



Treasury Institute
for Higher Education



INTRODUCTION TO CAPITAL FINANCING

**EILEEN BYRNE &
MARY PELOQUIN-DODD**



***Ready
to get
started?***

OK I'M UP...



LET'S GET THIS MONEY

Agenda

1. Capital Budgeting
2. Debt Basics
3. Major Players
4. Debt Instruments
5. Bond Closing
6. Post Issuance Compliance
7. Case Studies

CAPITAL BUDGETING

CAPITAL BUDGET

- Long term expenditures
- Major maintenance
- Renovate assets
- Buy or build assets
- Multi-year lives, such as buildings or equipment



Cornell University

Table 7: Sources & Uses of Capital Expenditures by Campus
(dollars in thousands)

	Projections through FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Estimated Total Budget
Ithaca Campus - Sources							
1. Gifts in Hand	44,025	104,776	-	-	-	-	148,801
2. Gifts Pledged	-	8,808	5,823	1,945	2,045	-	20,795
3. Gifts to be Raised	1,950	3,103	45,000	4,000	-	225	52,103
4. Gift Funds ^a	-	-	-	-	-	-	-
5. Unit & Central Resources ^{b, c}	45,975	116,687	50,823	5,945	2,045	225	221,700
6. State University Construction Fund ^d	70,158	188,495	36,218	7,245	39,724	5,563	347,403
7. Grants & Other External Sources ^e	56,229	4,319	21,715	40,709	-	-	122,972
8. External Debt ^f	18,365	700	-	-	-	-	19,065
9. Estimated Total Budget - Ithaca Campus	81,959	7,485	51,892	53,899	41,769	5,788	141,337
Ithaca Campus - Uses							
1. Planning and Design	272,686	317,687	160,647	-	-	-	852,476
2. Net New Space - Program	-	-	-	-	-	-	-
3. Building Renewal	50	4,500	9,600	845	-	-	14,995
4. Renewal - Programmatic Fit	136,231	129,867	38,947	-	-	-	305,045
5. Renewal - Capital Infrastructure & Maintenance	81,785	66,724	44,159	42,874	40,309	5,788	281,640
6. Administrative Systems	21,562	44,194	9,534	1,647	-	-	76,936
7. Total Budgeted Capital Expenditures - Ithaca Campus	32,605	71,170	57,360	7,495	-	-	168,629
	454	1,232	1,048	1,038	1,460	-	5,232
	272,686	317,686	160,647	53,899	41,769	5,788	852,476



Arena



Auditorium

RENOVATION



Visitor Center



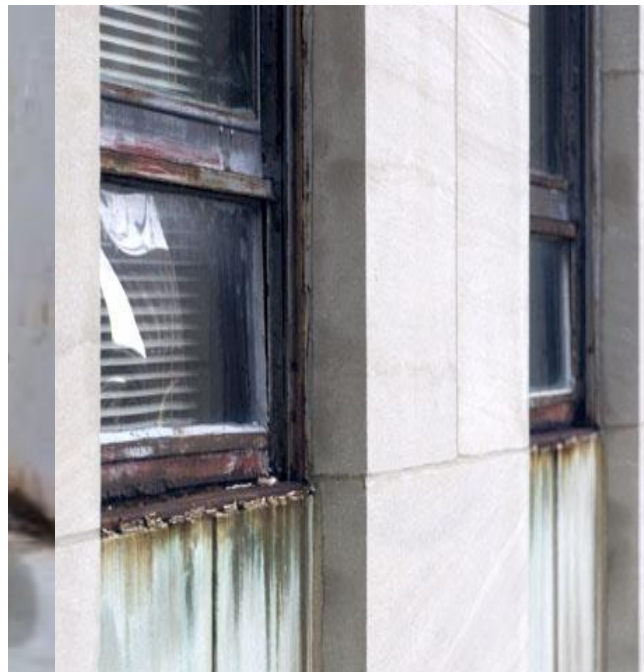
Labs



NEW CONSTRUCTION



DEFERRED MAINTENANCE



62 YRS

AVG AGE OF
CAMPUS ASSETS
(U.S. HIGHER ED 2025)

Michigan State University
Building Condition Assessment
2017-2021 Capital Renewal - Maintenance

Building Name	Bldg #	Work Plan Year-Proposed	Type	Description (Title)	Estimated Cost (2017 dollars)
COMPUTER CENTER	0035	2020	BUILDING SYSTEMS	SUBSTATIONS/TRANSFORMERS - 13.2 KV	\$630,000
					\$2,354,000
CONRAD HALL	0328	2017	BUILDING SYSTEMS	REPLACE BOOSTER COIL VALVES	\$134,000
CONRAD HALL	0328	2017	BUILDING SYSTEMS	REPLACE OLD LIGHTING PANELS	\$32,000
CONRAD HALL	0328	2018	BUILDING SYSTEMS	CHILLER - CH1	\$225,000
CONRAD HALL	0328	2020	BUILDING SYSTEMS	REPLACE DOMESTIC COLD WATER SHUTOFF VALVES AND WATER METER WHERE WATER COMES INTO THE BUILDING.	\$28,000
					\$419,000
COWLES HOUSE	0009	2017	BUILDING ENVELOPE	REPLACE WINDOWS WITH NEW THERMAL PANE	\$114,000
COWLES HOUSE	0009	2017	BUILDING SYSTEMS	INSULATED GLASS WINDOWS	\$316,000
COWLES HOUSE	0009	2017	BUILDING SYSTEMS	REPLACE EXISTING HVAC CONTROLS WITH NEW DDC CONTROLS	\$32,000
COWLES HOUSE	0009	2017	BUILDING ENVELOPE	REPLACE CHILLER	\$20,000
COWLES HOUSE	0009	2017	BUILDING SYSTEMS	CONCRETE & MASONRY REPAIRS AT BUILDING ENTRANCES	\$91,000
COWLES HOUSE	0009	2017	BUILDING SYSTEMS	COWLES HOUSE - REPLACE FIRE ALARM SYSTEM	\$177,000
COWLES HOUSE	0009	2017	BUILDING SYSTEMS	NEW FAN COIL UNITS AND VENTILATION DUCTWORK	\$101,000
COWLES HOUSE	0009	2017	BUILDING SYSTEMS	REPLACE 16 FAN COIL UNITS	\$38,000
COWLES HOUSE	0009	2017	BUILDING SYSTEMS	REPLACE 2 AIR HANDLING UNITS	

\$112B
CURRENT
U.S. BACKLOG

APPA & CBRE. (n.d.). Higher Ed Facilities Forum: Deferred maintenance backlog and average asset age in U.S. higher education.

CAPITAL PROJECT SUMMARIES

PRIORITY UW-STEVENSON POINT ALBERTSON HALL REPLACEMENT

5

\$92,160,000

\$92,160,000 GFSB

Project Request:

The UW System requests that the Board of Regents recommend this project of \$92,160,000 General Fund Supported Borrowing to construct a replacement multi-use academic learning commons and student services facility and demolish the former learning resource center on the UW-Stevens Point campus be included in the proposed 2021-23 Capital Budget request that will be submitted to the Department of Administration and the State Building Commission.



Albertson Hall
(proposed for replacement)

1970 Year
202,006 GSF

Summary:

- ✦ New Learning Commons, Student Success Center, and Center for Inclusive Learning.
- ✦ Installs mobile, high-density shelving on the lower levels and open floor configurations.
- ✦ Appropriately locates Disability and Assistive Technology Center on the ground floor.
- ✦ Relocates campus data center out of the 100-year floodplain, serving several municipal and regional entities.
- ✦ Resolves building infrastructure deficiencies in the mechanical, electrical, communications, plumbing, and fire protection systems.
- ✦ Eliminates structural deficiency that has resulted in deflection and localized buckling first floor.

	Physical Condition						
	i	ii	iii	iv	v	vi	vii
Functional Condition	A	iii	iii	iii	iii	iii	iii
	B	iii	iii	iii	iii	iii	iii
	C	iii	iii	iii	iii	iii	iii
	D	iii	iii	iii	iii	iii	iii
	E	iii	iii	iii	iii	iii	iii
	F	iii	iii	iii	iii	iii	iii
I	iii	iii	iii	iii	iii	iii	iii
	iii	iii	iii	iii	iii	iii	iii

202,006 GSF
180,100 GSF
0 GSF

Demolition
New Construction
Renovation



PROJECT SUMMARY

Category: Growth
Type: Active

North Campus Student Housing - Phase IV(b) – Oak Hall/Denny Field

COVID update: Project is nearing completion (Aug). Interruption would be too costly.

REGENTS ACTIONS:

February 2019

- Approved project budget and funding plan.

OBJECTIVES:

- Complete Phase IV of ten-year plan to increase capacity and provide safe, affordable, quality student housing. Oak Hall will provide an additional 360 beds to the 1,774 beds completed in Phase IV(a) (Madrone, McCarty, and Willow Halls).

DESCRIPTION: This project will include the construction of Oak Hall and landscape improvements in the area behind Lewis Hall as well as the reconstruction of Denny Field as an artificial surface all-season field with lighting starting in May 2019 with occupancy in fall 2020. North Campus Housing Phase IV(b) originally included the demolition and minor site restoration of Haggett Hall. The demolition and potential redevelopment of Haggett Hall is accounted for in the Housing & Food Services (HFS) proforma in fiscal years 2021-2027 as a capital expenditure that is not yet approved by the University of Washington Board of Regents.

FINANCIALS:

Proposed Project Budget

Consultant Services	\$660,120	1%
Construction Cost	\$51,922,061	79%
FF&E & Other Costs	\$5,833,413	9%
Contingency	\$2,516,754	4%
Haggett Hall	-	0%
Accrued Costs to Date	\$4,567,652	7%
Total Project Budget	\$65,500,000	100%

Proposed Funding

UW - Housing & Food Services	\$62,200,000	95%
UW - HFS previously funded	\$3,300,000	5%
Estimated Total Funds	\$65,500,000	100%

BENCHMARKS:

Project
Costs escalated to 2019 (project costs)
Stanford Benchmark of west coast university housing previous five years (\$155,750/bed).
Maple and Terry Halls (\$132,000/bed)
Lander Hall (\$153,500/bed)

METRICS & INDICATORS:

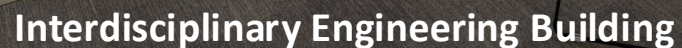
Item	Current	Targets	Item	Current	Targets
Net Assignable SF	66,979	287,886	Construction Cost/GSF	\$455	\$255
Gross SF	108,195	435,651	Project Cost/GSF	\$563	\$321
GSF/Bed	300	415	Project Cost/Bed	\$161,000	\$133,000
Efficiency (NASF/GSF)	62%	66%			

SCHEDULE:



UNIVERSITY of
WASHINGTON





Category: Growth
Type: Institutional Capital

REGENTS ACTIONS:

June 2020

- Project approval for \$75 million.
- Delegated authority to award Design Build contract.
- Site selection.

OBJECTIVES:

- Provide an educational experience that prepares undergraduate students to be leaders.
- Increase diversity and access to foster excellence.
- Build interdisciplinary collaborations that inspire innovation.
- Create industry partnerships to increase impact.
- Focus on key global challenges where they achieve greatest impact and excellence.

