund for street repairs and other right-of-way infrastructure improvements each year.

Additionally, the City has additional sources of revenue available that are used for capital improvements. Cuyahoga County collects front foot charges/assessments for the maintenance and repair of our sanitary sewers, storm sewers, and waterlines. The \$2.00/front foot assessment for sanitary sewers generates approximately \$1,000,000 per year. The \$0.50/front foot assessment for storm sewers generates approximately \$300,000 per year and the \$0.20/front foot assessment for waterlines generates approximately \$100,000 annually. The NEORSD community cost share provides approximately \$250,000 each year for storm water projects.

Additionally, the City will continue to aggressively pursue grant funding opportunities to continue to invest in our communities' most pressing needs. In the past several years, we have been successful in receiving substantial grants from Cuyahoga County, NOACA, NEORSD and OPWC to address the City's most pressing flooding concerns and roadway improvements.

Plan Format

The CIP has been developed based on the current funding sources available. As such, included you will find separate documents for the: 1) Capital Improvements Fund; 2) Streets/Infrastructure Improvements Fund; 3) Sanitary Sewer Fund maintained by Cuyahoga County; 4) Storm Sewer Fund (County); 5) Waterline Fund (County); and 6) NEORSD Community Cost share program.

The Five-Year Capital Improvement Plan should be viewed as a living document reflecting the dynamics of an ever-changing environment that requires constant monitoring and adjustment as priority needs change over time. This process needs to be revisited and updated annually with the understanding that the City's annual budget may need to be modified from time to time in reaction to the transforming needs of the community.

Capital Improvements Fund (#401)

Capital Improvement Plan Highlights

- The proposed plan includes \$2.2 million of capital improvements in 2023.
- We are recommending transferring \$500,000 and advancing an additional \$200,000 into the Capital Improvements Fund from the General Fund to facilitate increased investment in equipment and facility improvements, most notably the replacement of the Fire Station roof and demolition of the existing police station.
- In 2020, the City entered into a five-year capital lease (\$1,007,927) of a “Quint” firetruck to replace the current pumper truck and provide another aerial component to the fleet. Payments began in 2021.
- In 2022, the City advanced funds from the General Fund to the Capital Improvements Fund for the Baldwin Creek Trail and is likely going to need to advance \$235,000 as we await reimbursement from NEORSD for the purchase of the vac-all truck in 2022.
- Having just completed the skylight replacement project at the Community Center that began in 2020, the current plan begins to address needed roofing repairs/replacements at the Fire Station, Community Center, and Service Garage over the next five years.
- The plan document also includes over \$9.5 million of projects that the City may consider over the next five years if additional funding becomes available.

City of Middleburg Heights
 Capital Improvements Fund (#401)
 Capital Project Plan 2023-2027
 AS OF 11/16/2022

Department	Description	SOURCE OF FUNDS	2023 Budget Plan	2024 Budget Plan	2025 Budget Plan	2026 Budget Plan	2027 Budget Plan	Projects to Consider if Addtl. Funding Available
Police	2023 Police Cruiser Replacement (Qty 3)	CASH	\$ 165,000.00					
Police	Motorola In-Car Video Systems (QTY 12)	CASH	\$ 81,250.48					
Police	MDT replacement (Qty 11)- (conversion to Motorola CAD system)	CASH	\$ 30,000.00					
Police	FingerPrint Machine Replacement	CASH	\$ 22,000.00					
Police	Taser Replacement & Five Yr Maint agreement (Inc. from 12 to 30)	CASH	\$ 22,800.00	\$ 22,800.00	\$ 22,800.00	\$ 22,800.00	\$ 22,800.00	
Police	2024 Police Cruiser Replacement (Qty 3)	CASH		\$ 165,000.00				
Police	2025 Police Cruiser Replacement (Qty 3)	CASH			\$ 165,000.00			
Police	2026 Police Cruiser Replacement (Qty 3)	CASH				\$ 165,000.00		
Police	2027 Police Cruiser Replacement (Qty 3)	CASH					\$ 165,000.00	
Police								
Police Total			\$ 321,050.48	\$ 187,800.00	\$ 187,800.00	\$ 187,800.00	\$ 187,800.00	\$ -
Fire	Pumper/Ladder "Quint" and Rescue Tools (5 YEAR CAP. LEASE \$1,007,927	CASH	\$ 211,610.95	\$ 211,610.95	\$ 211,610.95			
Fire	Kitchen Drain Redirect	CASH	\$ 24,500.00					
Fire	Utility Body - Pickup Truck	CASH	\$ 10,000.00					
Fire	Ambulance	MED TRANS FUND		\$ 380,000.00				
Fire	Stryker Cot Pro XT (2)	CASH		\$ 50,000.00				
Fire	LifePak (3)	CASH		\$ 30,000.00	\$ 30,000.00	\$ 30,000.00		
Fire	Heavy Duty Pickup Truck	CASH			\$ 68,000.00			
Fire	Ladder Truck (replace platform)	CASH						\$ 1,500,000.00
Fire	Paint Job Engine	CASH						\$ 200,000.00
Fire	Rear Garage Doors Replacement (QTY 3)	CASH						\$ 80,000.00
Fire	Heavy Duty Pickup/Stake Body	CASH						\$ 75,000.00
Fire	Garage Floor Bays	CASH						\$ 60,000.00
Fire	Trench Drain Installation	CASH						\$ 28,500.00
Fire	UV Glass Tint	CASH						\$ 11,600.00
Fire Total			\$ 246,110.95	\$ 671,610.95	\$ 309,610.95	\$ 30,000.00	\$ -	\$ 1,955,100.00
Recreation	Three (3) outdoor scoreboards - Baseball fields	CASH	\$ 20,000.00					
Recreation	Adaptive Playground Equipment	CASH	\$ 17,000.00					
Recreation	Outdoor Pool Waterpark Features	CASH	\$ 6,000.00					
Recreation-Programs	Hustler MDV (Utility Vehicle)	CASH		\$ 20,000.00				
Recreation	2024 Fitness Equipment Replacement	CASH		\$ 15,000.00				
Recreation	2025 Fitness Equipment Replacement	CASH			\$ 15,000.00			
Recreation	2026 Fitness Equipment Replacement	CASH				\$ 15,000.00		
Recreation	2027 Fitness Equipment Replacement	CASH					\$ 15,000.00	
Recreation	Script Middleburg Heights signage	CASH						\$ 50,000.00
Recreation	Change pool filter medium to glass	CASH						\$ 44,000.00
Recreation	Community Room (A) Presentation Video Board	CASH						\$ 25,000.00
Recreation	Indoor/Outdoor Movie Projection Screen	CASH						\$ 20,000.00
Recreation Total			\$ 43,000.00	\$ 35,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 139,000.00
Service	2023 Pick-up Truck Replacement	CASH	\$ 75,000.00					
Service	2 Dump Bodies	CASH	\$ 60,000.00					
Service	Zero-Turn Lawnmower	CASH	\$ 20,000.00					
Service	Salt Truck Replacement	CASH		\$ 195,000.00		\$ 195,000.00		
Service	Stump Grinding Machine	CASH				\$ 70,000.00		
Service	Chipper	CASH			\$ 52,000.00			
Service	2024 Pick-up Truck Replacement	CASH		\$ 65,000.00				
Service	Sign Shop Table Plotter	CASH		\$ 17,000.00				

City of Middleburg Heights
 Capital Improvements Fund (#401)
 Capital Project Plan 2023-2027
 AS OF 11/16/2022

Department	Description	SOURCE OF FUNDS	2023 Budget Plan	2024 Budget Plan	2025 Budget Plan	2026 Budget Plan	2027 Budget Plan	Projects to Consider if Addtl. Funding Available
Service	2025 Pick-up Truck Replacement	CASH			\$ 65,000.00			
Service	Tire Changing Machine	CASH			\$ 35,000.00			
Service	2026 Pick-up Truck Replacement	CASH				\$ 65,000.00		
Service	2027 Pick-up Truck Replacement	CASH					\$ 65,000.00	
Service	Leaf Collection Body - Hook-lift installation for Salt Truck replacements	CASH						\$ 100,000.00
Service	Floor Scrubber	CASH						\$ 50,000.00
Service	Roller and Trailer	CASH						\$ 30,000.00
Service	Tire Balancing Machine	CASH						\$ 21,000.00
Service Total			\$ 155,000.00	\$ 277,000.00	\$ 152,000.00	\$ 330,000.00	\$ 65,000.00	\$ 201,000.00
Fac. Maint - Fire Station	Flat & Shingle Roofs	CASH	\$ 375,000.00					
Fac. Maint - Campus Improvements	Police Station Demolition	CASH	\$ 200,000.00					
Fac. Maint - City Hall	2023 Parking Lot Repairs - Municipal Campus	CASH	\$ 50,000.00					
Fac. Maint - Campus Improvements	Fiber/Conduit Directional Boring	CASH	\$ 50,000.00					
Fac. Maint-Service Center	Truck Wash Chassis Bath/Controls	CASH	\$ 40,000.00					
Fac. Maint-Service Center	Fuel System Controller/Software	CASH	\$ 30,000.00					
Fac. Maint - City Hall	Gazebo Lighting/Painting	CASH	\$ 24,000.00					
Fac. Maint - Service Garage	NO/CO Sensor Replacement	CASH	\$ 14,000.00					
Fac. Maint-Community Center	Replace Indoor Vortex Pump	CASH	\$ 10,000.00					
Fac. Maint-Community Center	Natorium Roof Replacement - Both Elevations	CASH			\$ 600,000.00			
Fac. Maint - City Hall	2024 Parking Lot Repairs - Municipal Campus	CASH		\$ 50,000.00				
Fac. Maint-Community Center	Multipurpose Gym Floor (Rubber)	CASH		\$ 49,000.00				
Fac. Maint - City Hall	HVAC Replacement - Council Office	CASH		\$ 10,000.00				
Fac. Maint-Community Center	Community Room Blinds Replacement	CASH		\$ 10,000.00				
Fac. Maint-Community Center	Recoat Community Center Flat Roof	CASH				\$ 440,000.00		
Fac. Maint - City Hall	2025 Parking Lot Repairs - Municipal Campus	CASH			\$ 50,000.00			
Fac. Maint - City Hall	HVAC Replacement - Finance Office	CASH			\$ 10,000.00			
Fac. Maint - Service Garage	Recoat Service Center Flat Roof	CASH					\$ 516,870.00	
Fac. Maint - City Hall	2026 Parking Lot Repairs - Municipal Campus	CASH				\$ 50,000.00		
Fac. Maint - Fire Station	HVAC Replacement - Fire Watch Office	CASH				\$ 10,000.00		
Fac. Maint - City Hall	2027 Parking Lot Repairs - Municipal Campus	CASH					\$ 50,000.00	
Fac. Maint-Community Center	Community Center Enhancements (flooring, wallcoverings, seating, etc)	CASH						Varies on scope
Fac. Maint-Community Center	Senior Center Addition	DEBT ISSUANCE						\$ 4,000,000.00
Fac. Maint-Middleburg Commons	Property Acquisition/Demolition and Development	CASH						\$ 2,000,000.00
Fac. Maint - City Hall	City Hall Lobby/General Facility Upgrades	CASH						\$ 250,000.00
Fac. Maint - City Hall	Connect City Hall to Generator	CASH						\$ 242,000.00
Fac. Maint - Campus Improvements	Amphitheater Improvements	CASH						\$ 150,000.00
Fac. Maint-Service Center	Brick Work (Tuck Pointing)	CASH						\$ 120,000.00
Fac. Maint-Service Center	Dumpster Enclosure	CASH						\$ 80,000.00
Fac. Maint-Community Center	Community Room Wallcovering Updates	CASH						\$ 75,000.00
Fac. Maint-Community Center	Community Room Window Treatment Updates	CASH						\$ 60,000.00
Fac. Maint - City Hall	Window Replacement	NOPEC GRANTS						\$ 50,000.00
Fac. Maint - City Hall	Wash and Seal Masonry	CASH						\$ 30,000.00
Fac. Maint-Community Center	Front Doors	CASH						\$ 30,000.00
Fac. Maint - Campus Improvements	Pavilion Waterline Extension (Guesstimate)	CASH						\$ 25,000.00
Fac. Maint-Community Center	Classroom Tile Replacement	CASH						\$ 23,000.00
Fac. Maint-Community Center	Steam Room wall replacement	CASH						\$ 21,000.00
Fac. Maint-Service Center	Clean Burn - Waste Oil furnace	CASH						\$ 20,000.00
Fac. Maint-Service Center	Sprinkler Heads (above Garage Doors)	CASH						\$ 7,000.00

City of Middleburg Heights
Capital Improvements Fund (#401)
Capital Project Plan 2023-2027
AS OF 11/16/2022