DESCRIPTION: The new IEB facility would provide much needed capacity to alleviate existing deficits within the College of Engineering, and provide student services and a "home base" for the freshmen and sophomore classes. The IEB would provide substantial project and curricular space, balanced with research and faculty office areas to support the growth in student enrollment. The IEB would also provide more space for industry-sponsored senior Capstone projects, which holistically combine theory, practice, and design. Pairing students with industry professionals opens doors to post-degree employment and strengthens University-industry connections.

FINANCIALS:

Proposed Project Budget			Proposed Funding		
Acquisition/Enabling Costs	\$13,000,000	17.3%	OFM State Capital Request 17-19	\$600,000	0.8%
Consultant Services	\$5,061,036	6.7%	OFM State Building Account 19-21	\$4,000,000	5.3%
Construction Contracts	\$52,799,778	70.4%	OFM State Capital Request 21-23	\$45,400,000	60.5%
Equipment	\$1,249,635	1.7%	Donor Funding	\$2,800,000	3.7%
Project Management	\$2,471,013	3.3%	Debt (ILP)	\$10,000,000	13.3%
Other Costs (inc Art)	\$418,538	0.6%	Unit Equity	\$12,200,000	16.3%
Total Project Budget	\$75,000,000	100%	Estimated Total Funds	\$75,000,000	100%

BENCHMARKS:

Project	Gross SF	Project Cost	Cost/GSF
Montana State University - Asbjornson Hall	109,000	\$62,356,720	\$572
University of Alaska - Integrated Science Facility	124,000	\$99,500,080	\$802
UW Gates Center for Computer Science & Engineering	135,000	\$115,352,100	\$854
UW Molecular Engineering Building	90,300	\$95,097,639	\$1,053

METRICS & INDICATORS:

Item	Current	Targets	Item	Current	Targets
Net Assignable SF		43,500	Construction Cost/GSF	-	\$704
Gross SF		75,000	Project Cost/GSF	-	\$1,000
Efficiency (NASF/GSF)		58%	Operating Costs/GSF	-	\$7.54
			Renewal Costs/GSF	-	\$9.36

SCHEDULE:

2019		2020				2021				2022				2023			
Qtr. 4	Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4	Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4	Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4	Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4	



FUNDING OF CAPITAL PROJECTS

State Appropriations

Tuition

Restricted Fees

Gifts and grants

Endowment Income

Revenues Pledges by Source of Capital



REVENUE

- Revenue Pledge
- Specifically Defined Revenue Source
- No Taxing Power
- Not Subject to Appropriation Risk

GENERAL OBLIGATION

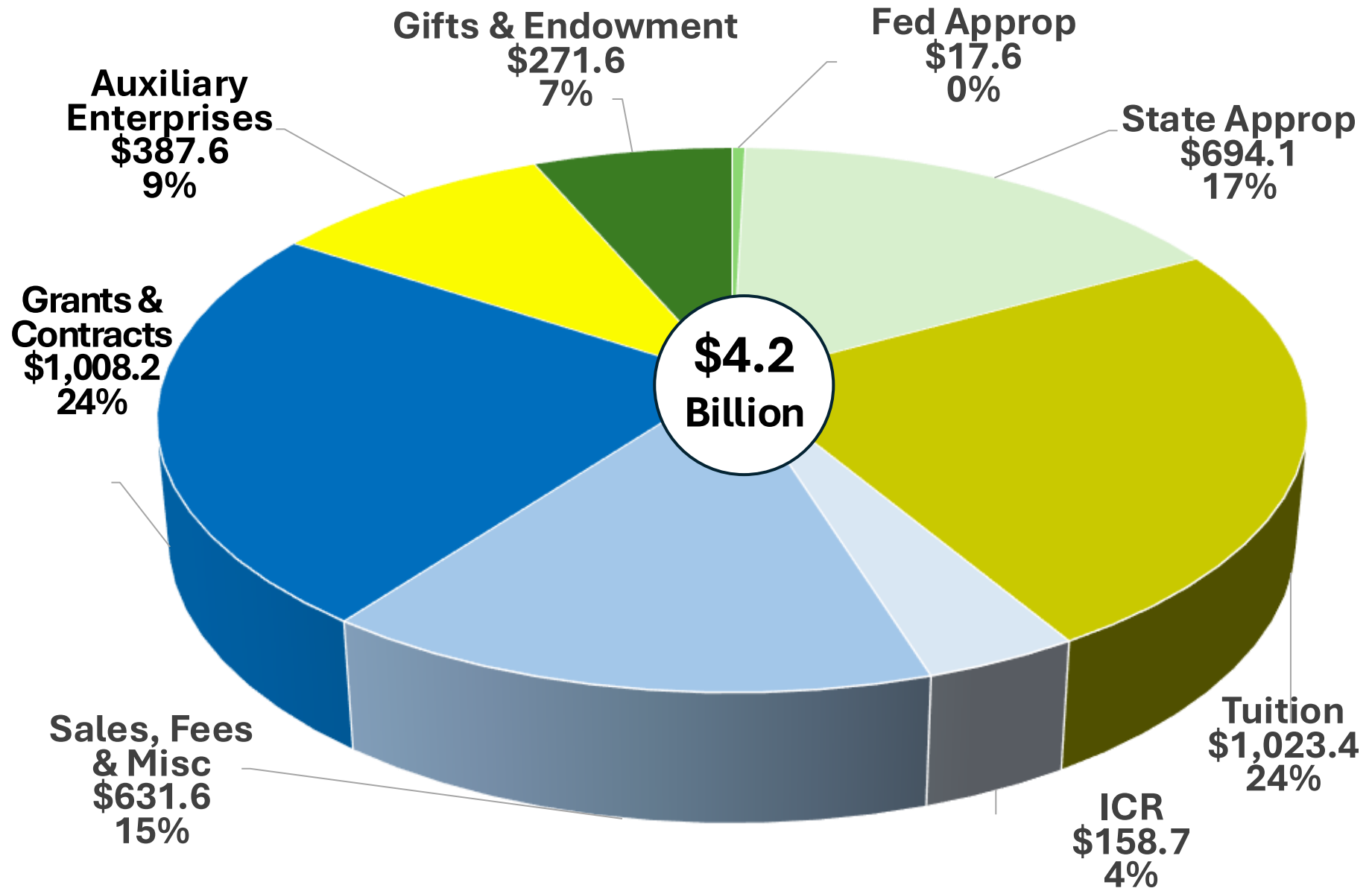
- Full Faith & Credit Pledge
- Taxing Power
- Not Subject to Appropriation Risk

LEASE

- Special Obligation Pledge
- All Legally Available Revenues
- No Taxing Powers
- Subject to Appropriation Risk

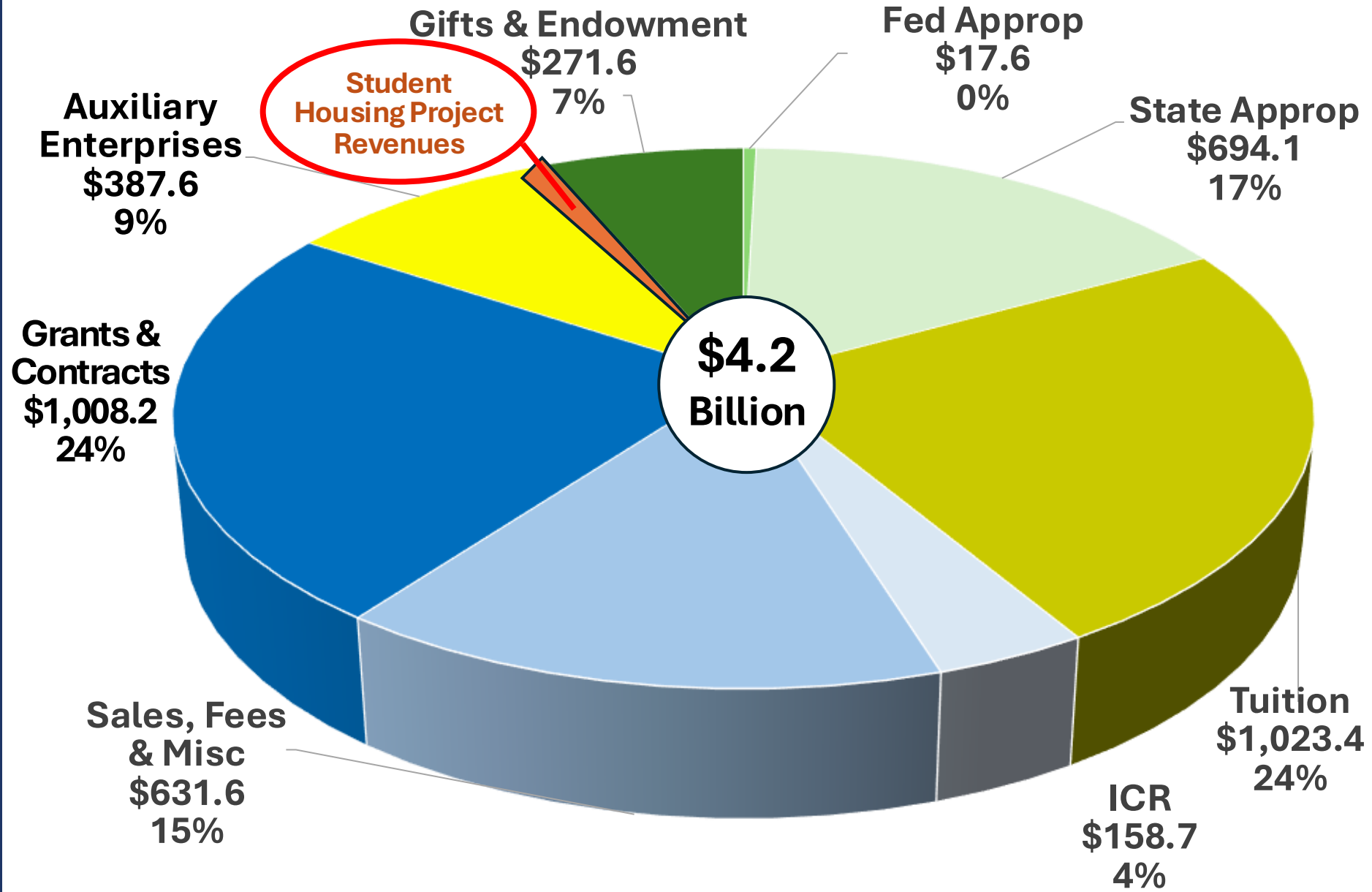
FUNDING OF CAPITAL PROJECTS

University of Minnesota Budgeted Revenues FY20 in millions



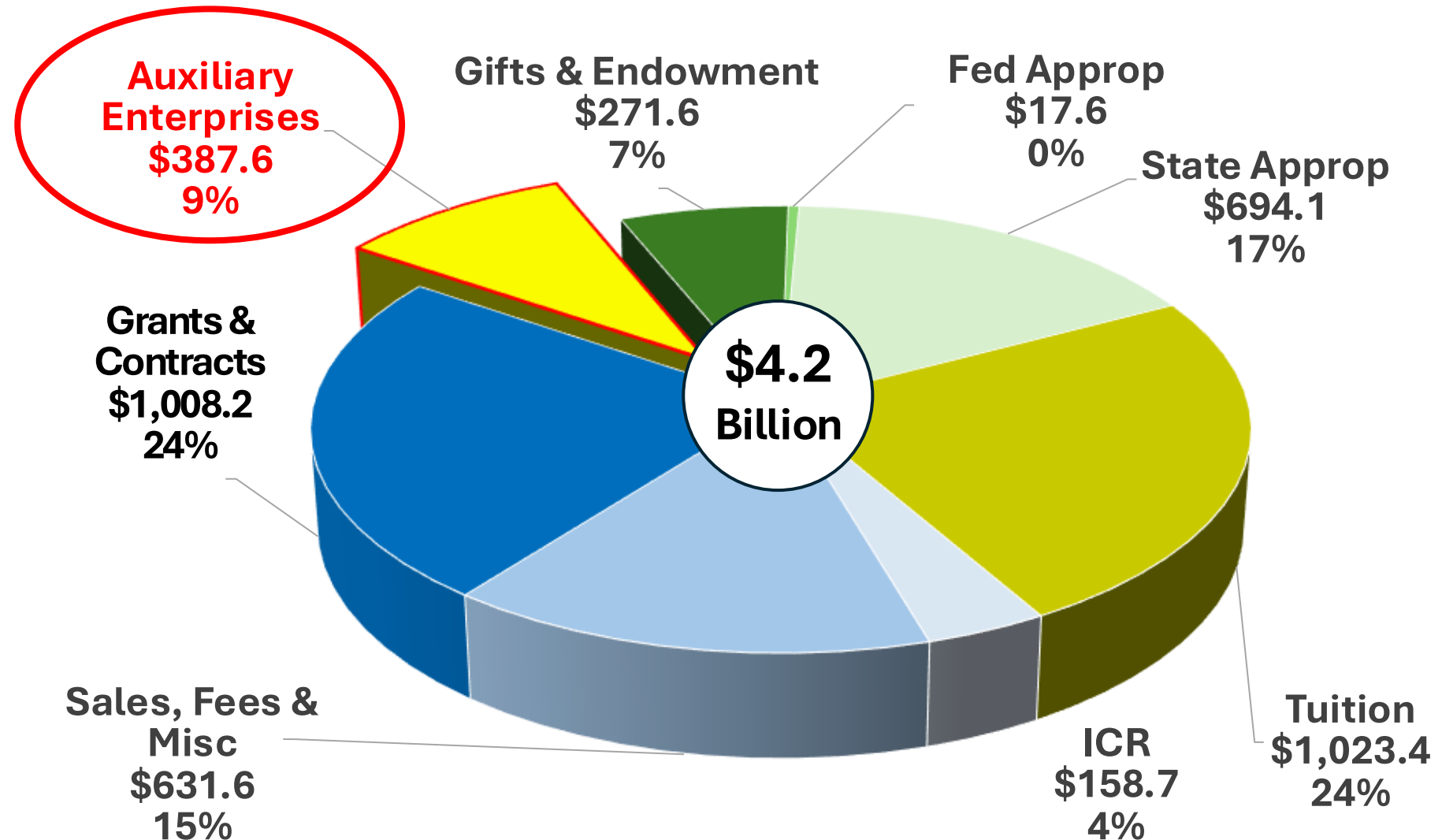
FUNDING OF CAPITAL PROJECTS

University of Minnesota Budgeted Revenues FY20 in millions



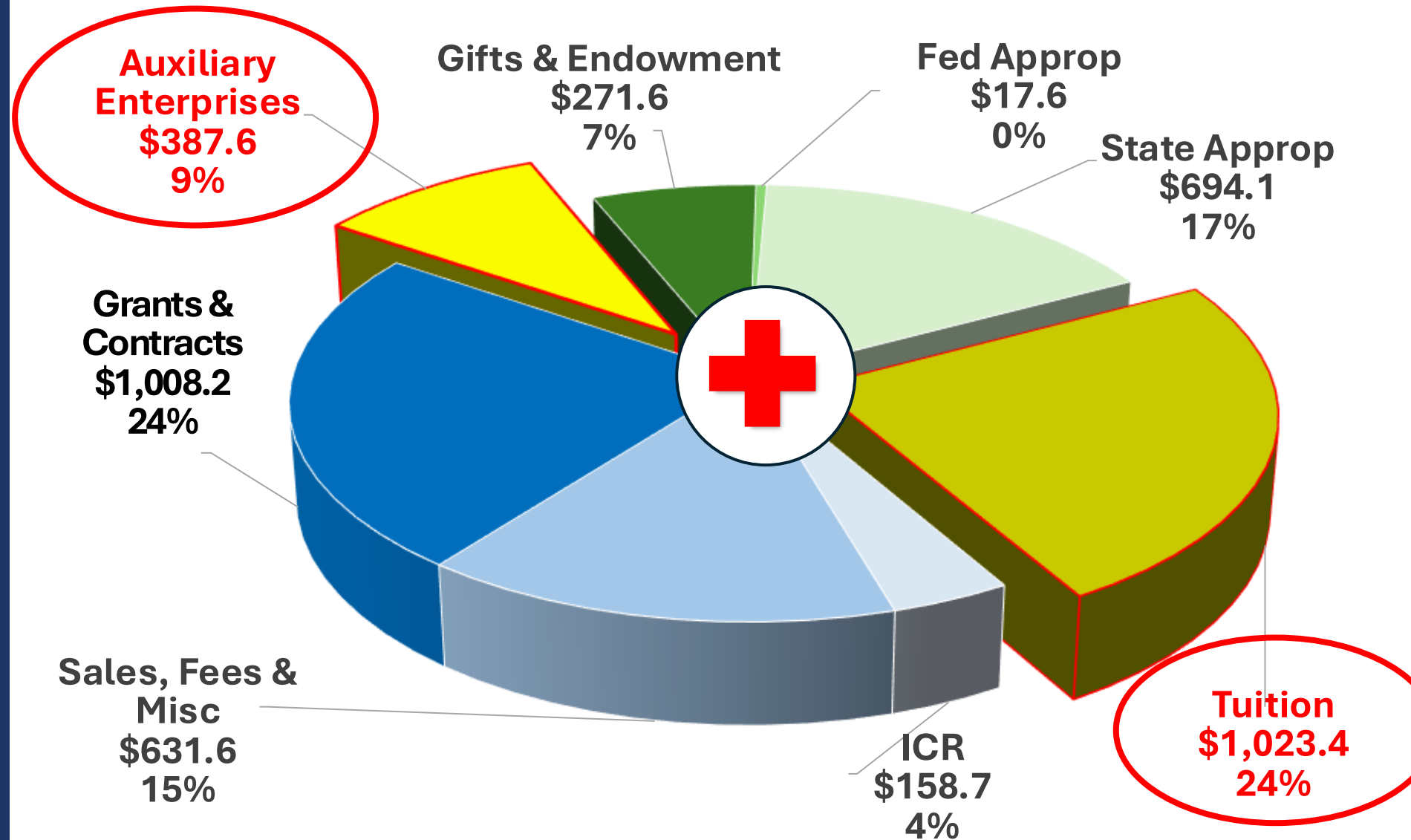
FUNDING OF CAPITAL PROJECTS

University of Minnesota Budgeted Revenues FY20 in millions



FUNDING OF CAPITAL PROJECTS

University of Minnesota Budgeted Revenues FY20 in millions



WHERE DEBT IS BORN!

	Money Markets
Maturity period:	Short-term: ≤ 1 year
Safety:	Lower risk
Examples:	Treasury bills Commercial paper Certificates of deposit (CDs)

Capital Markets

Long-term: > 1 year
Higher risk
Treasury bonds
Municipal bonds
Corporate bonds
Stocks (equity)

DEBT BASICS

IT'S NOT SCARY...
WE PROMISE!!



WHAT IS DEBT?

- A loan from a person, corporation, government, or nonprofit entity
- Generally, interest bearing
- For a specific period - long-term or short-term
- Usually with agreed upon repayment schedule
- Examples of types of debt

Loan (e.g. home, auto, student)

Bond

Commercial paper

Note

Credit card

IOU

DEBT vs. EQUITY

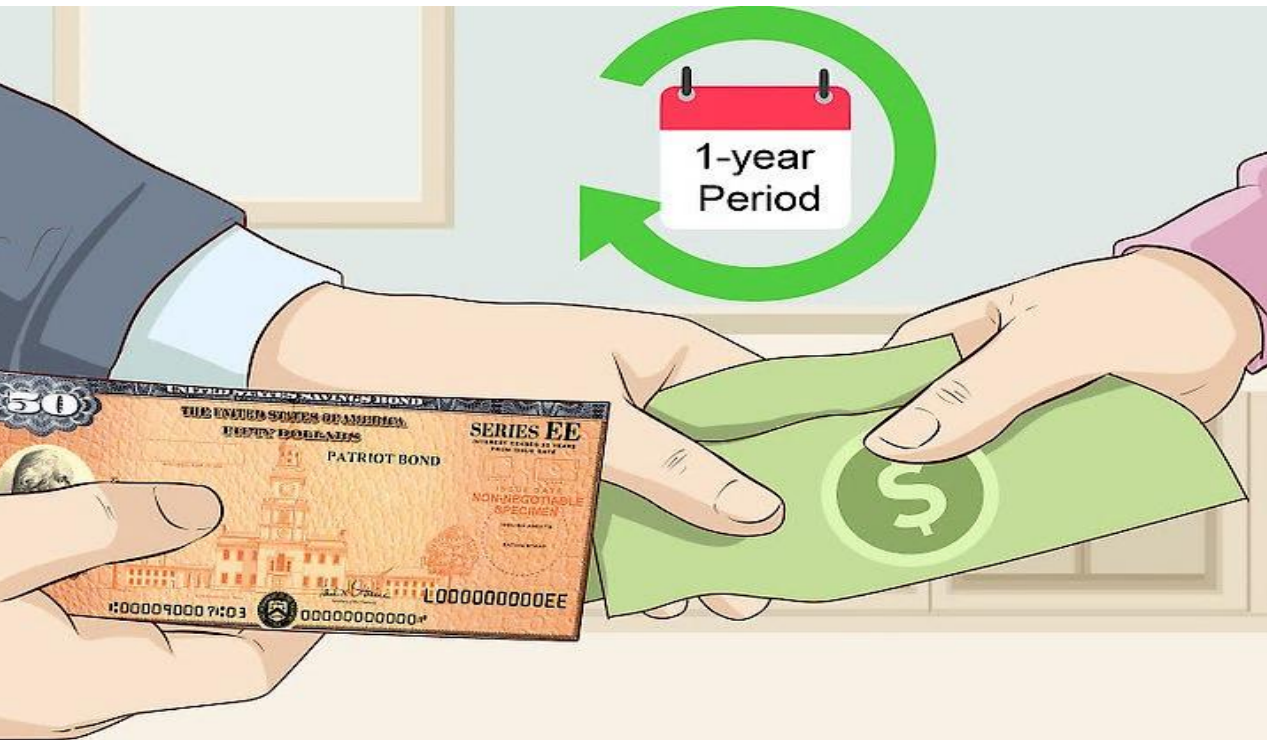
DEBT

- A financial obligation owed by one person to another
- Based on promise to repay amount borrowed + interest
- No ownership component
- Borrower commits to repay from some stream of revenues or assets
- To not pay on time is a default