Department	Description	SOURCE OF FUNDS	2023 Budget Plan	2024 Budget Plan	2025 Budget Plan	2026 Budget Plan	2027 Budget Plan	Projects to Consider if Addtl. Funding Available
Fac. Maint - City Hall	Automated Doors - City Hall entrance	CASH						\$ 6,000.00
Fac. Maint-Service Center	New Dumpster Entrance at Service Center (obtaining quotes)	CASH						\$ -
Fac. Maint - Service Garage	Wash and Seal Masonry	CASH						\$ -
Service - Fac. Maint Total			\$ 793,000.00	\$ 119,000.00	\$ 660,000.00	\$ 500,000.00	\$ 566,870.00	\$ 7,189,000.00
General Gov't	City-wide Camera System updates	CASH	\$ 15,000.00					
General Gov't	2023 Computer System Upgrades - (PCs, wireless expansion, network upgr	CASH	\$ 25,000.00					
General Gov't	Finance - Accounting Software	CASH	\$ 55,000.00	\$ 55,000.00				
General Gov't	2023 Tree Planting & Replacement- Spring & Fall	CASH	\$ 18,000.00					
General Gov't	2024 Tree Planting & Replacement- Spring & Fall	CASH		\$ 18,000.00				
General Gov't	2025 Tree Planting & Replacement- Spring & Fall	CASH			\$ 18,000.00			
General Gov't	2026 Tree Planting & Replacement- Spring & Fall	CASH				\$ 18,000.00		
General Gov't	2027 Tree Planting & Replacement- Spring & Fall	CASH					\$ 18,000.00	
General Gov't	Council Chambers Sound System/Audio Recording Upgrades	CASH						\$ 25,000.00
General Gov't	Advance Repayment Reimb. (Baldwin Creek Trail)	CASH	\$ 323,915.00					
General Gov't	Advance Repayment Reimb. (Vac Truck Reimb NEORSD)	CASH	\$ 235,000.00					
General Gov't	Advance Repayment	CASH		\$ 200,000.00				
General Gov't Total			\$ 671,915.00	\$ 273,000.00	\$ 18,000.00	\$ 18,000.00	\$ 18,000.00	\$ 25,000.00
Grand Total			\$ 2,230,076.43	\$ 1,563,410.95	\$ 1,342,410.95	\$ 1,080,800.00	\$ 852,670.00	\$ 9,509,100.00
Beginning Fund Balance (Actual)			\$ 100,815.00	\$ 113,738.57	\$ 204,202.62	\$ 173,132.92	\$ 442,264.41	\$ 979,273.84
Income Tax Funding			\$ 1,213,000.00	\$ 1,248,875.00	\$ 1,286,341.25	\$ 1,324,931.49	\$ 1,364,679.43	
Other Revenue Sources - Misc. Revenue			\$ 25,000.00	\$ 25,000.00	\$ 25,000.00	\$ 25,000.00	\$ 25,000.00	
Other Sources: FEMA Grant Fund								
Other Sources: Medical Transport Fund				\$ 380,000.00				
Bond/Note Proceeds				\$ -				
Grant Funding			\$ 305,000.00					
Advance In from General Fund			\$ 200,000.00					
Transfer In from General Fund			\$ 500,000.00					
Ending Fund Balance (Est.)			\$ 113,738.57	\$ 204,202.62	\$ 173,132.92	\$ 442,264.41	\$ 979,273.84	\$ (8,529,826.16)

Streets/Infrastructure Improvements Fund (#402)

Capital Improvement Plan Highlights

- In addition to the income tax funding, the current plan assumes the use of \$500,000 of fund balance reserves to expand our street improvement program in 2023 beyond the cash funding available for a total of \$1.3M.
- In 2022, the City entered into \$4.2M worth of street improvement project contracts. Of that \$4.2M, approximately \$2.3M will be completed in 2023 as we repair Cherokee Trail, Claremont Avenue, Fairweather, and complete the asphalt work on James and Winona. This work will be in addition to the \$1.3M proposed for 2023.
- The proposed plan calls for improvements along Smith Road to create a downtown “Main Street” concept for the revitalization of the Southland Shopping District. \$500,000 is being proposed to be appropriated for development of the final engineering plans & specs from the Streets/Infrastructure Improvements fund. The initial estimates for the project were \$6.4M, of which \$2,477,327 is being proposed to be appropriated from the Local Fiscal Recovery Fund as those ARPA grant funds were received from the Federal government and Cuyahoga County. The City also received a \$280,000 TLCI grant from NOACA for this project. Engineering is currently underway to further define the scope of the project.
- We are recommending transferring \$350,000 into the Streets/Infrastructure Improvements Fund from the General Fund to facilitate the replacement of traffic poles on Bagley Road from City Hall to Craigmere.
- The City is currently undertaking many sewer related projects that are being funded by the NEORSD and the OPWC. Timing of these projects and grant reimbursements will cause the City to have to advance funds from the General Fund as we await reimbursement from the grantors. It is probable that future advances will have to occur pending the timing of these reimbursements.

City of Middleburg Heights
Streets/Infrastructure Improvements Fund (#402)
Capital Project Plan 2023-2027
AS OF 11/16/2022

Department		Description	SOURCE OF FUNDS	2023 Budget Plan	2024 Budget Plan	2025 Budget Plan	2026 Budget Plan	2027 Budget Plan	Projects to Consider if Addtl. Funding Available
General Gov't	Indian Creek Sanitary Relief Sewer		CASH						
General Gov't	2023 Street Program		CASH	\$ 1,300,000.00					
General Gov't	Southland Redevelopment Final Engineering Plans/Specs		CASH	\$ 500,000.00					
General Gov't	Traffic Pole Replacements - City Hall to Craigmere		CASH	\$ 325,000.00					
General Gov't	2023 Eastland Road OPWC Repayment		CASH	\$ 41,000.00					
General Gov't	2023 Sidewalk Program		CASH	\$ 45,000.00					
General Gov't	2024 Street Program		CASH		\$ 800,000.00				
General Gov't	2024 Eastland Road OPWC Repayment		CASH		\$ 41,000.00				
General Gov't	2024 Sidewalk Program		CASH		\$ 45,000.00				
General Gov't	2025 Street Program		CASH			\$ 850,000.00			
General Gov't	2025 Eastland Road OPWC Repayment		CASH			\$ 41,000.00			
General Gov't	2025 Sidewalk Program		CASH			\$ 45,000.00			
General Gov't	2026 Street Program		CASH				\$ 875,000.00		
General Gov't	2026 Eastland Road OPWC Repayment		CASH				\$ 41,000.00		
General Gov't	2026 Sidewalk Program		CASH				\$ 45,000.00		
General Gov't	2027 Street Program		CASH					\$ 925,000.00	
General Gov't	2027 Eastland Road OPWC Repayment		CASH					\$ 41,000.00	
General Gov't	2027 Sidewalk Program		CASH					\$ 45,000.00	
General Gov't	Southland Redevelopment - "Main Street" Concept		VARIOUS						\$ 6,400,000.00
General Gov't	Smith Road Resurfacing		COUNTY?						\$ 900,000.00
General Gov't	First Ave. - Berea to Eastland		ASSESSMENT?						\$ 3,000,000.00
General Gov't	Traffic Signals - Pearl Road Corridor		NOACA?						Cost/Scope Unknown
General Gov't	Sidewalks - Areas without current sidewalks		Prop. Owner/Assess						Varies based on scope
Grand Total				\$ 2,211,000.00	\$ 886,000.00	\$ 936,000.00	\$ 961,000.00	\$ 1,011,000.00	\$ 10,300,000.00
Beginning Fund Balance (Actual)				\$ 1,038,000.00	\$ 34,000.00	\$ 41,175.00	\$ 35,616.25	\$ 43,447.74	\$ 43,447.74
Income Tax Funding				\$ 837,000.00	\$ 873,175.00	\$ 910,441.25	\$ 948,831.49	\$ 988,579.43	
Other Revenue Sources - Misc. Revenue				\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	
Other Revenue Sources - Grants									
Other Sources: Reimbursements									
Bond/Note Proceeds									
Advance in From General Fund									
Transfer In from General Fund				\$ 350,000.00					
Ending Fund Balance (Est.)				\$ 34,000.00	\$ 41,175.00	\$ 35,616.25	\$ 43,447.74	\$ 41,027.17	\$ (10,256,552.26)

Sanitary Sewer Fund (County)

Capital Improvement Plan Highlights

- Each year the \$2.00 per front foot assessment generates approximately \$1,000,000 annually to be used for the maintenance and repair of the City's sanitary sewer lines.
- Each year, based on its contract with the City of Middleburg Heights, the County Sanitary Engineer's office performs routine maintenance, cleaning, and inspection services for the City. That cost estimate varies based on annual activity; however based on past history those costs are estimated at \$875,000 each year.
- The City is currently working with Mackay Engineering and R2O to identify solutions to the Indian Creek/Gerald Sanitary relief sewer projects. Grant and loan funding was provided by NEORSD and OPWC amounting to approximately \$3.7M. Current estimates for the whole project are in the \$10.5M range.

QUESTIONS

- Thank you to Jason Stewart, Finance Director,
City of Middleburg Heights, and to the City of Avon

Topics

- Kinds of Debt & Debt Limitations
- Borrowing
- Federal Tax Law Matters
- Federal Securities Law Matters

Kinds of Debt and Debt Limitations

Kinds of Debt and Debt Limitations

- State law dictates the rules for most issuers:
 - Limits kind and amount of debt that can be issued
 - Places fiscal responsibility on its officials
 - Protects taxpayers from unlimited debt burden
 - Legislation required to authorize borrowing
 - Legislation must authorize security, source of repayment and other terms

Kinds of Debt

- General Obligations
 - Bonds vs. Notes
- Lease-Purchase Financing
- Revenue (Special) Obligations

General Obligations – Security and Sources

- Secured by Property Taxes (and all other resources of issuer)
 - Voted
 - Unvoted
- Full Faith and Credit
 - Repayment may come from Other Available Revenues
 - Municipal Income Tax
 - Special Assessments for the Project Financed
 - Other Nontax Revenues (Enterprise Funds)
 - Exceptions
 - Taxes Limited to Particular Purpose (e.g., motor vehicle fuel and license taxes)
 - Pledged Utility Revenues
 - Special assessments for specific projects

Statutory Limitations – GO Debt

▪ Direct Debt Limitation

- ✓ Based on the Assessed Value of all property in the community as listed and assessed for taxation
 - Unvoted GO debt - may not exceed 5½%
 - Voted AND unvoted GO debt - may not exceed 10½%

- ✓ Exempt Debt - Debt not included in the direct debt limit calculation
 - Self-supporting GO debt, i.e. revenues from the facilities financed are sufficient to pay applicable operating and maintenance expenses and related debt service and other requirements
 - Municipal Income Tax Covenant
 - Utility revenue and other non-general obligation debt
 - Bonds issued in anticipation of the collection of special assessments
 - Note issues in anticipation of the collection of current revenues or in anticipation of the proceeds of a specific tax levy
 - Notes issued for certain emergency purposes
 - Bonds issued to pay final judgments

General Financial Statement

GENERAL FINANCIAL STATEMENT
City of _____, Ohio
\$9,000,000 Capital Facilities Bonds, Series 2023

I, the fiscal officer of the City of _____, Ohio, certify that the following statements are true and correct:

1. The tax valuation of the City (as shown by the tax lists and duplicates for the year 2022, which are the latest at this date).....	\$1,327,270,230
2. (a) Total principal amount of all outstanding bonds and notes of the City, including the captioned issue(s) and excluding any bonds or notes to be retired by the captioned issue(s)(*).....	\$ 60,285,000
(b) Of that total, the total of voted and unvoted general obligation bonds and notes.....	\$ 42,675,000
3. Principal amount of exempt securities included in item 2(a):	
(a) Bonds and notes issued in anticipation of the levy or collection of special assessments (excluding the City's portion).....	\$ -0-
(b) General obligation bonds and notes that are "self-supporting securities" as defined in R.C. 133.01 (LL):	
<u>Category</u>	\$
.....	\$
Total	\$ -0-
(c) Securities issued to pay final judgments and settlements.....	\$ -0-
(d) Revenue, mortgage revenue and excess condemnation bonds issued under §§ 5, 10 or 12 of Article XVIII of the Constitution (R.C. 133.05(B)(4)).....	\$ -0-
(e) Notes issued in anticipation of the collection of current revenues under R.C. 133.10.....	\$ -0-
(f) Notes issued in anticipation of voted tax levy proceeds under R.C. Chapter 5705.....	\$ -0-
(g) Securities to extent authorizing legislation contains covenants to appropriate, levy and collect municipal income taxes (R.C. 133.05(B)(7)).....	\$ 26,725,000
(h) Urban renewal tax increment bonds issued under R.C. Chapter 725.....	\$ -0-
(i) Voted bonds and notes issued for urban redevelopment that do not exceed 2% of tax valuation (R.C. 133.05(B)(6)).....	\$ -0-
(j) Securities evidencing loans from State Capital Improvements Fund (R.C. Chapter 164).....	\$ -0-
(k) Federal aid securities (R.C. Chapter 139).....	\$ -0-
(l) Voting machine or vote tabulating equipment notes (R.C. 3506.03, 3506.02).....	\$ -0-
(m) Other (Nontax Revenue/TIF/Library/Other).....	\$ 25,329,219
4. Total of item(s) 3(a) to (m).....	\$ 52,054,219
5. 10-1/2% of tax valuation.....	\$ 139,363,374
6. Total principal amount of voted and unvoted bonds and notes subject to 10-1/2% overall debt limitation [2(a) minus 4].....	\$ 8,230,781
7. Debt leeway (**) within 10-1/2% limitation [5 minus 6].....	\$ 131,132,593
8. 5-1/2% of tax valuation.....	\$ 72,999,862
9. Total principal amount of unvoted bonds and notes subject to 5-1/2% unvoted debt limitation.....	\$ 8,230,781
10. Debt leeway (**) within 5-1/2% unvoted debt limitation [8 minus 9].....	\$ 64,769,081

(*) Including the amount of bonds and notes apportioned to the City and excluding the amount of bonds and notes apportioned to another municipal corporation, as a result of the acquisition or loss of territory. Also excluding any hospital revenue bonds or industrial development bonds issued under R.C. Chapter 140 or 165, respectively.

(**) Debt leeway determined without considering money in the Bond Retirement Fund.

Debt Limitations

- Indirect Debt Limit (“ten-mill” limitation)

- Applies to Debt Service on Unvoted General Obligation Debt
- Constitution and Ohio Revised Code 5705.02
- Municipal charter limitation may be different
- *Article XII, Section 11*
 - “No bonded indebtedness of the state, or any political subdivision thereof, shall be incurred or renewed unless, in the legislation under which such indebtedness is incurred or renewed, provision is made for levying and collecting annually by taxation in amounts sufficient to pay the interest on said bonds, and to provide a sinking fund for their final redemption at maturity.”
- *Article XII, Section 2*
 - “No property, taxed according to value, shall be so taxed in excess of 1% of its true value in money for all state and local purposes, but laws may be passed authorizing additional taxes to be levied outside of such limitation either when approved by at least a majority of the electors of the taxing district voting on that proposition, or when provided for by the charter of a municipal corporation.”

Supplemental Financial Statement

Squire Patton Boggs (US) LLP
CLEVELAND * COLUMBUS * CINCINNATI

SUPPLEMENTAL FINANCIAL STATEMENT (UNVOTED GENERAL OBLIGATION BONDS AND NOTES)

I, County Auditor of _____ County, Ohio, certify in connection with the following proposed issue of Bonds: Issuer: City of _____, Ohio \$9,000,000 Capital Facilities Bonds, Series 2023, Dated May 2, 2023, that:

The tax rates required to produce an amount to pay the highest annual aggregate debt charges for the proposed issue and all other general obligation securities of the Issuer and the subdivisions overlapping it, which are payable from taxes subject to the 10-mill limitation of Article XII, Section 2, Ohio Constitution and applicable Revised Code provisions, based on the facts set forth below *and assuming that all levies were to be made for those debt charges* on the general tax list and duplicate, are as follows:

Overlapping Subdivisions	Tax Valuation	Bonds and Notes Outstanding Payable from Taxes Inside 10-Mill Limitation	Present Principal Amount	Debt charges for calendar year in which they will be the highest (2028)		Required Tax Rate in Mills for Two Previous Columns
				For Principal	For Interest	
_____ County	\$37,609,105,840	(a) Special Assessment Bonds and Notes. (b) All other Bonds and Notes.	None \$176,141,035	None \$17,783,011	None \$2,726,957	0.0000 0.5453
City of _____	\$1,327,270,230	(a) Special Assessment Bonds and Notes. (b) All other Bonds and Notes.	None \$33,675,000	None \$1,900,000	None \$721,065	0.0000 1.9748
_____ City School District	\$3,544,954,560	Bonds and Notes.	\$1,334,001	None	None	0.0000
Township (if any)	None	Bonds and Notes.	None	None	None	0.0000
_____ Joint Vocational SD	\$39,595,199,910	Bonds and Notes.	\$56,905,000	\$5,540,000	\$943,238	0.1638
		Proposed Issue	\$9,000,000	\$260,000	\$322,383	0.4388
					Total	0.1637

INSTRUCTIONS:

1. When Notes constitute the proposed issue or are otherwise included above, use the estimated debt charges for the Bonds anticipated by the Notes as described in the note legislation.
2. If the Issuer is a county, the information should relate to the county, and the combination of overlapping city/village, school district, township and other political subdivisions requiring the highest millage for debt charges inside the 10-mill limitation.
3. Do not include voted bonds or notes.
4. Fill in all blanks, using the word "NONE" where applicable.
5. Include all required millage for debt charges even though no taxes are currently levied for those debt charges.

Lease-Purchase Financing

- Lease-Purchase Financing

- Types of Assets Financed: Equipment and Buildings
- If Structured Properly, Not “Debt” for State Law Purposes
- Subject to Annual Appropriation
- Can help issuers stay within debt limits
- Less Secure, Higher Borrowing Cost
- No New Tax Levied as Source of Payment
- Publicly marketed as COPs

Revenue Obligations

- Revenue (or Special) Obligations
 - Examples
 - Utilities
 - Income Tax or Sales Tax Supported Obligations
 - Sold without voter approval
 - Not subject to debt limitations
 - Trust Indenture
 - Coverage Covenants
 - Debt Service Reserve Fund
 - Additional Bonds Test

Borrowing

Ohio Municipal Advisory Council

<http://www.ohiomac.com/Rates/GuideToMunicipalDebt.pdf>

Borrowing - Participants

Underwriter Investment Bankers

- Perform due diligence on disclosure
- Provide financing plan assistance
- Provide rating agency & bond insurer preparation
- Provide investment advice

Sales Force - Market the bonds

Issuer

- Approve bond legislation
- Assist with preparation of disclosure data
- Develop financing plan
- Make rating & insurance presentations (if applicable)
- Make bond payments

Municipal Advisor

- Provide financing plan assistance
- Provide rating agency & bond insurer preparation
- Provide investment advice

Bond Counsel (Legal Opinion)

- Prepare bond resolution/ordinance
- Provide Official Statement/disclosure preparation assistance
- Prepare various deal related legal documents
- Provide legal opinion to investors

Borrowing - Participants

Rating Agencies/ Credit Enhancement

- Review credit worthiness of the Issuer
- Rating agencies issue bond rating

Trustee/Registrar (P&I Payments)

- Authenticate bonds
- Receive interest and principal payments from Issuer
- Make interest and principal payments to investors

Investors

- Purchase bonds
- Receive interest and principal payments from paying agent

MSRB Education Center

https://www.msrb.org/Education-Center?f%5B0%5D=ed_center_format%3Aremote_video

Bond Anticipation Notes (BANs)

General obligation bond anticipation notes, commonly referred to as “BANs”, are securities issued in anticipation of the issuance of bonds and authorized as set forth in Section 133.22 ORC. Security for the payment of the debt charges on such BANs when due includes undertakings of the taxing authority of the subdivision to (i) apply the proceeds from the sale of the anticipated bonds or any renewal BANs, and any remaining proceeds of the initial BANs, to the payment of debt charges on the BANs and (ii) levy annually the same voted or unvoted tax that would have been levied if the anticipated bonds had been issued without the prior issuance of the BANs. BANs, except special assessment BANs (described below) issued under Section 133.17 ORC, may be renewed from time to time until: (i) the expiration of two hundred forty months from the date of original issue or, if a shorter period, the maximum maturity of the anticipated bonds plus five years; or (ii) the disposition of any litigation that prevents the sale or issuance of the anticipated bonds. When BANs, other than special assessment BANs, are outstanding later than the last day of December of the fifth year following the date of issuance of the original issue, (i) the period in excess of those five years must be deducted from the last permitted maturity of the bonds in anticipation of which the BANs are issued, and (ii) a portion of the principal of the BANs must be paid in annual amounts equal to the principal amount that would have been paid annually if bonds had been issued after the fifth year.

Borrowing – Components of BANs

- Components of BANs (Municipal Securities)
 - Principal or Par Amount
 - Maturity Date (typically one year or less)
 - Interest Payment Date (Annual)
 - Interest Rate (Fixed Rate)
 - Redemption Provisions

Borrowing – Components of Bonds

- Components of Bonds (Municipal Securities)
 - Principal or Par Amount
 - Maturity Date
 - Interest Payment Date (Semi-annual)
 - Interest Rate (Fixed Rate)
 - Redemption Provisions

Borrowing – Maximum Maturity

<https://codes.ohio.gov/ohio-revised-code/section-133.20>

- ABC Municipality is issuing \$10M for a new Police Facility
 - Cost Detail:
 - Land acquisition = \$1,000,000
 - Furniture, Fixtures and Equipment = \$1,000,000
 - Construction of building = \$8,000,000
 - Maximum Maturity Per ORC 133.20
 - Land = 30 years
 - F,F&E = 10 years
 - Buildings = 30 years
- **Calculation is as follows** (Weighted Avg. Method):
 - Land = $\$1/\$10 = 10\%$ 10% x 30 yrs.
 - FF&E = $\$1/\$10 = 10\%$ 10% x 10 yrs.
 - Building = $\$8/\$10 = 80\%$ 80% x 30 yrs.
- **Maximum Maturity of the Issuance approx. 27 yrs.**

Federal Tax Matters

Federal Tax Matters

• **Tax Exemption Matters**

- Exclusion of Interest from Gross Income for Federal Income Tax Purposes
- State Income Tax Exemption
- Qualified Tax-Exempt Obligations (QTEOs)
 - \$10,000,000 per year and per issue limitation
 - Attractiveness to Financial Institutions
 - Deductibility of Interest Carrying Cost (in addition to exclusion of interest from gross income)
- Reimbursement of Prior Expenditures
 - Declaration of Official Intent

Federal Tax Matters

- **Arbitrage and Rebate Matters**

- Arbitrage is basically investing the proceeds of tax-exempt securities at a taxable yield in excess of the yield on those securities
 - Municipalities, townships, counties, etc. are not taxpayers
 - If issuer earns arbitrage, and cannot fit within an exception to the arbitrage rule, the bonds are “arbitrage bonds”. Arbitrage bonds are taxable
 - Requirement to “rebate” positive arbitrage to federal treasury, subject to exceptions
 - Negative arbitrage environment for many years - changing
 - Exceptions exist to yield restriction and rebate rules – mainly relating to how quickly bond proceeds are spent
 - Don’t issue bonds too early, and don’t issue too much

Federal Tax Matters

- **New Money Issues**

- **Refundings**

- Purposes: Reducing Interest Expense, Restructuring, and Removing Restrictive Covenant
- Refunding *ing* Bonds v. Refunded *ed* Bonds
- Kinds of Refundings:
 - Current Refundings
 - Pay off Refunded Bonds within 90 days of issuance of Refunding Bonds
 - Advance Refundings
 - Refunding securities issued more than 90 days in advance of payment of Refunded Bonds
 - Eliminated (sort of) in 2017

Federal Securities Law Matters

Federal Securities Law Matters

- Tower Amendment
- Exception: Anti-Fraud Provisions (SEC Rule 10b-5)
- SEC Rule 15c2-12 (Primary Offering Disclosure)
- SEC Rule 15c2-12 (Continuing Disclosure)
 - Annual Information Filing
 - Audited Financial Statements
 - Material Event Notices
 - Electronic Municipal Market Access (EMMA)
- SEC's Municipal Continuing Disclosure Cooperation (MCDC) Initiative

Theory of Public Finance of Capital Projects

▪ Why do communities issue debt?

- ✓ Costs are too high for cash payment of a project
- ✓ Spread the cost of a project over current and future generations
 - Benefits are spread over several generations - - costs should be as well
 - One generation should not subsidize the next
- ✓ Payments should equate to useful life of assets or less
- ✓ Example of public purposes for which debt is issued:
 - Building schools - both for K-12 and higher educational institutions
 - Public Purpose Improvements (Building, Recreation, Sewer, Energy Conservation, etc)
 - Road projects - new roads and highways as well as maintenance on existing roads
 - Public power projects
 - Sewer & Water and other utilities
 - Economic Development

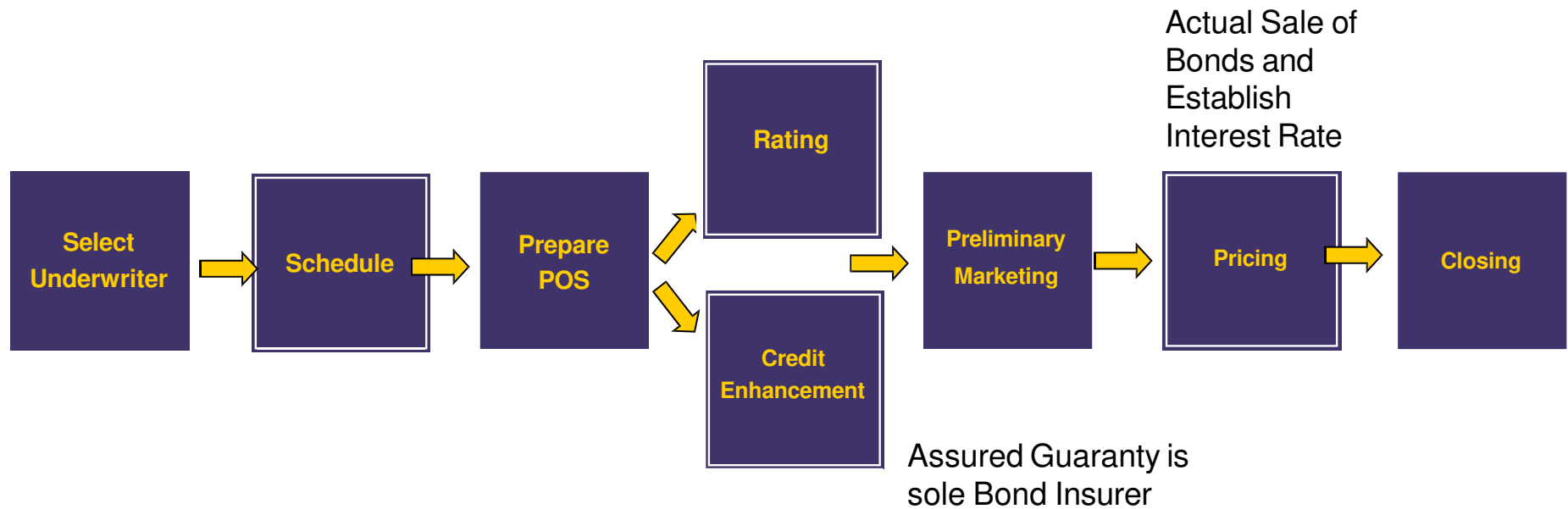
Method of Sale – Disclosure Requirements

- Public Offering
 - ❖ Negotiated sale – Requires POS and rating/credit enhancement
 - ❖ Competitive sale – Requires POS and rating/credit enhancement
- Limited Offering
 - ❖ Negotiated sale – POS or Limited Offering Memorandum
- Private Placement
 - ❖ Negotiated sale to sophisticated institutional buyer –requires data and info similar to POS; not as comprehensive
- Bank Purchase
 - ❖ Form of private placement - Negotiated sale to sophisticated institutional buyer –requires data and info similar to POS; not as comprehensive