EQUITY

- Ownership in a thing
 - Company
 - Real estate property
 - Vehicle
- If you own stock of a company, you are part owner of the company
- No guarantee stockholders will receive
 - Return on investment (e.g. dividend)
 - Price paid for stock
 - Or anything else

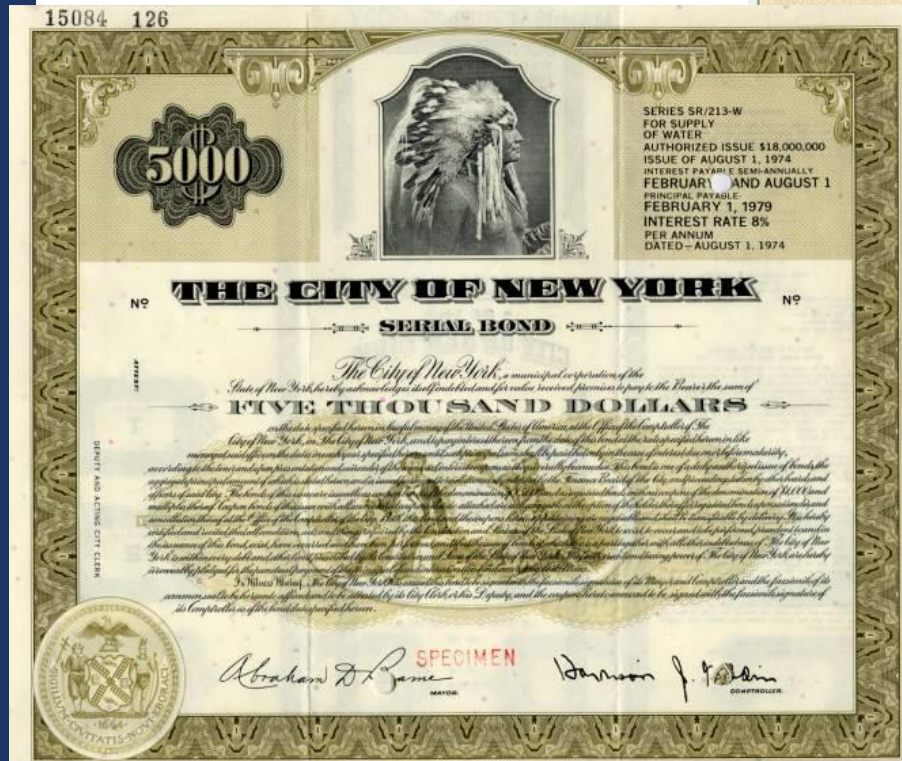
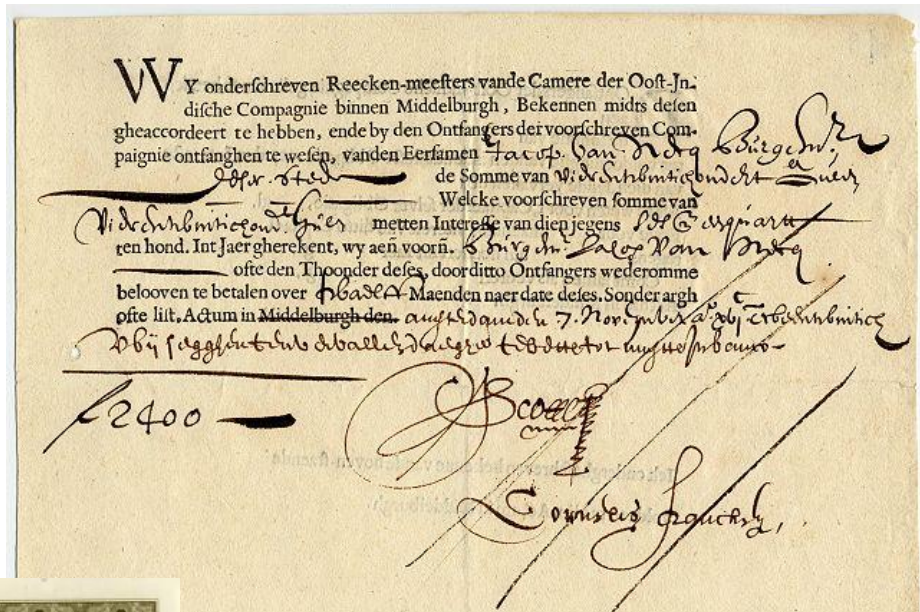
WHAT ARE BONDS?



- Debt issued for a period of one or more years
- Bonds can be outstanding for 30 years or more, even 100 years
- Short-term bond typically matures in less than 3 years
- Borrower pays interest periodically — often every 6 months
- Borrower repays principal amount of bond at specified times — often one payment per year

A BIT OF HISTORY

**Dutch East India Co.
issues bond on
Nov. 7, 1623**



1812
New York City
issues 1st U.S. local
govt debt
instrument
to fund local canals
a “municipal bond”

What if you had
the cash?

WHY BORROW?

When does it
make sense
to do so?



Should you
spend it in
one or
two
years?

INSTITUTIONS HAVE OPTIONS

PAY WITH CASH OR BORROW?

Pay-As-You-Go

- Construct or acquire only as revenues become available
- Current users bear cost
- Construction/acquisition capacity limited to available funds on hand
- Lower total cost of financing
- Financial sustainability

Debt Financing

- Construct or acquire assets as needed
- Current & future users bear cost
- Enhanced construction/acquisition capacity
- More affordable as payments spread over time
- Finance over useful life of assets

WHY BORROW?

NEW MONEY DEBT

For capital projects

- Housing, classrooms, research buildings, athletic facilities, etc.

For short-term operating needs

- In anticipation of gifts
- To cover cash flow during fiscal year

For strategic initiatives:

- Avoid liquidating endowment during periods of market weakness
- Pay for new acquisitions, e.g, land & other real estate assets

*Hmm.. we can
earn more by
keeping our
funds invested.*



WHY BORROW?

REFINANCING

To pay off existing debt

To create debt service savings by issuing new bonds at lower interest rate

To remove restrictive requirements of outstanding bonds / avoid covenant default

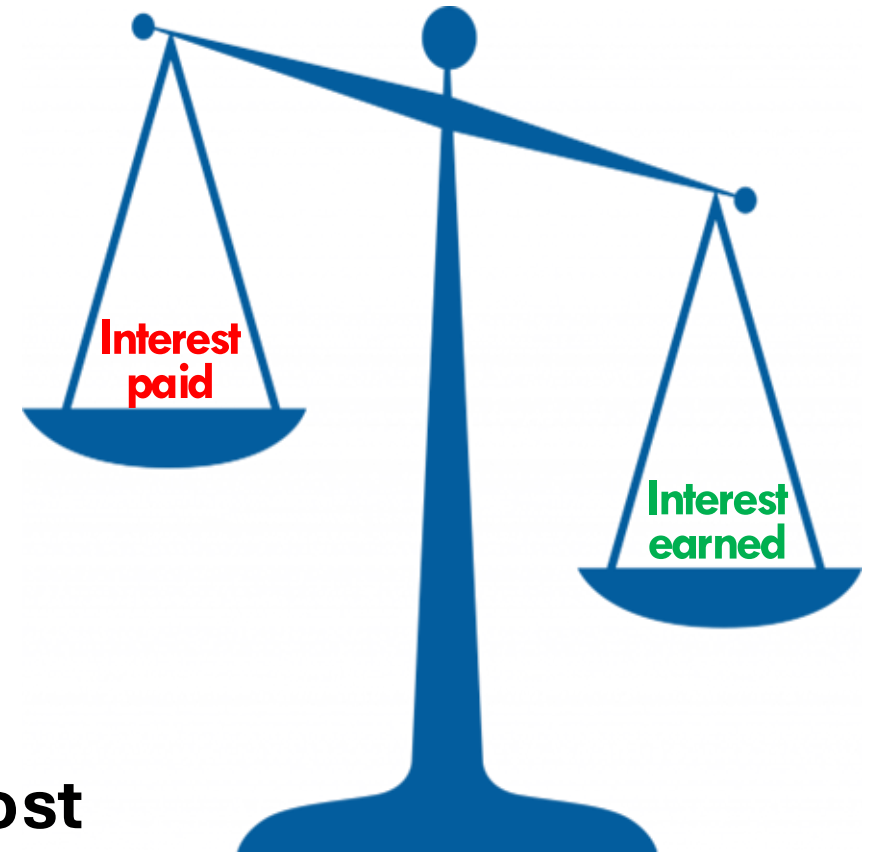


*We need
a break
from this high
debt service!*

WHY BORROW?

FINANCIAL LEVERAGE

**YOUR MONEY
VS.
OPM**



If investment income $>$ than “all in” cost of borrowing, then advantageous to borrow

PUBLIC INSTITUTIONS HAVE OTHER REASONS

State appropriations
insufficient or not available

- Scarce state funds
- Capital outlay priority system
- Auxiliary enterprises usually not funded by the state
- State debt limits
- States' priorities differ

PRIORITY 1 – EMERGENCY

- LIFE SAFETY PROJECTS
- STATE FIRE MARSHALL DEFICIENCIES
- SPECIAL PROJECTS, AS ASSIGNED BY THE AVP F&S

PRIORITY 2 – URGENT – BASIC HUMAN NEEDS PROJECTS

- POTABLE WATER
- INDOOR AIR QUALITY
- PROPERLY FUNCTIONING RESTROOMS
- PROTECTION FROM THE ELEMENTS (WATER INTRUSION, ROOF/WINDOW LEAKS)

PRIORITY 3 – EXPEDITE – EDUCATION SPACE IMPROVEMENTS

- EDUCATION – CLASSROOMS
- RESEARCH – LABS
- WORKPLACE ENVIRONMENT PROJECTS (HVAC/POWER/LIGHTING)

PRIORITY 4 – EXPEDITE – NON-EDUCATION SPACE IMPROVEMENTS

- RESIDENCE LIFE
- RETAIL
- RECREATION
- FACULTY & STAFF SPACE

PRIORITY 5 – ROUTINE

- FINISHES
- FLOORING
- PAINT

PRIORITY 6 – EXTERIOR (EMERGENCY REPAIRS CAN BE ASSIGNED TO PRIORITY 1 OR 2)

- LANDSCAPE
- WALKWAYS
- ROADWAYS

WHY BORROW MONEY?

- Capital projects = \$\$\$
 - Difficult to fund with cash on hand
 - Construction inflation
- Competing campus needs
- Gifts



Promises of gifts

- Capital campaigns
- Multi-year pledges

✓ **PLEDGE**

Name _____

Address _____

City/State/Zip _____

Email _____

I commit to give \$ _____ over the next year.