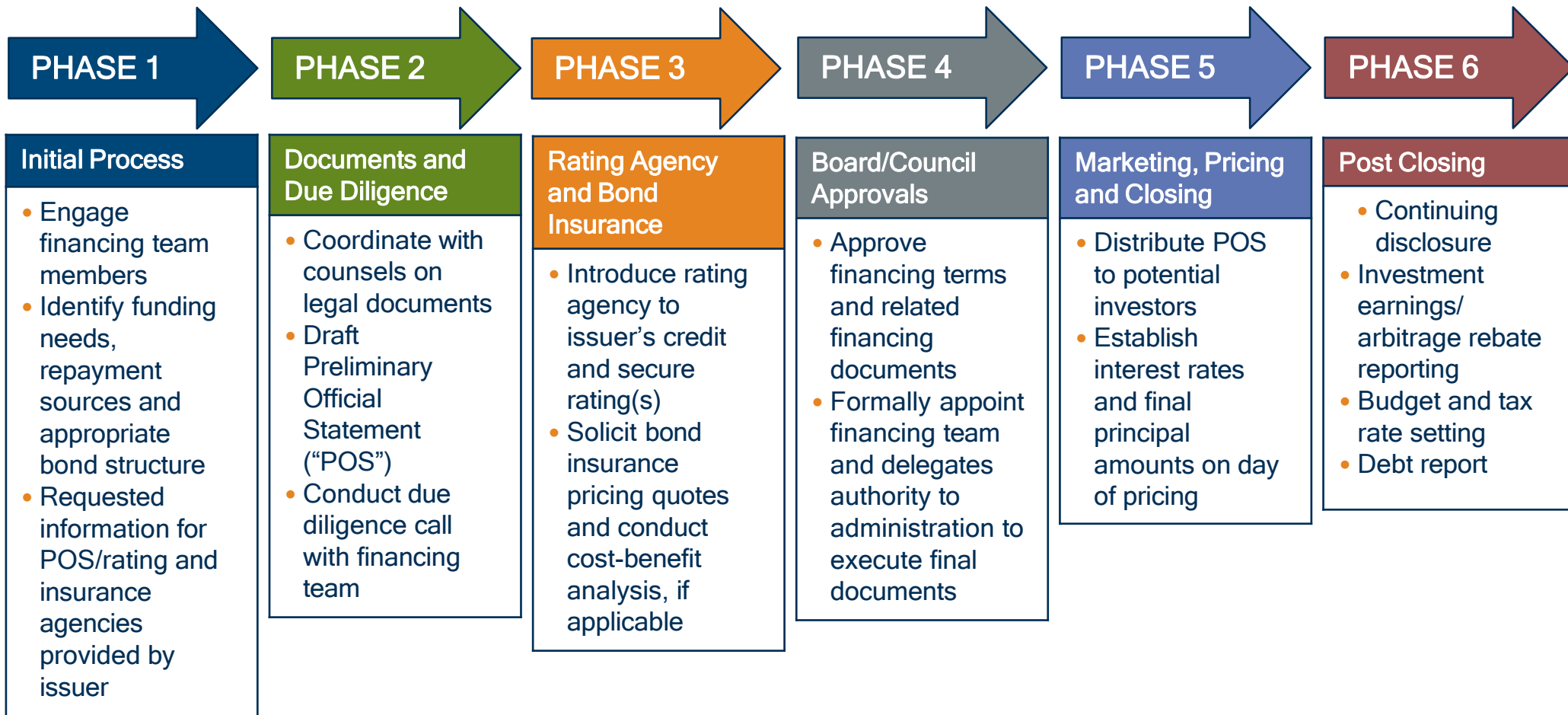
Underwriting Firm's Role in Debt Financing



Summary of Deal Flow- Negotiated Sale

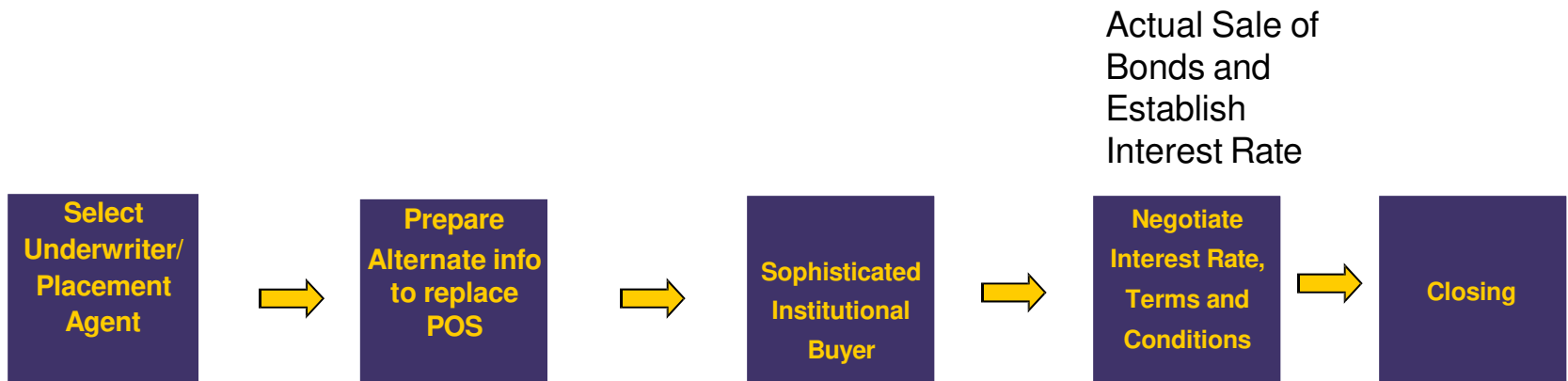


Timeline of Bond Sale

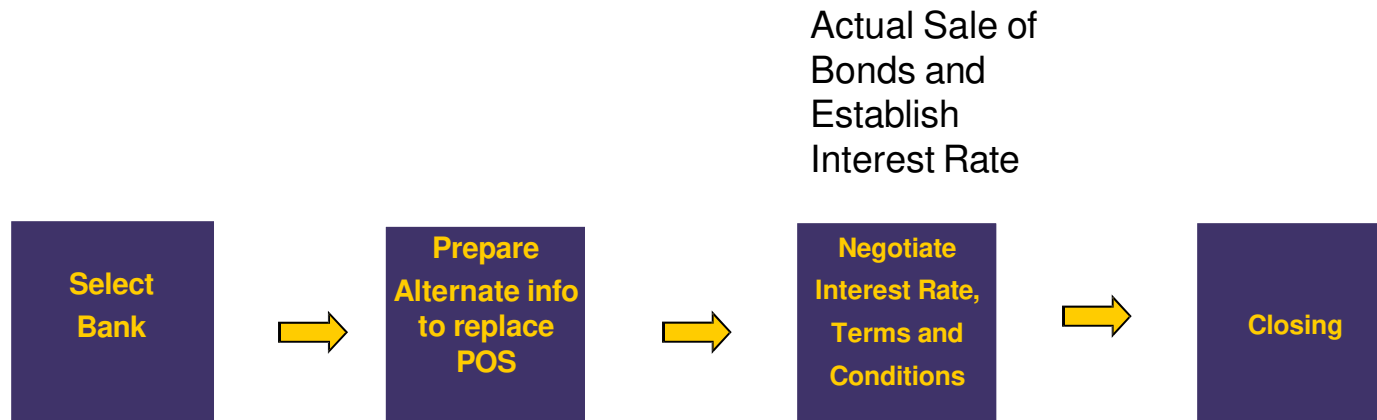


The actual timeline for conducting a bond sale depends upon the Issuers objectives, the ability to coordinate other required efforts and market forces

Summary of Deal Flow- Limited Offering/Private Placement



Summary of Deal Flow- Bank Purchase



Determining the Optimal Structure



There are two components of structuring your bond issue:

Component

Objectives

1. Plan of Issuance

- Ensure availability of funds when needed
- Maximize construction period investment earnings
- Minimize/avoid arbitrage rebate

2. Plan of Repayment

- Manage impact of tax increase
- Optimize benefits of structuring features (calls, discounts, premiums, etc.)
- Consider future capital plans

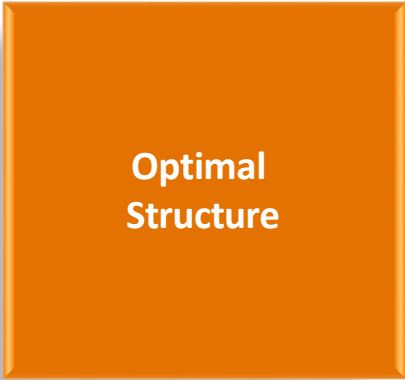
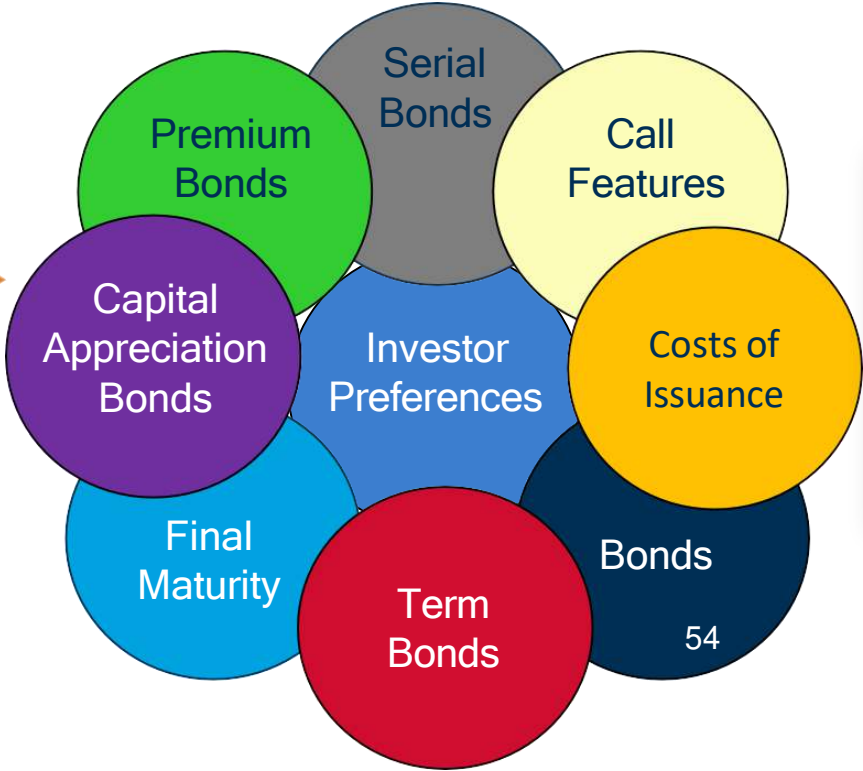
Effective Structuring



Inputs

Variables

Output



Bond Structures

▪ Serials

- ✓ Principal amount matures each year



▪ Terms

- ✓ An issue of bonds that mature on the same date
- ✓ Usually, issuer makes sinking fund payments until maturity date

▪ Premium or Discount

▪ Optional Redemption (callable/pre-payment)

▪ Rated and Non-rated

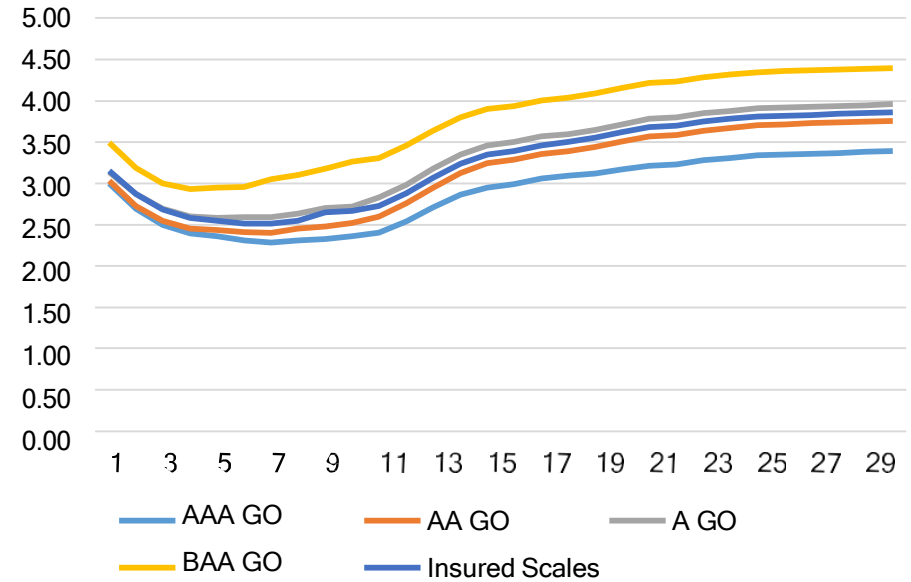
▪ Insurance

Market Interest Rates and the Yield Curve

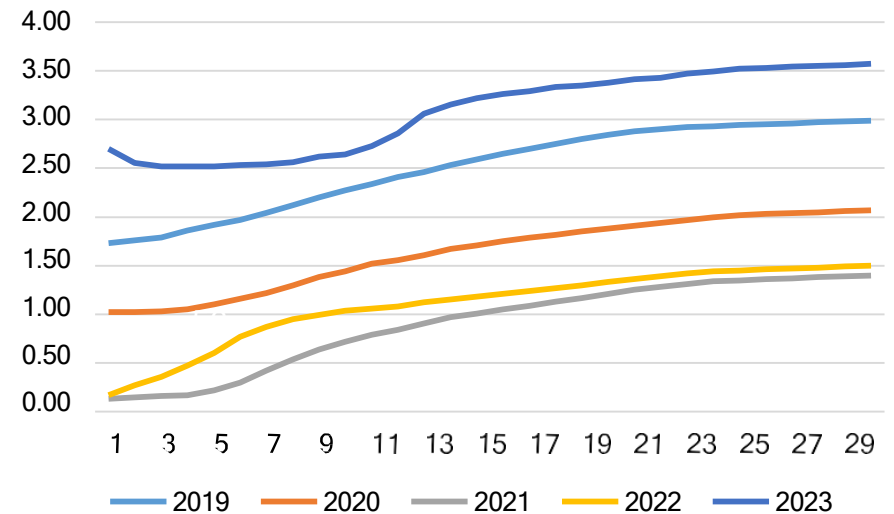
Municipal Yield Curves as of 05/03/2023

Year	Maturity	General Obligations					"AAA" Coupon Range		
		"AAA"	PRE-RE	INSURE D	"AA"	"A"	"BAA"	"LOW"	"HIGH"
1	2024	3.00	3.10	3.15	3.03	3.14	3.49	5.00	5.00
2	2025	2.69	2.79	2.87	2.73	2.87	3.19	5.00	5.00
3	2026	2.50	2.58	2.68	2.55	2.69	3.00	5.00	5.00
4	2027	2.39	2.43	2.58	2.45	2.60	2.93	5.00	5.00
5	2028	2.36	2.40	2.55	2.44	2.58	2.95	5.00	5.00
6	2029	2.31	2.35	2.51	2.41	2.59	2.96	5.00	5.00
7	2030	2.28	2.32	2.51	2.40	2.59	3.05	5.00	5.00
8	2031	2.31	2.35	2.55	2.45	2.63	3.10	5.00	5.00
9	2032	2.33	-	2.65	2.48	2.70	3.18	5.00	5.00
10	2033	2.36	-	2.67	2.52	2.72	3.26	5.00	5.00
11	2034	2.40	-	2.73	2.60	2.83	3.31	5.00	5.00
12	2035	2.54	-	2.88	2.76	2.98	3.46	5.00	5.00
13	2036	2.71	-	3.07	2.95	3.18	3.64	5.00	5.00
14	2037	2.86	-	3.24	3.13	3.35	3.80	5.00	5.00
15	2038	2.95	-	3.35	3.25	3.46	3.90	5.00	5.00
16	2039	2.99	-	3.39	3.29	3.50	3.94	5.00	5.00
17	2040	3.06	-	3.46	3.36	3.57	4.01	5.00	5.00
18	2041	3.09	-	3.50	3.39	3.60	4.04	5.00	5.00
19	2042	3.12	-	3.55	3.44	3.65	4.09	5.00	5.00
20	2043	3.17	-	3.62	3.51	3.72	4.16	5.00	5.00
21	2044	3.21	-	3.68	3.57	3.78	4.22	5.00	5.00
22	2045	3.23	-	3.70	3.59	3.80	4.24	5.00	5.00
23	2046	3.28	-	3.75	3.64	3.85	4.29	5.00	5.00
24	2047	3.31	-	3.78	3.67	3.88	4.32	5.00	5.00
25	2048	3.34	-	3.81	3.71	3.91	4.35	5.00	5.00
26	2049	3.35	-	3.82	3.72	3.92	4.36	5.00	5.00
27	2050	3.36	-	3.83	3.73	3.93	4.37	5.00	5.00
28	2051	3.37	-	3.84	3.74	3.94	4.38	5.00	5.00
29	2052	3.38	-	3.85	3.75	3.95	4.39	5.00	5.00
30	2053	3.39	-	3.86	3.76	3.96	4.40	5.00	5.00

Municipal Yield Curves



Aaa Municipal Curves Past Five Years



Source: Thomson Reuters

Rates as of 5.4.2023

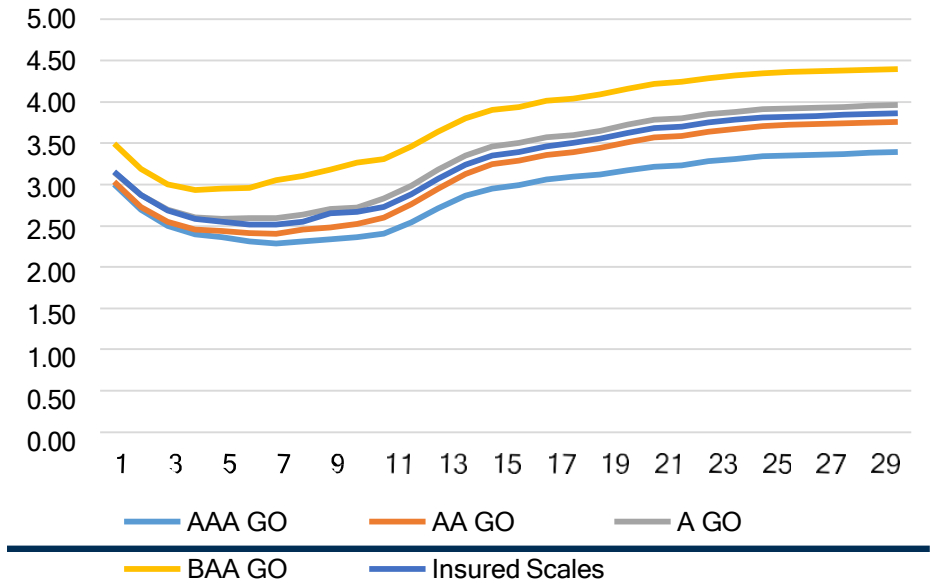
Serial and Term Bonds

Year	Maturity	General Obligations						"AAA" Coupon Range	
		"AAA"	PRE-RE	INSURE D	"AA"	"A"	"BAA"	"LOW"	"HIGH"
1	2024	3.00	3.10	3.15	3.03	3.14	3.49	5.00	5.00
2	2025	2.69	2.79	2.87	2.73	2.87	3.19	5.00	5.00
3	2026	2.50	2.58	2.68	2.55	2.69	3.00	5.00	5.00
4	2027	2.39	2.43	2.58	2.45	2.60	2.93	5.00	5.00
5	2028	2.36	2.40	2.55	2.44	2.58	2.95	5.00	5.00
6	2029	2.31	2.35	2.51	2.41	2.59	2.96	5.00	5.00
7	2030	2.28	2.32	2.51	2.40	2.59	3.05	5.00	5.00
8	2031	2.31	2.35	2.55	2.45	2.63	3.10	5.00	5.00
9	2032	2.33	-	2.65	2.48	2.70	3.18	5.00	5.00
10	2033	2.36	-	2.67	2.52	2.72	3.26	5.00	5.00
11	2034	2.40	-	2.73	2.60	2.83	3.31	5.00	5.00
12	2035	2.54	-	2.88	2.76	2.98	3.46	5.00	5.00
13	2036	2.71	-	3.07	2.95	3.18	3.64	5.00	5.00
14	2037	2.86	-	3.24	3.13	3.35	3.80	5.00	5.00
15	2038	2.95	-	3.35	3.25	3.46	3.90	5.00	5.00
16	2039	2.99	-	3.39	3.29	3.50	3.94	5.00	5.00
17	2040	3.06	-	3.46	3.36	3.57	4.01	5.00	5.00
18	2041	3.09	-	3.50	3.39	3.60	4.04	5.00	5.00
19	2042	3.12	-	3.55	3.44	3.65	4.09	5.00	5.00
20	2043	3.17	-	3.62	3.51	3.72	4.16	5.00	5.00
21	2044	3.21	-	3.68	3.57	3.78	4.22	5.00	5.00
22	2045	3.23	-	3.70	3.59	3.80	4.24	5.00	5.00
23	2046	3.28	-	3.75	3.64	3.85	4.29	5.00	5.00
24	2047	3.31	-	3.78	3.67	3.88	4.32	5.00	5.00
25	2048	3.34	-	3.81	3.71	3.91	4.35	5.00	5.00
26	2049	3.35	-	3.82	3.72	3.92	4.36	5.00	5.00
27	2050	3.36	-	3.83	3.73	3.93	4.37	5.00	5.00
28	2051	3.37	-	3.84	3.74	3.94	4.38	5.00	5.00
29	2052	3.38	-	3.85	3.75	3.95	4.39	5.00	5.00
30	2053	3.39	-	3.86	3.76	3.96	4.40	5.00	5.00

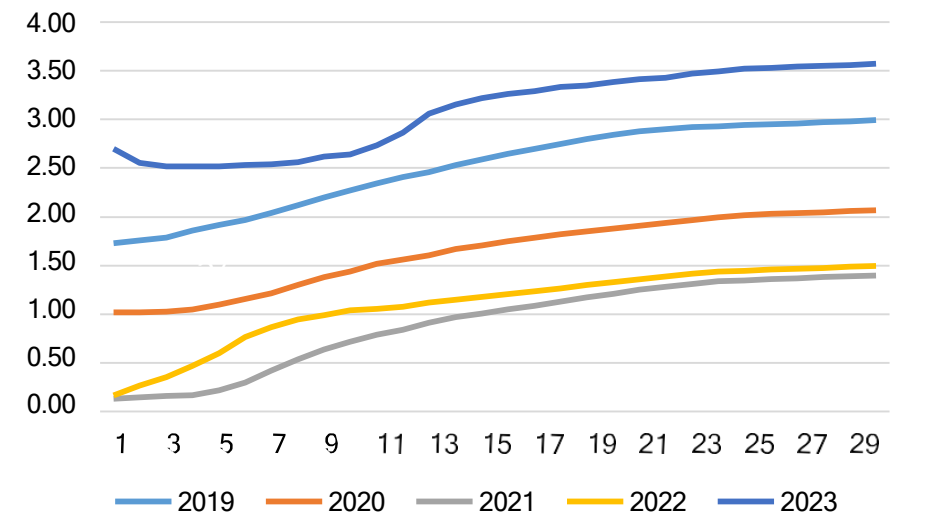
Source: Thomson Reuters

Rates as of 5.4.2023

Municipal Yield Curves



Aaa Municipal Curves Past Five Years



Serial and Term Bonds

Bond Type	Maturity	Amount	Coupon	Yield	Price	Yield to Maturity	Call Date	Premium (Discount)
Serial Bonds								
	12/1/2023	\$3,250,000	5.000%	3.230%	101.234			\$40,105
	12/1/2024	\$345,000	5.000%	3.280%	102.838			\$9,791
	12/1/2025	\$500,000	5.000%	3.230%	104.558			\$22,790
	12/1/2026	\$525,000	5.000%	3.030%	106.866			\$36,047
	12/1/2027	\$550,000	5.000%	2.970%	108.863			\$48,747
	12/1/2028	\$580,000	5.000%	2.950%	110.702			\$62,072
	12/1/2029	\$610,000	5.000%	2.930%	112.528			\$76,421
	12/1/2030	\$740,000	5.000%	2.870%	114.64			\$108,336
	12/1/2031	\$780,000	5.000%	2.940%	115.729			\$122,686
	12/1/2032	\$820,000	5.000%	2.960%	117.108			\$140,286
	12/1/2033	\$915,000	5.000%	3.010%	116.648	3.156%	12/1/2032	\$152,329
	12/1/2034	\$960,000	5.000%	3.140%	115.464	3.389%	12/1/2032	\$148,454
	12/1/2035	\$1,005,000	5.000%	3.250%	114.472	3.573%	12/1/2032	\$145,444
	12/1/2036	\$1,165,000	5.000%	3.410%	113.048	3.772%	12/1/2032	\$152,009
	12/1/2037	\$1,225,000	5.000%	3.490%	112.344	3.890%	12/1/2032	\$151,214
	12/1/2038	\$1,285,000	5.000%	3.610%	111.298	4.023%	12/1/2032	\$145,179
	12/1/2039	\$1,410,000	5.000%	3.710%	110.435	4.129%	12/1/2032	\$147,134
	12/1/2040	\$1,480,000	5.000%	3.790%	109.75	4.213%	12/1/2032	\$144,300
	12/1/2041	\$1,550,000	5.000%	3.860%	109.156	4.283%	12/1/2032	\$141,918
	12/1/2042	\$1,745,000	5.000%	3.890%	108.902	4.324%	12/1/2032	\$155,340
	12/1/2043	\$1,835,000	4.250%	4.400%	97.969		12/1/2032	(\$37,269)
Total Serial Bonds		\$23,275,000						\$2,113,332
Term Bonds								
	12/1/2048	\$11,050,000	5.500%	3.970%	112.226	4.677%	12/1/2032	\$1,350,973
	12/1/2052	\$11,675,000	4.375%	4.580%	96.683		12/1/2032	(\$387,260)
Total Term Bonds		\$22,725,000						\$963,713

**Hypothetical Example*

Serial and Term Bonds

Maturity Date	Serial Bonds	2048 Term Bond	2052 Term Bond	Total
12/1/2023	\$3,250,000	-	-	\$3,250,000
12/1/2024	\$345,000	-	-	\$345,000
12/1/2025	\$500,000	-	-	\$500,000
12/1/2026	\$525,000	-	-	\$525,000
12/1/2027	\$550,000	-	-	\$550,000
12/1/2028	\$580,000	-	-	\$580,000
12/1/2029	\$610,000	-	-	\$610,000
12/1/2030	\$740,000	-	-	\$740,000
12/1/2031	\$780,000	-	-	\$780,000
12/1/2032	\$820,000	-	-	\$820,000
12/1/2033	\$915,000	-	-	\$915,000
12/1/2034	\$960,000	-	-	\$960,000
12/1/2035	\$1,005,000	-	-	\$1,005,000
12/1/2036	\$1,165,000	-	-	\$1,165,000
12/1/2037	\$1,225,000	-	-	\$1,225,000
12/1/2038	\$1,285,000	-	-	\$1,285,000
12/1/2039	\$1,410,000	-	-	\$1,410,000
12/1/2040	\$1,480,000	-	-	\$1,480,000
12/1/2041	\$1,550,000	-	-	\$1,550,000
12/1/2042	\$1,745,000	-	-	\$1,745,000
12/1/2043	\$1,835,000	-	-	\$1,835,000
12/1/2044	-	\$1,910,000	-	\$1,910,000
12/1/2045	-	\$2,075,000	-	\$2,075,000
12/1/2046	-	\$2,190,000	-	\$2,190,000
12/1/2047	-	\$2,310,000	-	\$2,310,000
12/1/2048	-	\$2,565,000	-	\$2,565,000
12/1/2049	-	-	\$2,705,000	\$2,705,000
12/1/2050	-	-	\$2,820,000	\$2,820,000
12/1/2051	-	-	\$3,010,000	\$3,010,000
12/1/2052	-	-	\$3,140,000	\$3,140,000
	\$23,275,000	\$11,050,000	\$11,675,000	\$46,000,000

Maturity Date	Prinipal	Coupon	Interest	Debt Service
12/1/2023	\$3,250,000	5.000%	\$1,619,470	\$4,869,470
12/1/2024	\$345,000	5.000%	\$2,106,019	\$2,451,019
12/1/2025	\$500,000	5.000%	\$2,088,769	\$2,588,769
12/1/2026	\$525,000	5.000%	\$2,063,769	\$2,588,769
12/1/2027	\$550,000	5.000%	\$2,037,519	\$2,587,519
12/1/2028	\$580,000	5.000%	\$2,010,019	\$2,590,019
12/1/2029	\$610,000	5.000%	\$1,981,019	\$2,591,019
12/1/2030	\$740,000	5.000%	\$1,950,519	\$2,690,519
12/1/2031	\$780,000	5.000%	\$1,913,519	\$2,693,519
12/1/2032	\$820,000	5.000%	\$1,874,519	\$2,694,519
12/1/2033	\$915,000	5.000%	\$1,833,519	\$2,748,519
12/1/2034	\$960,000	5.000%	\$1,787,769	\$2,747,769
12/1/2035	\$1,005,000	5.000%	\$1,739,769	\$2,744,769
12/1/2036	\$1,165,000	5.000%	\$1,689,519	\$2,854,519
12/1/2037	\$1,225,000	5.000%	\$1,631,269	\$2,856,269
12/1/2038	\$1,285,000	5.000%	\$1,570,019	\$2,855,019
12/1/2039	\$1,410,000	5.000%	\$1,505,769	\$2,915,769
12/1/2040	\$1,480,000	5.000%	\$1,435,269	\$2,915,269
12/1/2041	\$1,550,000	5.000%	\$1,361,269	\$2,911,269
12/1/2042	\$1,745,000	5.000%	\$1,283,769	\$3,028,769
12/1/2043	\$1,835,000	4.250%	\$1,196,519	\$3,031,519
12/1/2044	\$1,910,000	5.500%	\$1,118,531	\$3,028,531
12/1/2045	\$2,075,000	5.500%	\$1,013,481	\$3,088,481
12/1/2046	\$2,190,000	5.500%	\$899,356	\$3,089,356
12/1/2047	\$2,310,000	5.500%	\$778,906	\$3,088,906
12/1/2048	\$2,565,000	5.500%	\$651,856	\$3,216,856
12/1/2049	\$2,705,000	4.375%	\$510,781	\$3,215,781
12/1/2050	\$2,820,000	4.375%	\$392,438	\$3,212,438
12/1/2051	\$3,010,000	4.375%	\$269,063	\$3,279,063
12/1/2052	\$3,140,000	4.375%	\$137,375	\$3,277,375
	\$46,000,000		\$42,451,383	\$88,451,383