I plan to give:

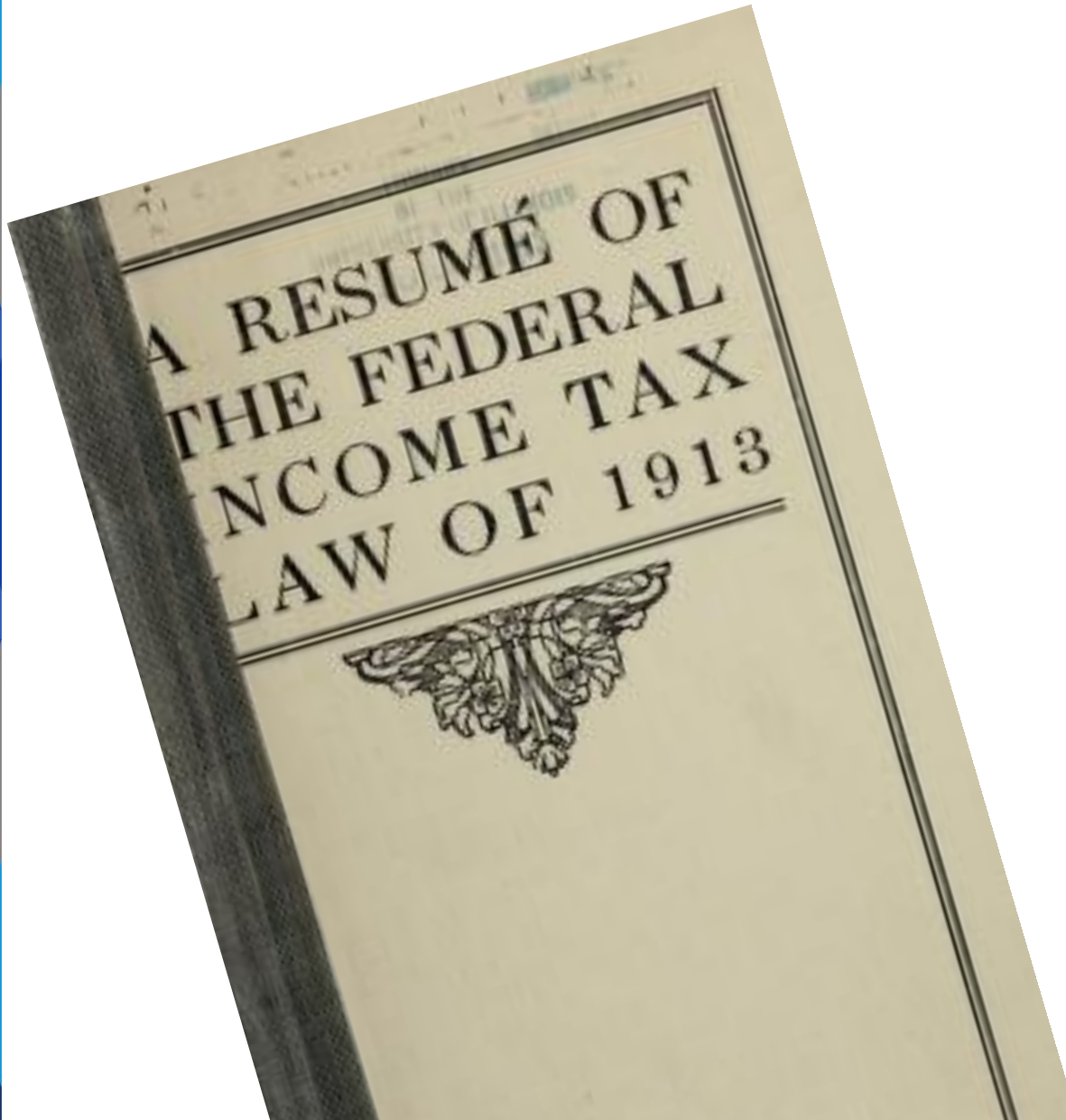
☐ 1x ☐ Weekly ☐ Twice a month ☐ Monthly ☐ Quarterly ☐ Other _____

TAX-EXEMPT MUNICIPAL BONDS

- Over 80,000 municipal bond issuers in U.S.
- State or local governments bonds
- Public purpose projects
 - Governmental
 - Nonprofit organization
- Interest paid to investors exempt from certain income taxes
 - Federal Income Tax
 - Some State Income Tax
- Includes higher education bonds



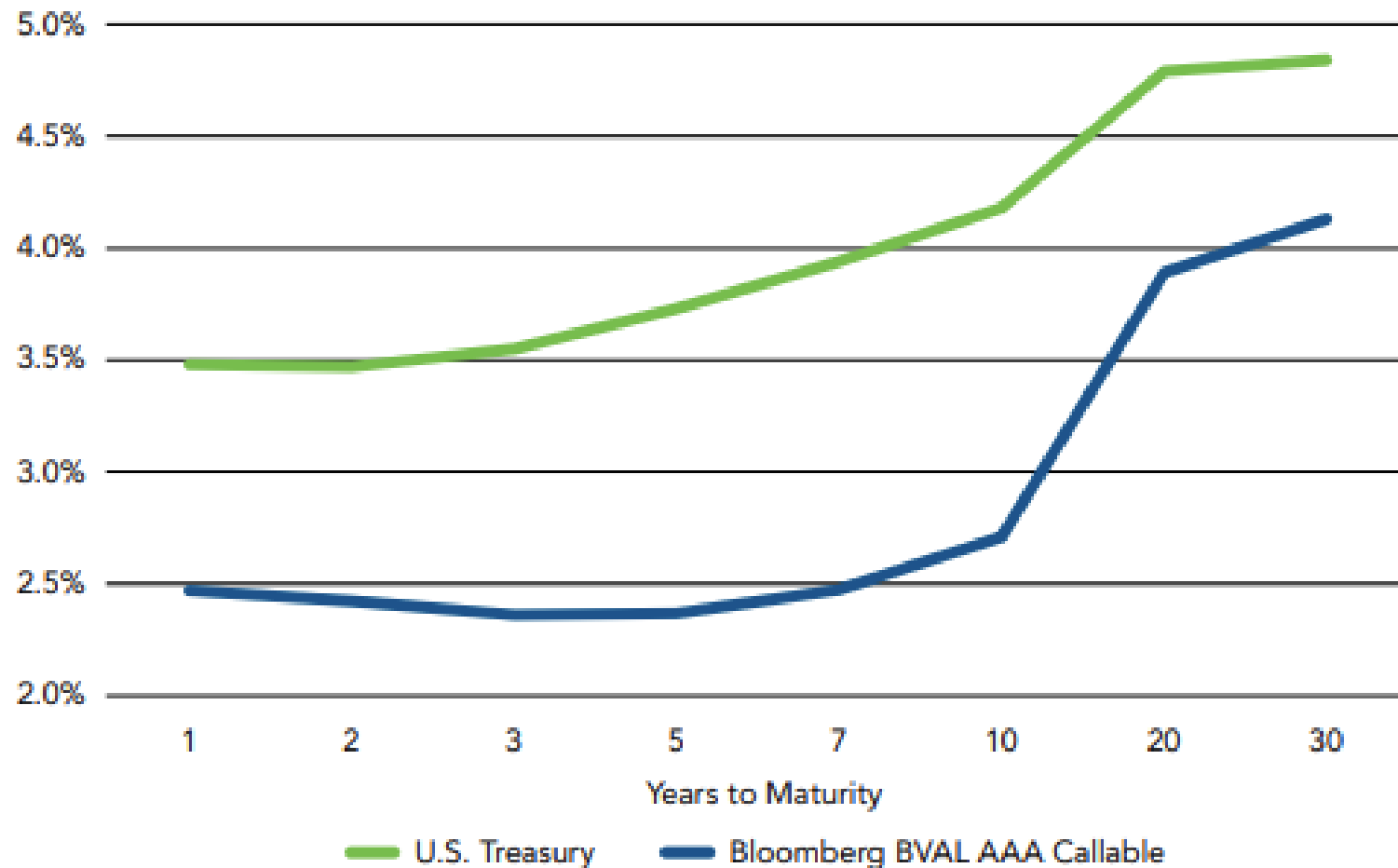
TAX EXEMPTION



- ✓ In 1913, tax-exempt debt created by Congress
- ✓ Revenue Act of 1913 excluded interest income from municipal bond issues from federal taxes
- ✓ Borrowing was not most common method of financing facilities until federal programs of 1950s
- ✓ Codified in Title 26 of the Code of Federal Regulations (CFR)

BENCHMARK TAX-EXEMPT AND TREASURY YIELDS

As of December 31, 2025



The tax exemption enables highly rated municipal issuers to issue debt at rates even lower than the Treasury market and allows municipalities to provide essential services and projects cost effectively.

Source: Bloomberg Finance L.P, U.S. Department of Treasury

SHOULD TAYLOR SWIFT BUY BONDS?



HIGHER ED BOND MARKET ISSUANCE

1880s

Port of New Orleans - first U.S. “authority” to issue revenue bonds

1921

Port of New York and New Jersey becomes 1st interstate authority – “Special District”

1960s

Use expands for purposes previously financed by G.O. bonds (e.g. utility projects, local public housing)

2020

Nearly 54% of all U.S. muni revenue bond issues

2025

\$44B sold in 2025; up by 8%

SO, YOU HAVE DECIDED TO BORROW...

BUT WHAT RISKS TO CONSIDER?

- Affordability
- Staff workload
- Changes in tax law
- Unpredictable investor behavior
- Compliance reporting
- Disclosure requirements
- Counterparty risk
- External monitoring
 - Rating agencies, trustees, investors
- Contractual risk
- Covenant violations
- Changes in interest rates



"Don't worry — I used
a bond issue."