Serial and Term Bonds

Bond Type	Maturity Date	Amount	Rate	Yield	Price	Yield to Maturity	Call Date	Premium (-Discount)
Serial Bond:								
	12/1/2019	\$215,000	2.000%	1.260%	101.516			\$3,259
	12/1/2020	\$215,000	4.000%	1.380%	107.881			\$16,944
	12/1/2021	\$230,000	2.000%	1.520%	101.892			\$4,352
	12/1/2022	\$235,000	4.000%	1.690%	111.205			\$26,332
	12/1/2023	\$245,000	4.000%	1.870%	112.192			\$29,870
	12/1/2024	\$250,000	5.000%	2.040%	119.428			\$48,570
	12/1/2025	\$260,000	5.000%	2.210%	120.547			\$53,422
	12/1/2026	\$280,000	5.000%	2.380%	121.286			\$59,601
	12/1/2027	\$290,000	5.000%	2.530%	121.859			\$63,391
	12/1/2028	\$305,000	2.500%	2.710%	97.999			-\$6,103
	12/1/2029	\$300,000	4.000%	4.000%	100.000			\$0
		\$4,155,000						\$418,735
Term Bond 2040:								
	12/1/2040	\$2,995,000	4.000%	3.250%	106.402	C 3.590%	12/1/2027	\$191,740
		\$7,150,000						\$610,475
Serials Bonds		Term Bond						

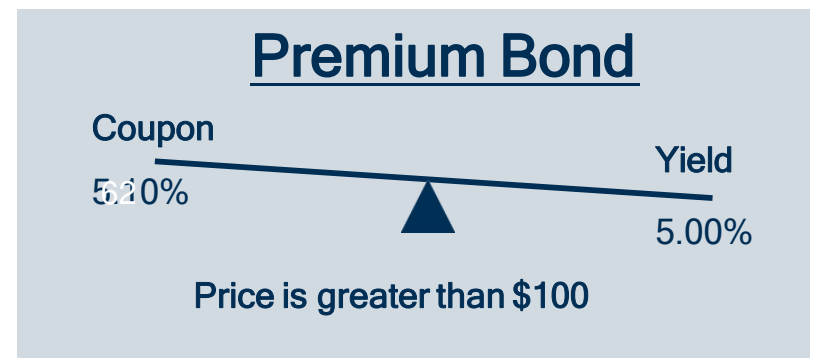
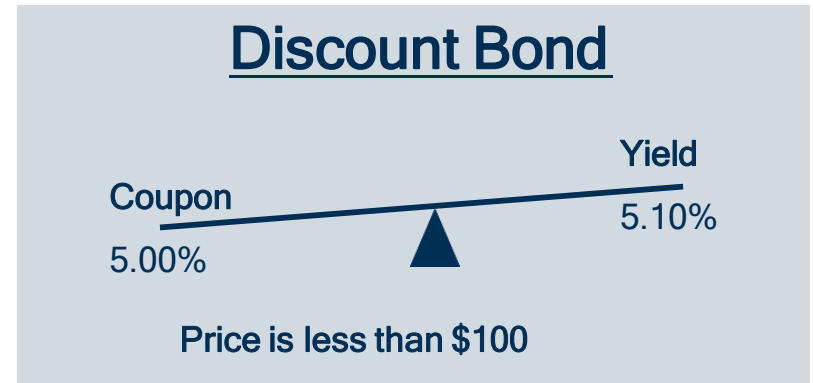
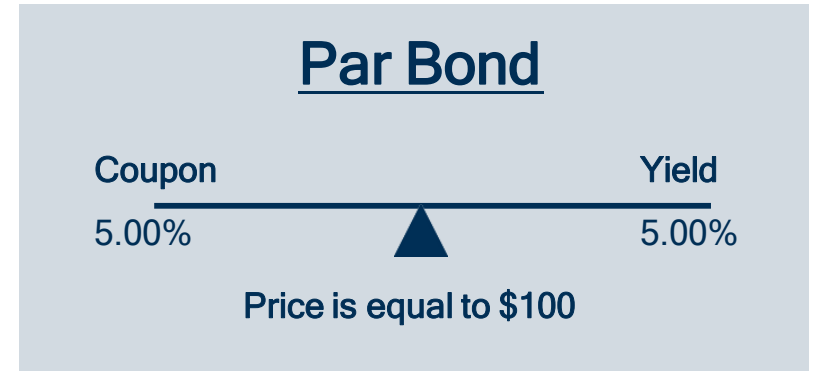
Hypothetical Illustration

Discount and Premium Bonds

- **Original Issue Discount (OID)** - An amount by which the par value of a security exceeded its public offering price at the time of its original issuance. The original issue discount is amortized over the life of the security and, on a municipal security, is generally treated as tax-exempt interest.
- **Original Issue Premium** - The amount by which the public offering price of a security at the time of this original issuance exceeded its par value. The original issue premium is amortized over the life of the security and results in an adjustment to the basis of the security.

Pricing of Bonds – Par, Premium and Discount

- **Pricing** - The process by which the issuer and underwriter(s) determine the interest rates and prices at which the new issue will be offered to the public.
- **Coupon** - The rate of interest the Issuer pays.
- **Yield** - The rate of interest the investor receives.
- **Price** - amount of dollars or percent of principal paid by an investor for a note or bond.
- **Discount** - Notes or Bonds sold at a price less than the par (face value) amount. In this situation the coupon is less than the yield.
- **Premium** - Notes or Bonds sold at a price greater than the par amount. In this situation the coupon is greater than the yield.



Pricing of Bonds – Par, Premium and Discount

Bond Type	Maturity	Amount	Coupon	Yield	Price	Yield to Maturity	Call Date	Premium (Discount)
Serial Bonds								
	12/1/2023	\$3,250,000	5.000%	3.230%	101.234			\$40,105
	12/1/2024	\$345,000	5.000%	3.280%	102.838			\$9,791
	12/1/2025	\$500,000	5.000%	3.230%	104.558			\$22,790
	12/1/2026	\$525,000	5.000%	3.030%	106.866			\$36,047
	12/1/2027	\$550,000	5.000%	2.970%	108.863			\$48,747
	12/1/2028	\$580,000	5.000%	2.950%	110.702			\$62,072
	12/1/2029	\$610,000	5.000%	2.930%	112.528			\$76,421
	12/1/2030	\$740,000	5.000%	2.870%	114.64			\$108,336
	12/1/2031	\$780,000	5.000%	2.940%	115.729			\$122,686
	12/1/2032	\$820,000	5.000%	2.960%	117.108			\$140,286
	12/1/2033	\$915,000	5.000%	3.010%	116.648	3.156%	12/1/2032	\$152,329
	12/1/2034	\$960,000	5.000%	3.140%	115.464	3.389%	12/1/2032	\$148,454
	12/1/2035	\$1,005,000	5.000%	3.250%	114.472	3.573%	12/1/2032	\$145,444
	12/1/2036	\$1,165,000	5.000%	3.410%	113.048	3.772%	12/1/2032	\$152,009
	12/1/2037	\$1,225,000	5.000%	3.490%	112.344	3.890%	12/1/2032	\$151,214
	12/1/2038	\$1,285,000	5.000%	3.610%	111.298	4.023%	12/1/2032	\$145,179
	12/1/2039	\$1,410,000	5.000%	3.710%	110.435	4.129%	12/1/2032	\$147,134
	12/1/2040	\$1,480,000	5.000%	3.790%	109.75	4.213%	12/1/2032	\$144,300
	12/1/2041	\$1,550,000	5.000%	3.860%	109.156	4.283%	12/1/2032	\$141,918
	12/1/2042	\$1,745,000	5.000%	3.890%	108.902	4.324%	12/1/2032	\$155,340
	12/1/2043	\$1,835,000	4.250%	4.400%	97.969		12/1/2032	(\$37,269)
Total Serial Bonds		\$23,275,000						\$2,113,332
Term Bonds								
	12/1/2048	\$11,050,000	5.500%	3.970%	112.226	4.677%	12/1/2032	\$1,350,973
	12/1/2052	\$11,675,000	4.375%	4.580%	96.683		12/1/2032	(\$387,260)
Total Term Bonds		\$22,725,000						\$963,713

Optional Redemption/Call Option

Redemption Features

- **Callable Bonds** - A bond that the issuer is permitted to redeem before the stated maturity at a specified price, sometimes at or above par, by giving notice of redemption in a manner specified in the bond contract.
 - ✓ **Redemption** - A transaction in which the issuer repays to the holder of an outstanding security the principal amount thereof (plus, in certain cases, an additional amount representing a redemption premium).
 - ✓ Redemption can be made under several different circumstances: at maturity of the security, as a result of the issuer exercising a right under the bond contract to repay the security prior to its scheduled maturity date (often referred to as a “call”), or as a result of the security holder’s election to exercise a put or tender option privilege.
- **Non-Callable Bonds** - A bond that cannot be redeemed at the issuer’s option before its stated maturity date.

Callable Bonds versus Non-Callable Bonds

Callable Bonds					
Maturity	Amount	Coupon	Yield	Price	Premium (Discount)
12/1/2033	\$915,000	5.000%	3.010%	116.648	\$152,329
12/1/2034	\$960,000	5.000%	3.140%	115.464	\$148,454
12/1/2035	\$1,005,000	5.000%	3.250%	114.472	\$145,444
12/1/2036	\$1,165,000	5.000%	3.410%	113.048	\$152,009
12/1/2037	\$1,225,000	5.000%	3.490%	112.344	\$151,214
12/1/2038	\$1,285,000	5.000%	3.610%	111.298	\$145,179
12/1/2039	\$1,410,000	5.000%	3.710%	110.435	\$147,134
12/1/2040	\$1,480,000	0.05	0.0379	109.75	\$144,300
	\$9,445,000				\$1,186,063

Total Proceeds: \$10,631,063

Non-Callable Bonds					
Maturity	Amount	Coupon	Yield	Price	Premium (Discount)
12/1/2033	\$915,000	5.000%	3.010%	118.104	\$165,652
12/1/2034	\$960,000	5.000%	3.140%	118.107	\$173,827
12/1/2035	\$1,005,000	5.000%	3.250%	118.101	\$181,915
12/1/2036	\$1,165,000	5.000%	3.410%	117.295	\$201,487
12/1/2037	\$1,225,000	5.000%	3.490%	117.256	\$211,386
12/1/2038	\$1,285,000	5.000%	3.610%	116.553	\$212,706
12/1/2039	\$1,410,000	5.000%	3.710%	115.955	\$224,966
12/1/2040	\$1,480,000	5.000%	3.790%	115.502	\$229,430
	\$9,445,000				\$1,601,368

Total Proceeds: \$11,046,368

Net Result of Bond Structuring

Sources:

Bond Proceeds:	
Par Amount	19,250,000.00
Premium	934,921.60
	<hr/>
	20,184,921.60

Uses:

Project Fund Deposits:	
Project Fund	19,250,000.00
Other Fund Deposits:	
Bond Retirement Fund	646,682.77
Delivery Date Expenses:	
Cost of Issuance	173,250.00
Underwriter's Discount	114,988.83
	<hr/>
	288,238.83
	<hr/>
	20,184,921.60

Refunding Options

Issuing Taxable Debt

- Taxable bonds are exempt from federal tax law, therefore a taxable refinancing is not subject to the “one advance refunding” rule, like a tax-exempt issuance. This option would allow issuers to execute an advance refunding and secure interest savings on bonds that can only be currently refunded or were advance refunded.

Option 1

Refund outstanding debt on a taxable basis. Taxable bonds are exempt from federal tax laws.

Current Refunding with Forward Option

- Using a forward option, an issuer can execute a refinancing outside of the traditional 90 day time frame for a current refunding. Under this option, an issuer would price their debt a number of months in advance, and close within 90 days of the call date of the refunding opportunity. Typically, for each month between pricing and closing, issuers will have to pay investors between 5-10bps in extra yield.

Option 2

Execute a current refunding months before the call date, but close within 90 days of the call date.

Current Refunding

- The tax-reform bill eliminated advance refundings, but maintained the legality of current refundings; the major distinction between the two is that current refundings occur within 90 days of a call date. Going forward, we expect to see optional redemption dates of fewer than 10 years from the original dated date.