HIGHER ED MUNI BOND DEFAULTS

Year	Institution	State
2014	Thomas Jefferson School of Law	CA
2015	Dowling College	NY
2017	Birmingham-Southern College	AL
2020	Bradford College	MA
2022	Cazenovia College	NY
2024	University of the Arts	PA
2024	College of Saint Rose	NY
2025	Notre Dame College	OH
2026	Hampshire College	MA
2026	Harrisburg Univ of Sciences & Tech	PA

BREAK

MAJOR PLAYERS

GOING TO MARKET:

THE WORKING GROUP

**Issuer &
Borrower**

**Lenders/
Bondholders/
Investors**

Trustee

**Investment
Banker/
Underwriter**

**Financial
Advisor**

**Credit
Enhancer**
AKA Credit
Provider

ISSUERS

- States & Political Subdivisions
 - Public Colleges & Universities
 - Institution's corporate entity (board), if authorized by law to issue debt
- Debt Issuing Authority
- Public Trust
- Governmental Issuing Authority
- Special Purpose Nonprofit Corporation – a “63-20 Corp”
 - Formed under state nonprofit law for purposes of issuing obligations *on behalf of* a political subdivision

CONDUIT ISSUER:

- Issues bonds for project, then loans proceeds to borrower
- Compensated at closing and annual fee
- May require additional compliance and contracts
- External monitoring
 - Additional tasks associated with agencies, trustees, investors



BORROWERS

The actual user of bond proceeds

May also be the Issuer if have legal authority

Entity that will own facility

Borrows bond proceeds from Issuer

Provides revenues to Issuer for repayment of debt

- Revenues usually assigned directly to Trustee



HOWARD
UNIVERSITY



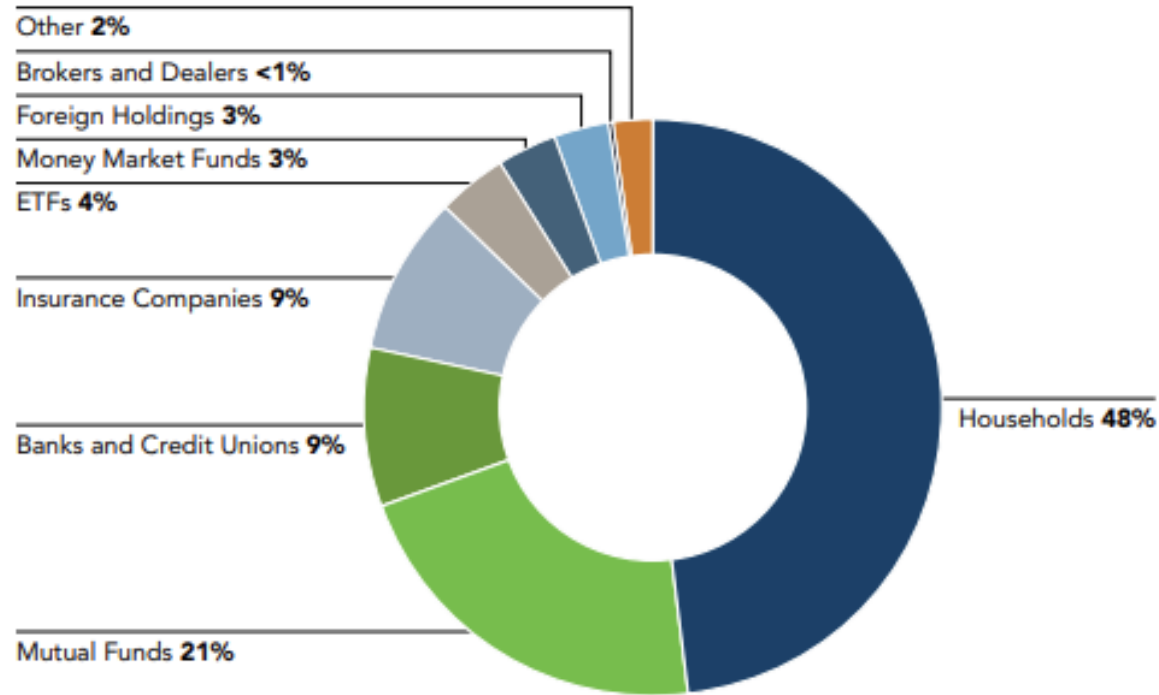
OLD DOMINION
UNIVERSITY®
REAL ESTATE FOUNDATION



MUNI BOND INVESTORS

AKA LENDERS / BONDHOLDERS

Holders of Municipal Bonds—As of September 2025



Individual investors are by far the largest holders of municipal bonds, holding nearly 70% of outstanding securities, 48% directly and approximately 21% through mutual funds.

Individual investors are drawn to municipal securities because of the tax exemption and their relative safety given historically low default rates.

Source: Financial Accounts of the United States, Board of Governors of the Federal Reserve System, January 2026



MetLife



PIMCO



TRUSTEE

- Bank trust department
- Holds funds in trust for bondholders
 - Represents bondholders over life of bonds
- Maintains funds/accounts
 - Project/Construction Funds
 - Principal & Interest Funds
 - Debt Service Reserve Funds
- Approves requisitions/invoices
- Compensated at closing and also annual fee



INVESTMENT BANKER

AKA UNDERWRITER



- Provides advice on structure of bond issue
- Purchases bonds
- Resells those bonds to investors
- Manages bidding for competitive sale
- May manage investment of bond proceeds

Goldman
Sachs

Jefferies



RAYMOND
JAMES®



STIFEL
NICOLAUS
INVESTMENT SERVICES SINCE 1890



FINANCIAL ADVISOR (FA) / MUNICIPAL ADVISOR (MA)

- Borrower's representative
- Often registered investment banker
- Performs initial analytical work
- Advises on bond issuance structure, timing and terms, and method of sale
- Manages sales process
- (competitive or negotiated)

NAMA

NATIONAL ASSOCIATION OF MUNICIPAL ADVISORS



CREDIT ENHANCER



Bond Insurer

Letter of
Credit (LOC)
provider

WHAT DO ALL THESE LAWYERS DO???!!!



Institution's counsel

Bond counsel

Underwriter's counsel

Trustee's counsel

Issuer's counsel

Credit Enhancer's counsel

BOND COUNSEL

Specialize in bond transactions

Legal opinion

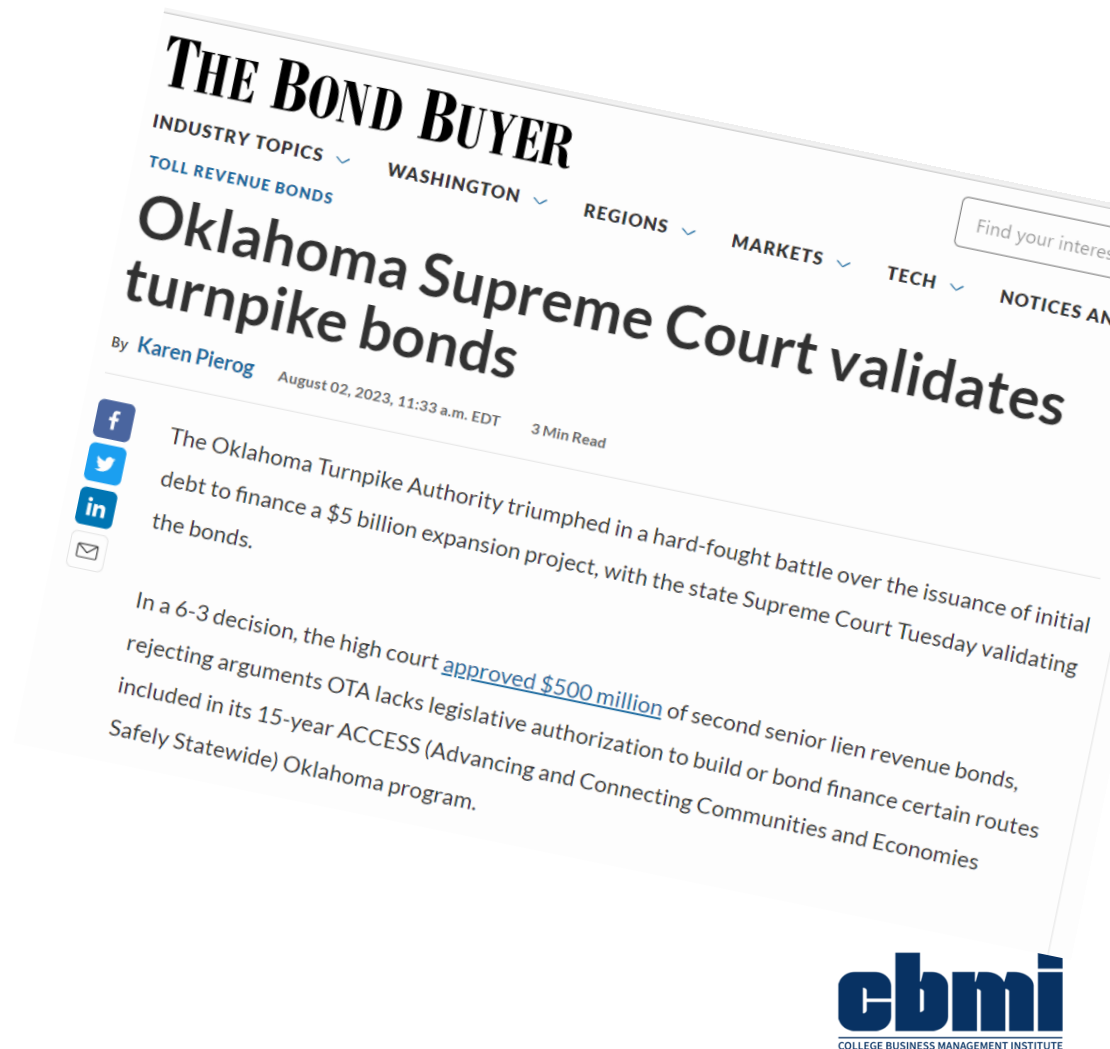
- Certify issue meets tax-exempt regulation
- Legal, valid and binding obligation

Ensure procedures necessary to make commitments binding have been followed



BOND COUNSEL OPINION

- ✓ 501(c)(3) status
- ✓ Conduit issuer status
- ✓ Covenant compliance
- ✓ Satisfaction of additional bonds test
- ✓ “Agreed upon procedures” for financial disclosure
- ✓ Allocation & accounting of private use
- ✓ Determination of useful lives of assets
- ✓ Arbitrage / rebate recordkeeping, analysis, reporting & returns
- ✓ Bond validation



BOND COUNSEL SELECTION

Retain experienced counsel who knows institution well

Select through RFP process

Require listing in
***“The Bond Buyer’s
Municipal Market Place
Directory”***



“RED BOOK”

UNDERWRITER'S COUNSEL

- Represents investment bank underwriting the bond sale
- Responsible for protecting underwriter from legal and financial liabilities
- Performs due diligence review of issuer/borrower ensuring that issuer's financial condition, future plans, and other pertinent details are accurately disclosed
- Ensures offering complies with securities law and rules set by Municipal Securities Rulemaking Board (MSRB)
- Drafts Bond Purchase Agreement and reviews other bond documents

RATING AGENCIES

SECURITIES & EXCHANGE COMMISSION (SEC) OFFICE OF CREDIT RATINGS

Examines and monitors credit rating agencies registered as *nationally recognized statistical rating organizations* (NRSROs)

Develops and administers rules affecting NRSROs

Rating agencies reviewing higher education credit typically look at the same things:

- Demand
- Management
- Finances
- Debt

<https://www.sec.gov/about/divisions-offices/office-credit-ratings/current-nrsros>

11 NRSRO Entities

3 credit rating agencies are most commonly seen in higher education:

MOODY'S
INVESTORS SERVICE

S&P Global
Ratings

FitchRatings

RATING AGENCIES

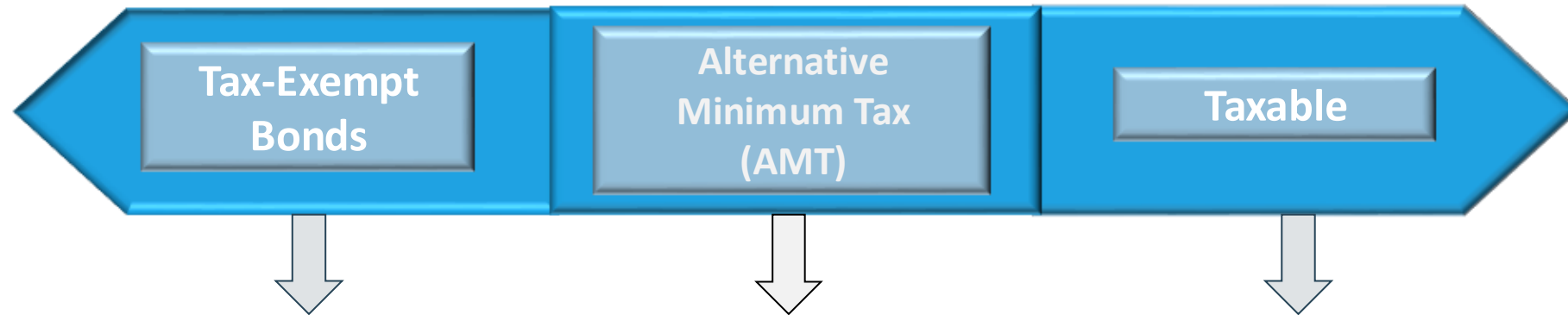
- Generally are rating a security's credit worthiness and risk of default for a particular bond issue
- Many sophisticated investors do their own credit research, but... ratings play a critical role in perception of Borrower's creditworthiness
- Public credit ratings allow for a bigger investor base and enhanced market access

Investment Grade Rating Scales

Moody's	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3
S&P/ Fitch	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-

DEBT INSTRUMENTS

TAX-EXEMPT, AMT & TAXABLE BONDS



- Lowest cost
 - Interest is Federally tax-exempt & might be State tax-exempt too
 - Issued by State and Local governments, certain non-profits
 - Finance projects owned, operated, or used by a government for its own public purposes
- Slightly higher cost
 - Interest subject to Federal AMT
 - Private Activity Projects – outside realm of pure governmental functions
 - Airports, housing agencies
 - Not for profit 501(c)(3)
- Highest cost
 - Interest is included in gross income for federal income taxes
 - Projects are taxable if do not provide significant benefit to general public

TYPES OF MUNICIPAL BONDS

GENERAL OBLIGATION (G.O.) BONDS

“Full faith and credit” –all revenues, maybe all assets
Secured by a govt. agency’s pledge of tax revenues
Power/obligation to tax strengthens credit

REVENUE BONDS

Secured by specified revenue stream of an entity
User fees, tolls, rents, tuition, services charges, license fees, special purpose tax assessments

PRIVATE PLACEMENTS/LIMITED OFFERINGS

Non-public offering
Between 1 to 35 bondholders

GENERAL BOND TERMINOLOGY

Principal /Par Amount

- Total amount of indebtedness

Maturity Date

- Repayment date of bond issue

Coupon Rate

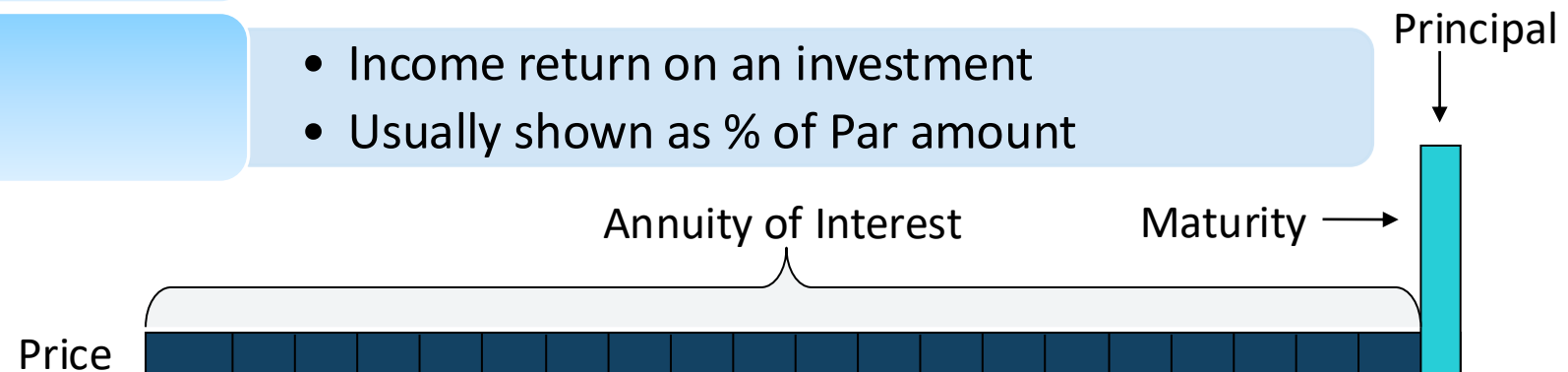
- Annual interest rate on bond issue
- Usually expressed as % of Par amount

Price

- Amount paid to buy a bond in exchange for future receipt of principal & interest payments

Yield

- Income return on an investment
- Usually shown as % of Par amount



BOND CHARACTERISTICS

Tax Status	Maturity Term	Bond Sales	Interest Rate Determination
• Tax-Exempt Bonds • Must meet public purpose rules • Cannot finance privately used projects • Taxable Bonds • More expensive • Less compliance reporting	• Long Term Bonds • Interest usually higher the longer the maturity • Short-term Debt • Often used in form of bank lines • Must be paid down each year • Bridging • Common for projects financed with gifts	• Competitive sale • Negotiated Sale • Public Offering • Private Placement - • Non public offering with 1-35 lenders	• Fixed interest rates for entire maturity or entire life of bond issue • Variable interest rates for the entire maturity of bond issue

BOND CHARACTERISTICS

City of CDFA					
Par Amount	\$4,420,000 Public Improvement Bonds, Series 2015				
Maturity Date	Due March 1 st	Principal Amount	Coupon Rate	Yield	CUSIP No.
	2015	\$255,000	2.000%	0.350%	354730XG3
	2016	300,000	2.000%	0.450%	354730XH1
Principal Amount	2017	305,000	2.000%	0.650%	354730XJ7
	2018	315,000	2.000%	0.900%	354730XK4
	2019	320,000	2.000%	1.350%	354730XL2
	2020	325,000	2.000%	1.700%	354730XM0
	2021	330,000	2.000%	1.850%	354730XN8
	2022	340,000	2.500%	2.100%	354730XP3
	2023	350,000	2.500%	2.250%	354730XQ1
	2024	355,000	2.500%	2.350%	354730XR9
	2025	365,000	2.600%	2.600%	354730XS7
	2026	375,000	2.750%	2.750%	354730XT5
	2034	485,000	4.000%	3.750%	354730XV0

SOURCES & USES EXAMPLE

SOURCES

Par amount (Principal)	\$ 81,000,000
Less: Underwriter's discount	<u>(414,000)</u>
Total Sources	\$ 80,586,000

USES

Project (Construction) Fund	\$ 68,311,350
Capitalized Interest Fund	3,842,500
Costs of Issuance	1,542,150
Debt Service Reserve Fund	<u>6,890,000</u>
Total Uses	\$ 80,586,000

**NOTE THAT
ONLY 85% OF
PAR VALUE
GOES INTO
THIS PROJECT**

TYPES OF BOND SALES

PUBLIC OFFERING

Competitive Sales:

Procure bids from a variety of underwriters

Negotiated Solicitation:

Selects one or more underwriter works to sell via negotiated process

PRIVATE PLACEMENT

Bonds purchased by an investor directly from the Issuer

- Borrower negotiates a price directly with Investor(s)
- Can be more expensive as smaller universe of potential investors

Factors such as security type, transaction size, and length of repayment typically help determine best method of sale

NEW MUNI BOND ISSUANCE BY SECTOR

As of 12/31/2025

Use of Bond Proceeds	Tax-Exempt		Taxable	
	Amount (\$ Billion)	Percentage	Amount (\$ Billion)	Percentage
General Purpose/ Public Imp	\$120.1	23%	\$10.9	33%
Primary & Secondary Education	101.0	19%	1.7	5%
Water & Sewer Facilities	46.1	9%	0.6	2%
Higher Education	41.6	8%	2.9	9%
General Acute Care Hospital	35.9	7%	0.4	1%
Public Power	34.4	7%	0.4	1%
Toll Roads, Highways & Streets	23.1	4%	0.2	<1%
Single and Multi Family Housing	37.5	7%	12.1	36%
Mass Transportation	15.7	3%	0.1	<1%
Other Proceeds	69.4	13%	4.1	12%
Industry Total	\$524.9		\$33.3	

Source: LSEG

OTHER SOURCES OF DEBT-LIKE CAPITAL

Outsourcing

**Bank
Loans**

**Operating
Leases**

**Capital
Leases**

CAPITALIZED INTEREST (“CAPI”)

- Borrow early interest payments
- Buys time before project revenues are generated to pay debt service
 - Construction period
 - Project normalization/stabilization
- One or two years
- Increases bond par value
- Must be offset by earnings on bond proceeds

DEBT SERVICE RESERVE FUND (“DSRF”)

Security against temporary failure to make P&I payments

Often 1 year of debt service payments

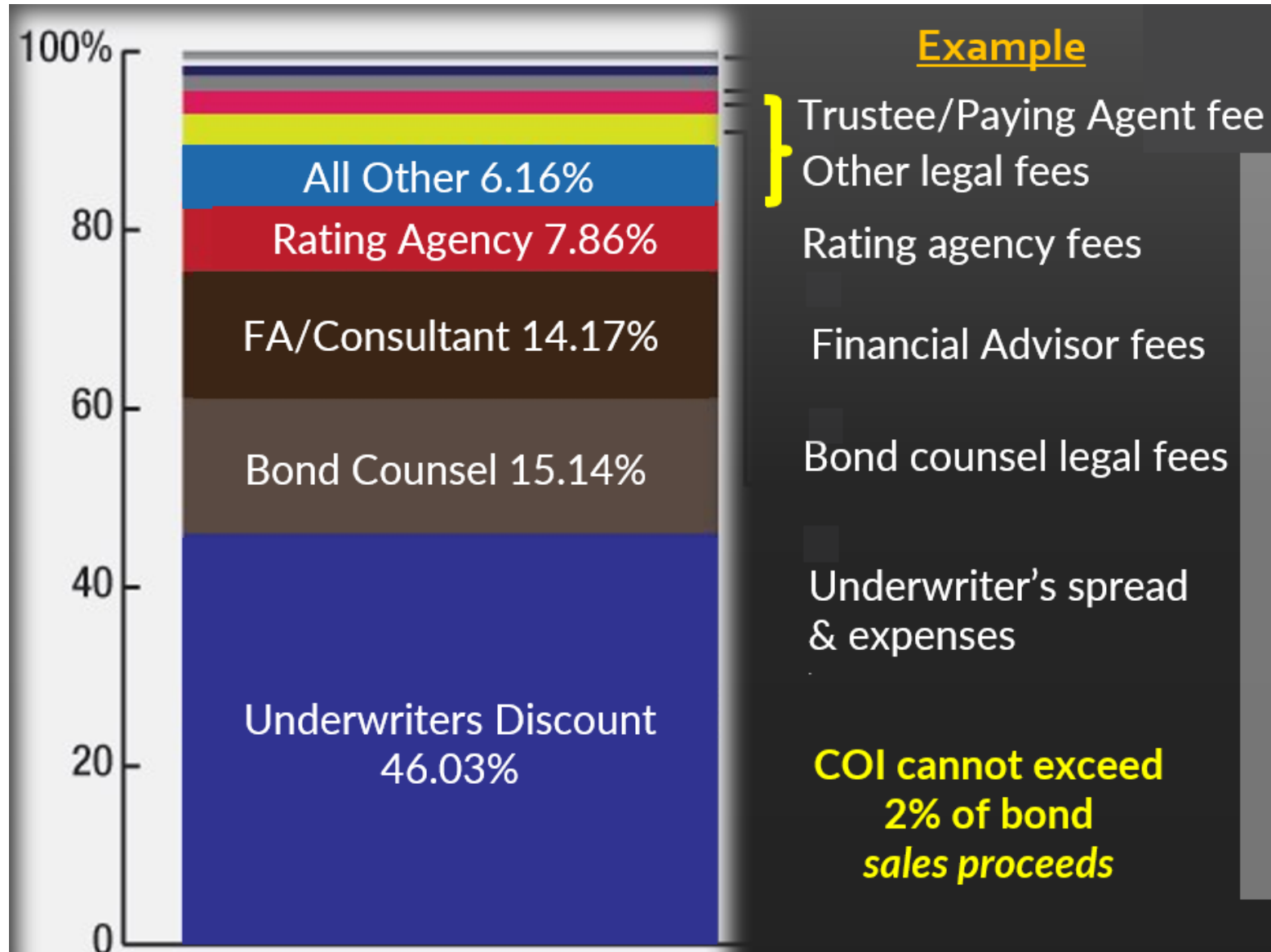
Max Annual Debt Service (MADS)