Option 3

Refund outstanding debt within 90 days of the call date

Prepare Disclosure



Issuer

- Issuer overview
- Projections
- Facilities data
- Financial outlook
- Financial Statements

Underwriter

- Structuring information
- Continuing disclosure agreement
- Interface with County Auditor

Bond Counsel

- Demographic info from Census & other sources
- Description of tax base and other sources of revenue
- Debt limitation tables
- Debt tables
- Financial appendices
- Bond counsel opinion
- Interface with County Auditor
- Actual production of document

County Auditor

- Assessed Valuation data
- Building Permits info
- Tax tables
- Largest taxpayer list

PRELIMINARY OFFICIAL STATEMENT DATED NOVEMBER 30, 2022

Ratings: Moody's: "Aa1"
S&P: "AAA"
(See "RATINGS" herein)

TWO NEW ISSUES - BOOK-ENTRY FORM ONLY

In the opinion of Bricker & Eckler LLP, Bond Counsel, under existing law, assuming continuing compliance with certain covenants and the accuracy of certain representations, (i) interest on the Series 2022A Bonds is excluded from gross income for federal income tax purposes and is not an item of tax preference for purposes of the alternative minimum tax; however, for tax years beginning after December 31, 2022, interest on the Series 2022A Bonds is included in the "adjusted financial statement income" of certain corporations that are subject to the alternative minimum tax under section 55 of the Internal Revenue Code of 1986, as amended, (ii) interest on the Series 2022B Bonds is not excluded from gross income for federal income tax purposes, and (iii) interest on and any profit made on the sale, exchange or other disposition of the Series 2022 Bonds is exempt from certain taxes levied by the State of Ohio and its political subdivisions. The City has not designated the Series 2022A Bonds as "qualified tax exempt obligations" within the meaning of Section 205(b)(2) under the Internal Revenue Code of 1986, as amended (the "Code"). Interest on the Series 2022A Bonds may be subject to certain federal income taxes imposed on certain corporations, and certain taxpayers may have certain other adverse federal income tax consequences as a result of owning the Series 2022A Bonds. For a more complete discussion of the tax aspects, see "TAX MATTERS."

OFFICIAL STATEMENT
CITY OF UPPER ARLINGTON

\$18,685,000*
CITY OF UPPER ARLINGTON, OHIO
Special Obligation Non-tax Revenue Bonds, Series: 2022
(Kingsdale Mixed-Use Development)

consisting of

\$13,185,000* Special Obligation Non-tax Revenue Bonds, Series: 2022A (Kingsdale Mixed-Use Development)	\$5,500,000* Special Obligation Non-tax Revenue Bonds, Series: 2022B (Federally Taxable) (Kingsdale Mixed-Use Development)
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Dates of Delivery: Due: As shown on the inside cover herein

THE SERIES 2022 BONDS ARE A SPECIAL OBLIGATION OF THE CITY PAYABLE SOLELY FROM NON-TAX REVENUES AND WILL NOT REPRESENT OR CONSTITUTE A GENERAL OBLIGATION OF THE CITY, THE STATE OF OHIO, OR ANY POLITICAL SUBDIVISION THEREOF, AND ARE NOT SECURED BY THE FULL FAITH AND CREDIT OF THE CITY, THE STATE, OR ANY POLITICAL SUBDIVISION THEREOF. THE OWNERS AND HOLDERS OF THE SERIES 2022 BONDS DO NOT HAVE THE RIGHT TO HAVE ANY EXCISES OR TAXES LEVIED BY THE GENERAL ASSEMBLY OF THE STATE OF OHIO OR THE TAXING AUTHORITY OF ANY POLITICAL SUBDIVISION THEREOF, INCLUDING THE CITY, FOR THE PAYMENT OF THE PRINCIPAL OF, PREMIUM, IF ANY, OR INTEREST ON THE SERIES 2022 BONDS. See "SECURITY FOR AND SOURCES OF PAYMENT OF THE SERIES 2022 BONDS" herein.

Interest on the Series 2022 Bonds will be payable semiannually on June 1 and December 1 of each year, commencing June 1, 2023.

Principal of and interest on the Series 2022 Bonds will be payable at maturity in federal funds at the designated office of The Huntington National Bank, Columbus, Ohio, as register, paying agent and transfer agent for the Series 2022 Bonds.

The Series 2022 Bonds are issuable as fully registered obligations and, when issued, will be initially registered in the name of Code & Co., as nominee for The Depository Trust Company, New York, New York ("DTC"). Purchases of beneficial interests in the Series 2022 Bonds will be made in book-entry only form. Purchasers of beneficial interests ("Beneficial Owners") will not receive certificates representing their interests in the Series 2022 Bonds. So long as the Series 2022 Bonds of an issue are registered in the name of Code & Co., as nominee of DTC, references herein to the owners shall mean Code & Co. and shall not mean the Beneficial Owners of that issue of Bonds. See "BOOK-ENTRY ONLY SYSTEM" herein.

The Series 2022A Bonds maturing after December 1, 20__ and the Series 2022B Bonds maturing after December 1, 20__ will be subject to optional redemption prior to stated maturity. The Series 2022A Bonds maturing on December 1, 20__ will be subject to mandatory sinking fund redemption prior to stated maturity, and the Series 2022B Bonds maturing on December 1, 20__ will be subject to mandatory sinking fund redemption prior to stated maturity. The Series 2022 Bonds are subject to extraordinary optional redemption, all as described in this Official Statement. See "THE SERIES 2022 BONDS - Redemption" herein.

The Series 2022 Bonds are offered when, as and if issued and received by the Underwriter identified herein (see "UNDERWRITING" herein), subject to prior sale, to withdrawal or modification of the offer without notice, and to the approval of certain legal matters by Bricker & Eckler LLP, Columbus, Ohio, Bond Counsel to the City. Certain legal matters will be passed upon for the Underwriter by its counsel, Frost Brown Todd LLC, Columbus, Ohio. Bradley Payne LLC, Cincinnati, Ohio, has acted as Municipal Adviser to the City in connection with the issuance of the Series 2022 Bonds. See "MUNICIPAL ADVISOR" herein.

This cover page contains certain information for general reference only. It is not a summary of the provisions of the Series 2022 Bonds. Investors must read the entire Official Statement to obtain information essential to the making of an informed investment decision.

This Official Statement has been prepared by the City of Upper Arlington in connection with the original offering for sale by it of the Series 2022 Bonds. It is expected that delivery of the Series 2022 Bonds in definitive form will be made through the facilities of DTC on or about December 21, 2022. The date of this Official Statement is December __, 2022, and the information herein speaks only as of that date.

STIFEL

*Preliminary, subject to change.

Credit Rating Process



MOODY'S
INVESTORS SERVICE

STANDARD & POOR'S
RATINGS SERVICES
McGRAW HILL FINANCIAL

FitchRatings

Decreasing
Credit Quality,
Increasing
Yields

Investment Grade	Prime	Aaa	AAA	AAA
	High Grade	Aa1, Aa2, Aa3	AA+, AA, AA-	AA+, AA, AA-
	Upper Medium Grade	A1, A2, A3	A+, A, A-	A+, A, A-
	Lower Medium Grade	Baa1, Baa2, Baa3	BBB+, BBB, BBB-	BBB+, BBB, BBB-
Non-Investment Grade	Speculative	Ba1, Ba2, Ba3	BB+, BB, BB-	BB+, BB, BB-
	Highly Speculative	B1, B2, B3	B+, B, B-	B+, B, B-
	Substantial Risks	Caa1, Caa2, Caa3	CCC+, CCC, CCC-	CCC+, CCC, CCC-



Credit Rating Process



- Inform Agency of Upcoming Sale
- Provide Necessary Information
 - ✓ Financial Statements, Budgets, Audits, POS
- Analyst Performs Review
- Issuer Financing Team Interaction with Analyst
 - ✓ Presentation or Conference Call
 - ✓ Follow-up Questions and Clarifications
- Credit Committee Presentation
- Rating Determination & Issuer Credit Report

Rating Factors

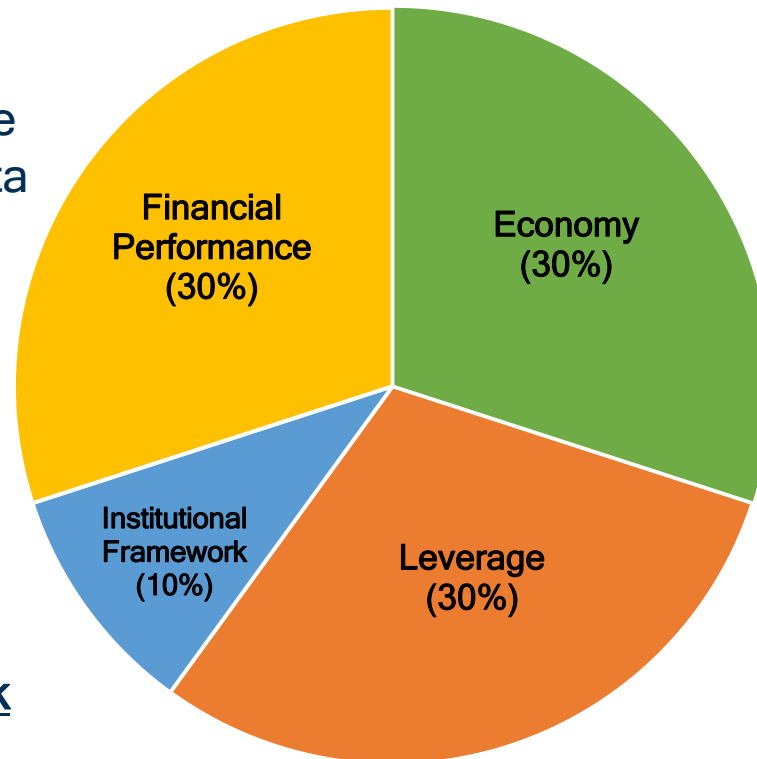


Economy

- Demographic Profile
- Full Value Per Capita
- Largest Taxpayers
- Largest Employers

Financial Performance

- Available Fund Balance Ratio
- Net Cash Ratio
- Trends ?



Leverage

- Long Term Liabilities Ratio
- Fixed-Costs Ration

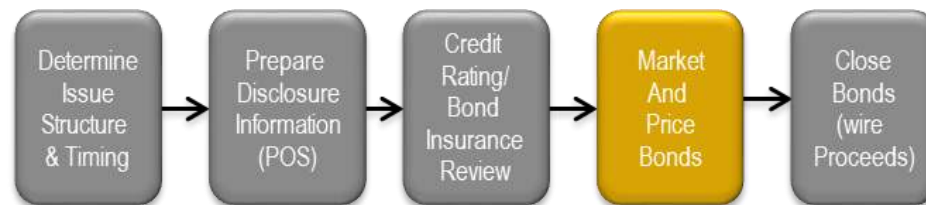
Administration

Institutional Framework

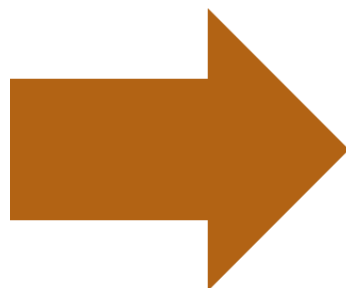
Other Considerations:

- Additional Strength in Local Resources
- Structural Scale of Operations
- Robust Financial Reporting
- Potential for Significant Change in Leverage

Pricing and Marketing the Bonds



Marketing	
	Distribute POS or OMAC Report, rating report, maturity structure internally
	Receive feedback from underwriting / trading / sales teams on structure
	Internal distributions to institutional and retail sales teams
	Distribute POS or OMAC Report, rating reports, maturity structure to investors
	Advertisements (if any)

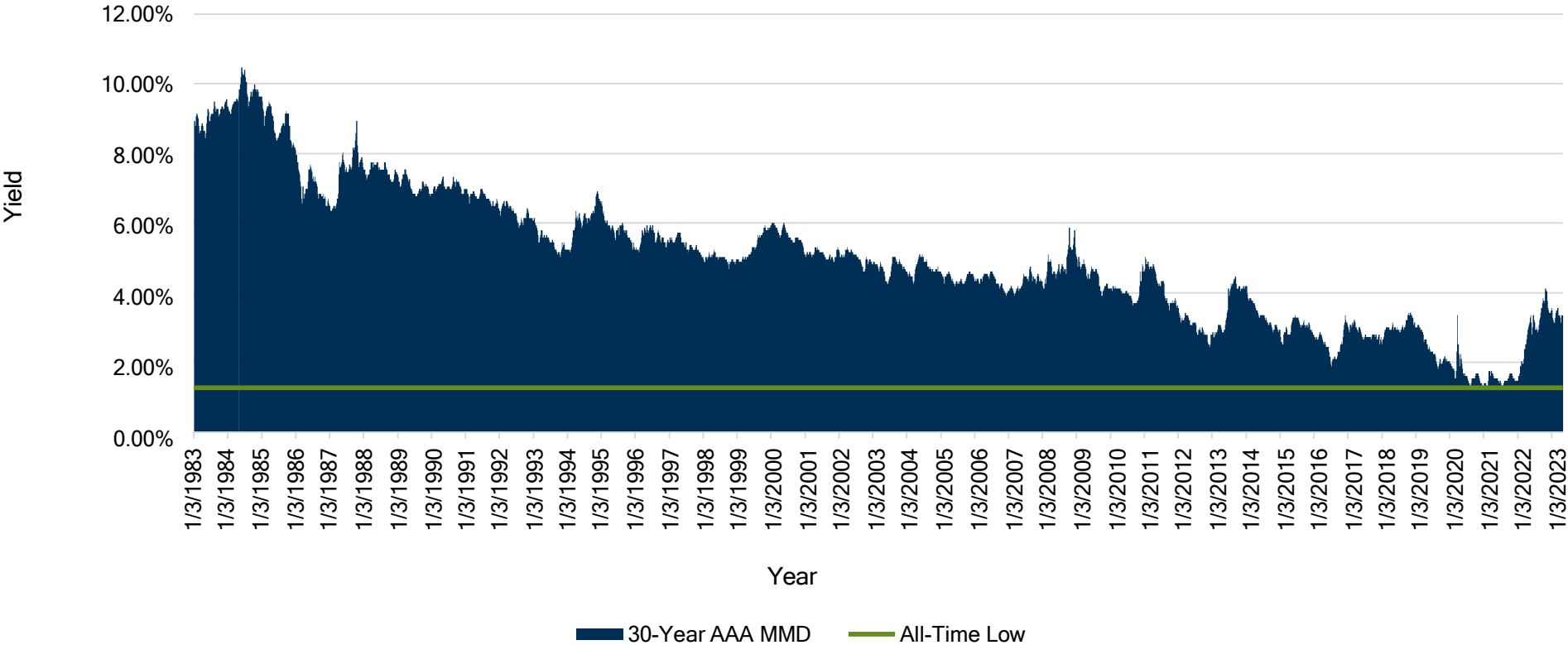


Pricing Process	
	Review overall market conditions
	Review recent comparables and trading levels
	Develop "price thoughts"
	Pre-pricing call with Issuer and Underwriting Desk
	Hold order period. When significant number of bonds have been sold, Stifel commits to purchase all the notes or bonds at proposed rates and puts the remaining in our inventory.
	When all participants reach agreement on final structure, interest rates (coupons) and yields of the bonds, the Issuer provides Verbal Award
	<ul style="list-style-type: none"> • Then Note or Bond Purchase Agreement is executed by the Issuer and Underwriter <ul style="list-style-type: none"> • Investor orders confirmed • Underwriter allots notes or bonds to investors

Pricing the Bonds



30-Year Tax-Exempt Interest Rates



Source: TM3

Closing the Bond Issue



Closing Activities

- Underwriter wires funds to issuer
- Issuer confirms to the underwriter that all wires are received
- Bond counsel confirms everything is in place for closing
- Underwriter and Paying Agent call DTC (Depository Trust Company) to release the bonds to investors

Village of Orange Case Study – Fund Balance Drawdown vs Debt Issuance

Government Finance Officers Association

BEST PRACTICES

Fund Balance Guidelines for the General Fund

Governments should establish a formal policy on the level of unrestricted fund balance that should be maintained in the general fund for GAAP and budgetary purposes.

GFOA recommends that governments establish a formal policy on the level of unrestricted fund balance that should be maintained in the general fund for GAAP and budgetary purposes. Such a guideline should be set by the appropriate policy body and articulate a framework and process for how the government would increase or decrease the level of unrestricted fund balance over a specific time period. In particular, governments should provide broad guidance in the policy for how resources will be directed to replenish fund balance should the balance fall below the level prescribed.

Appropriate Level. The adequacy of unrestricted fund balance in the general fund should take into account each government's own unique circumstances. For example, governments that may be vulnerable to natural disasters, more dependent on a volatile revenue source, or potentially subject to cuts in state aid and/or federal grants may need to maintain a higher level in the unrestricted fund balance. Articulating these risks in a fund balance policy makes it easier to explain to stakeholders the rationale for a seemingly higher than normal level of fund balance that protects taxpayers and employees from unexpected changes in financial condition.

Nevertheless, GFOA recommends, at a minimum, that general-purpose governments, regardless of size, maintain unrestricted budgetary fund balance in their general fund of no less than two months of regular general fund operating revenues or regular general fund operating expenditures. The choice of revenues or expenditures as a basis of comparison may be dictated by what is more predictable in a government's particular circumstances.

In establishing a policy governing the level of unrestricted fund balance in the general fund, a government should consider a variety of factors, including:

1. The predictability of its revenues and the volatility of its expenditures (i.e., higher levels of unrestricted fund balance may be needed if significant revenue sources are subject to unpredictable fluctuations or if operating expenditures are highly volatile);
2. Its perceived exposure to significant one-time outlays (e.g., disasters, immediate capital needs, state budget cuts);
3. The potential drain upon general fund resources from other funds, as well as, the availability of resources in other funds;
4. The potential impact on the entity's bond ratings and the corresponding increased cost of borrowed funds;
5. Commitments and assignments (i.e., governments may wish to maintain higher levels of unrestricted fund balance to compensate for any portion of unrestricted fund balance already committed or assigned by the government for a specific purpose). Governments may deem it appropriate to exclude from consideration resources that have been committed or assigned to some other purpose and focus on unassigned fund balance, rather than on unrestricted fund balance.

Village of Orange Fund Balance Policy

This Fund Balance Policy is designed to ensure that Orange Village maintains adequate reserves in its General Fund in order to:

1. Provide sufficient cash flow for daily financial needs.
2. Offset significant economic downturns or revenue shortfalls.
3. Provide funds for unforeseen expenditures resulting from emergencies.
4. Secure and maintain investment grade bond ratings. Bond rating agencies usually recommend reserving a percentage of General Fund revenue or expenditures as a standard methodology.

This Fund Balance Policy is a guideline for the Village's administration and intended to provide general direction regarding the Village's future cash flow obligations, to minimize borrowing costs and to maintain the highest credit rating on its bonds.

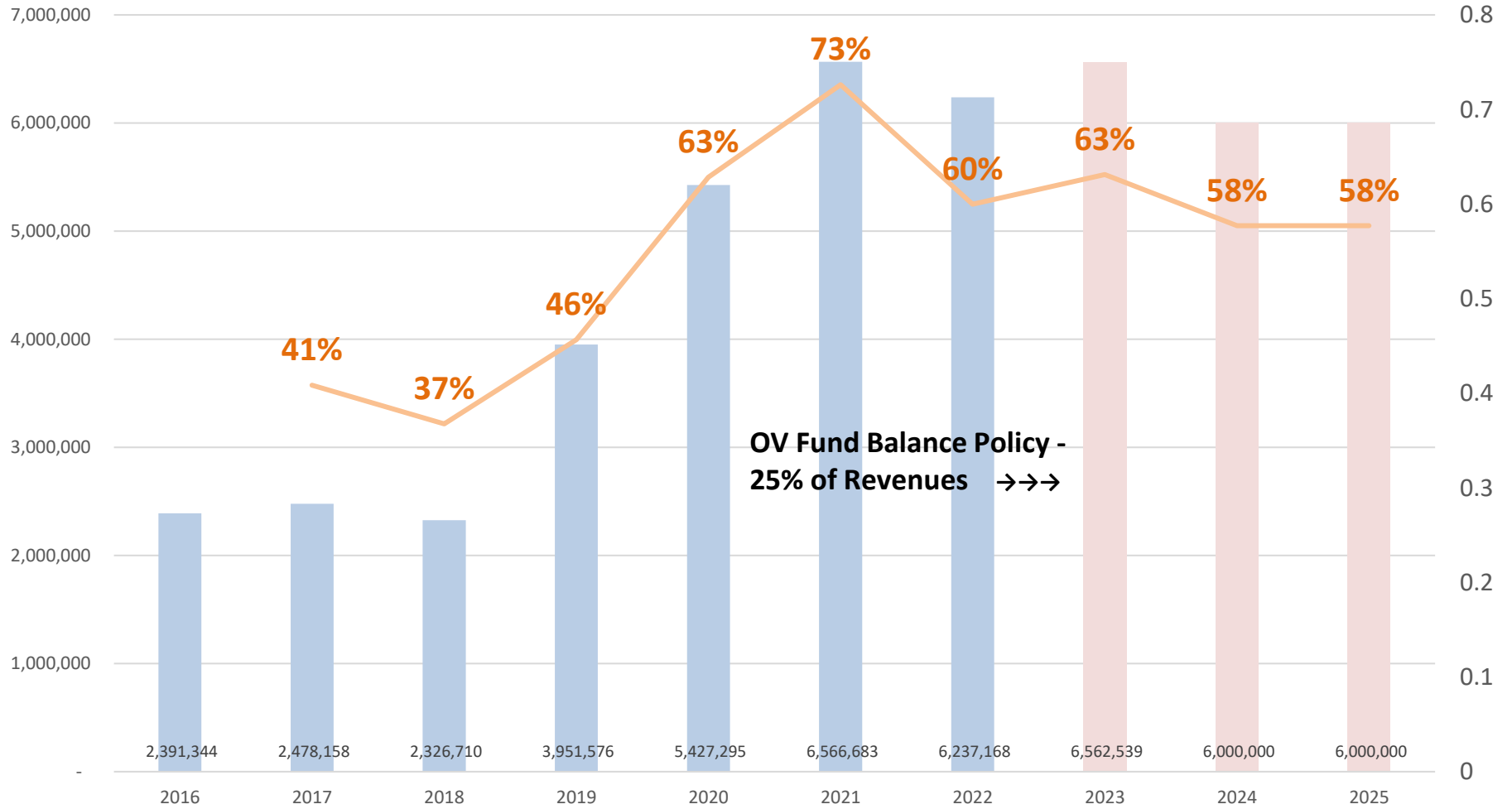
GENERAL FUND RESERVES:

The Orange Village administration will, each year, recommend to the Village Council that the Village set aside, and not appropriate, a General Fund Reserve in an amount equal to at least 25% of the estimated General Fund revenues for the year.

Moody's Investor Services – Current Ohio “Aa2” Rated Communities

Athens, OH	Aa2	28.1		
Avon, OH	Aa2	72.3		
Beavercreek, OH	Aa2	54.3		
Berea, OH	Aa2	33.6		
Bowling Green, OH	Aa2	33.6		
Broadview Heights, OH	Aa2	55.8		
Brooklyn, OH	Aa2	176.5		
Brunswick, OH	Aa2	184.9		
Centerville (Montgomery County), OH	Aa2	121.7		
Cincinnati, OH	Aa2	24.2		
Clayton, OH	Aa2	113.3		
Concord Township, OH	Aa2	16.8		
Cuyahoga Falls, OH	Aa2	54.4		
Dayton, OH	Aa2	39.1		
Delaware, OH	Aa2	50.8		
Delhi Township (Hamilton County), OH	Aa2	352.3		
Fairborn, OH	Aa2	45.2		
Fairfield Township (Butler County), OH	Aa2	261.3		
Fairview Park, OH	Aa2	58.5		
Heath, OH	Aa2	55.6		
Highland Heights, OH	Aa2	79.4		
Kent, OH	Aa2	137.6		
Lakewood, OH	Aa2	43.2		
Lebanon, OH	Aa2	80.5		
Loveland, OH	Aa2	131.8		
Maumee, OH	Aa2	64.4		
Mayfield Heights, OH	Aa2	63.4		
Miami Township (Clermont County), OH	Aa2	148.0		
Miami Township (Montgomery County), OH	Aa2	158.5		
Miamisburg, OH	Aa2	71.1		
Middleburg Heights, OH	Aa2	42.4		
North Olmsted, OH	Aa2	46.2		
North Royalton, OH	Aa2	42.5		
Oxford, OH	Aa2	63.0		
Pickerington, OH	Aa2	116.5		
Reynoldsburg, OH	Aa2	77.5		
Rocky River, OH	Aa2	39.2		
Sharonville, OH	Aa2	81.3		
Springfield Township (Hamilton County), OH	Aa2	142.1		
Stow, OH	Aa2	45.9		
Sycamore Township (Hamilton County), OH	Aa2	117.1		
Sylvania, OH	Aa2	25.7		
Tallmadge, OH	Aa2	65.4		
Tipp City, OH	Aa2	104.3		
Twinsburg, OH	Aa2	57.1		
Vandalia, OH	Aa2	106.2		
Violet Township (Fairfield County), OH	Aa2	82.0		
Willoughby, OH	Aa2	48.0	85%	average
			63%	median

Orange General Fund YEB (excluding Agency) vs Revenue Years 2016- 2022 (actual) 2023-2025 (est)



**OV Fund Balance Policy -
25% of Revenues →→→**

General Fund YEB YEB % of GF Revenue

Table of Orange Fund Balance (Actual and Projected)

Year	General Fund YEB	YEB % of GF Revenue	GF Revenue
2016	2,391,344		
2017	2,478,158	41%	6,064,638
2018	2,326,710	37%	6,328,823
2019	3,951,576	46%	8,651,235
2020	5,427,295	63%	8,637,077
2021	6,566,683	73%	9,042,321
2022	6,237,168	60%	10,396,195
2023	6,562,539	63%	10,396,196
2024	6,000,000	58%	10,396,197
2025	6,000,000	58%	10,396,198

Voted Bond Millage Scenarios

Village of Orange									
Assumptions:									
\$1,000,000 borrowing for 25 years at 5% = \$71,000 annual debt service									
Assessed Valuation				232,744,780					
1 Mill equals				\$ 233,000					
1 Mill per 100,000 MV home equals				\$ 35					
		Amount of Borrowing in Millions	Required Annual Debt Service	New Mills Required to Service Debt	Cost to Property Owner of \$100,000 home	Cost to Property Owner of \$200,000 home	Cost to Property Owner of \$300,000 home	Cost to Property Owner of \$400,000 home	Cost to Property Owner of \$500,000 home
		5	\$ 355,000	1.5	\$ 53	\$ 107	\$ 160	\$ 213	\$ 267
		6	\$ 426,000	1.8	\$ 64	\$ 128	\$ 192	\$ 256	\$ 320
		7	\$ 497,000	2.1	\$ 75	\$ 149	\$ 224	\$ 299	\$ 373
		8	\$ 568,000	2.4	\$ 85	\$ 171	\$ 256	\$ 341	\$ 427

■ **KEY RESPONSIBILITIES OF THE**
■ **FINANCIAL ADVISOR**

■ (All Methods of Sale)

- Assists in evaluating capital funding alternatives and developing a financing plan.
- Assists with obtaining required authorizations, including referenda
- Provides advice on method of sale (where appropriate)
- Develops RFP for financing team
- Evaluates proposal submissions
- **Recommends timing of bond sale**
- **Identifies tasks, responsibilities, and dates for completing activities leading up to bond sale**
- **Designs debt structure**
- **Provides advice on approach to ratings and assists with rating presentation**
- **Evaluates use of and obtains bids for credit enhancement (if appropriate)**
- **Assists in producing and reviewing documents, including preliminary and final official statements**
- Conducts pre-marketing of issue (competitive sale)
- Evaluates bids, including accuracy of TIC calculation, and recommends award (competitive sale)
- Reviews pricing and allocation of bonds (negotiated sale)
- **Assists with closing arrangements**
- Provides advice on investment of bond proceeds (if appropriate)
- Provides advice related to compliance with arbitrage regulations

■ **KEY RESPONSIBILITIES OF THE**
■ **SENIOR MANAGING UNDERWRITER**

■ (Negotiated Sale)

- **Recommends timing of bond sale**
- **Identifies tasks, responsibilities, and dates for completing activities leading up to bond sale**
- **Designs debt structure**
- **Provides advice on approach to ratings and assists with rating presentation**
- **Evaluates use of and obtains bids for credit enhancement (if appropriate)**
- **Assists in producing and reviewing documents, including preliminary and final official statements**
- Conducts pre-marketing of issue
- Prepares preliminary pricing analysis prior to planned sale date
- Distributes preliminary and final official statements
- Coordinates syndicate activities in pricing and allocating bonds
- Purchases bonds from issuer for sale to final investors
- **Assists with closing arrangements**
- Completes sales report including designations and allotments

Thank You

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