Can be funded out of bond proceeds

Surety bond can substitute



COSTS OF ISSUANCE (“COI”)



BOND PRICING

Bond price is often quoted as % of the face value of a bond

DISCOUNT BONDS

Coupon Rate < Yield

Investor pays less than
stated price

pays a “discounted”
amount

PAR BONDS

Coupon Rate = Yield

Investor pays
stated price

pays “par”
amount

PREMIUM BONDS

Coupon Rate > Yield

Investor pays more than
stated price

pays a “premium”
amount

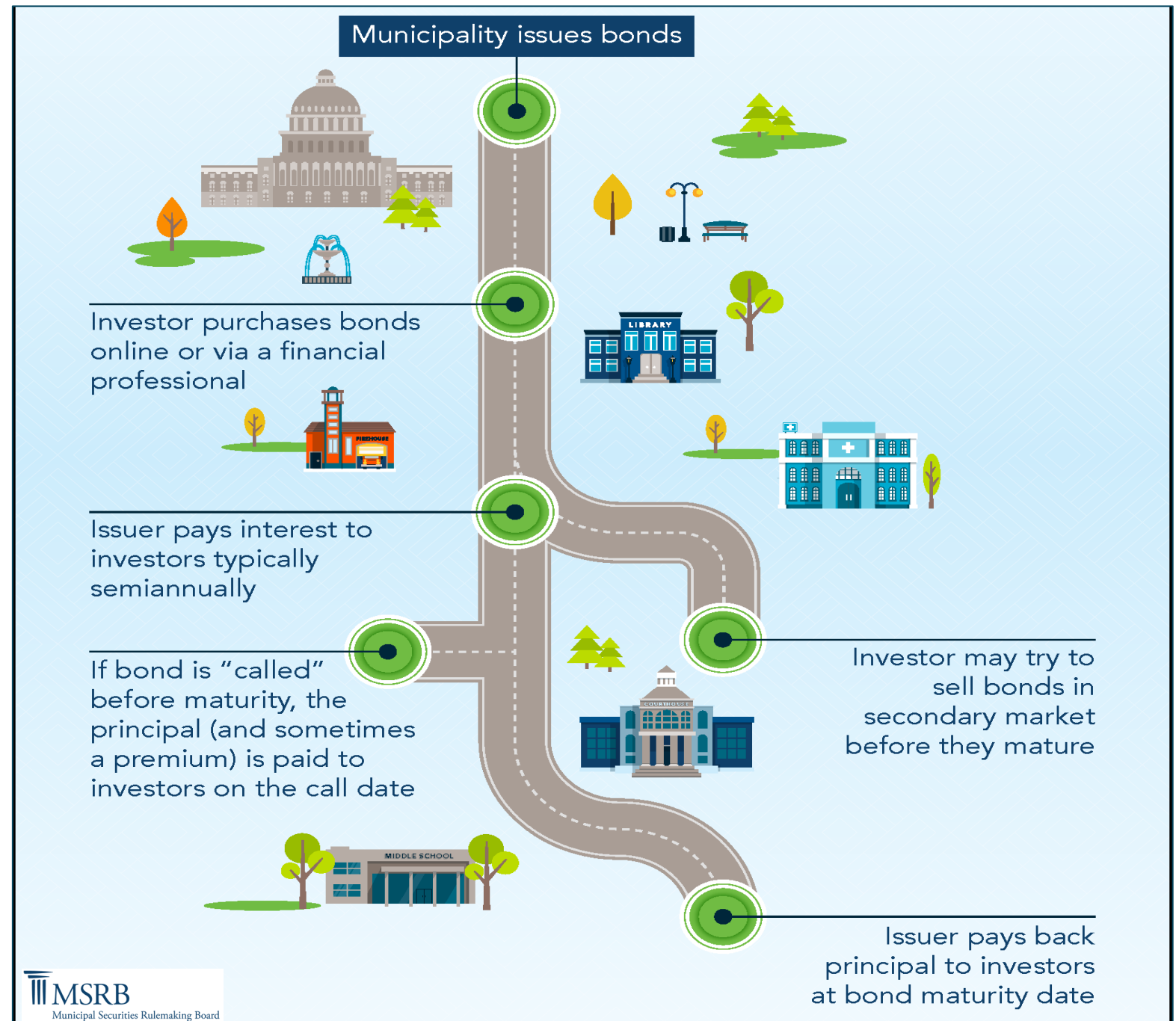
CALL REDEMPTION PROVISIONS

- Calls exercised at option of issuer - not investors
- Calls usually exercised to achieve savings or restructure debt
- Optional 10-year call for flexibility is common
 - Call must be exercised on specified date during specified timeline
 - May be required by law
 - May be required by legal structure of transaction
- Extraordinary Call
 - Call exercised upon occurrence of certain events
 - May be optional
- Redemption Prices for Calls Vary
 - Par
 - Premium
 - Make-Whole

PATHWAY TO DEBT ISSUANCE

Thinking About a New Project on Campus	Review of Demand & Financial Feasibility of Project	Determine Type of Debt & Finalize Working Group	Prepare Bonds for Sale While Monitoring Market Conditions	Sale Completed & Proceeds are Distributed at Closing
• Finance Office approached about issuing bonds for new campus residential housing project • Training at CBMI! • Confirm institution has capacity to pursue this project — there are usually competing needs!	• Begin ground- work: understanding project and financial feasibility • Explore creation of a campus Working Group • Request For Proposals (RFP) or Request For Qualifications (RFQ) for outside professionals (e.g.bond counsel, municipal advisor, underwriters)	• Assemble working group, gain an understanding of any tax or legal issue • AND begin document preparation • Match debt structure to forecasted project cash flow • Confirm type of bond sale • Pursue approvals	• Finalize legal documents • Obtain credit ratings • Obtain final authority, resolution, and certificates • Monitor market conditions for timing of sale • Complete due diligence/collect information	• Begin post-issuance compliance period • Tax-exempt proceeds must be used timely • Compliance reporting and use tracking • Credit monitoring • Arbitrage tracking

TYPICAL LIFECYCLE OF A MUNI BOND



LOTS OF DOCS

Trust Indenture

Loan Agreement &

Assignment of Revenues

Tax Regulatory Agreement

Ground Lease Agreement

Project / Facilities Lease
Agreement

Bond Resolution

Preliminary & Final Official
Statement (“OS”)



Bond Purchase Agreement
 (“BPA”)

Mortgage and Security Agreement

Continuing Disclosure Agreement

Tax Certificate and Non-Arbitrage
Certificate

Legal Opinions

And many more!

OFFICIAL STATEMENT

- Primary offering document used to sell bonds
- It includes
 - Terms of the offering
 - Legal security
 - Tax status
 - Financial information about Borrower

BOND CLOSING

BOND CLOSING

- Culmination of purchase and sale transaction
- Legal opinions delivered
- Documents assembled and signed



- Bonds “delivered”
- Funds are wired to Borrower (though Trustee)

OFFICIAL STATEMENT & CLOSING

SPEND THE MONEY!

(FINAL) OFFICIAL STATEMENT

- Once pricing is final, a final Official Statement is prepared and distributed

CLOSING

- Legal process of approving & authorizing bond issuance concludes
- Closing preparations begin
- Bond proceeds are delivered
- Can immediately begin spending bond proceeds on authorized projects

Once you close the clock starts ticking on spending the money...



PAY DAY!!!! PAY DAY!!!! PAY DAY!!!!

POST-ISSUE COMPLIANCE

POST ISSUANCE COMPLIANCE

BOND COVENANTS

- Debt Service Reserve Fund (DSRF)
- Debt Service Coverage Ratio (DSCR)
- Rate Maintenance
- Additional Bond Test

CREDIT RATING MAINTENANCE

- Issuer is required to provide ongoing updates to rating agencies

CONTINUING DISCLOSURE

- Routine financial information on an annual basis (annual reports)
- Periodic notification upon certain events (notices of material

POST ISSUANCE COMPLIANCE

ARBITRAGE REBATE

- Prevent borrowers from issuing debt purely to invest & make a profit
- Independent analysis of bond funds required every 5 years
- If investment earnings > bond yield, must rebate excess to U.S. Treasury
- Certain exceptions in tax code

Form **8038-T**
(Rev. October 2021)
Department of the Treasury
Internal Revenue Service

Arbitrage Rebate, Yield Reduction and Penalty in Lieu of Arbitrage Rebate
Under sections 143(g)(3) and 148(f) and section 103(c)(6)(D) of the Internal Revenue Code of 1954.
Go to www.irs.gov/Form8038T for instructions and the latest information.

OMB No. 1545-0047

Part I Reporting Authority

1 Issuer's name

2 Check box if Amended Return ☐

3 Number and street (or P.O. box no. if mail is not delivered to street address) Room/suite

4 Issuer's employer identification number (EIN) ☐

5 City, town, or post office, state, and ZIP code

6 Report number (For IRS Use Only) ☐

7 Name of issue

8 Date of issue

9 Name and title of officer of the issuer or other person whom the IRS may call for more information

10 CUSIP number

11 Telephone number of officer or other person

Part II Type of issue

12 Arbitrage Rebate and Yield Reduction Payments

13 Computation date to which this payment relates (MM/DD/YYYY)

14 Arbitrage rebate payment (see instructions) ☐ check box if less than 100% of rebate amount

15 Yield reduction payment (see instructions) ☐ check box if less than 100% of yield reduction amount

16 Rebate payment from Qualified Zone Academy Bond (QZAB) defeasance escrow (see instructions)

Part III Penalty in Lieu of Arbitrage Rebate

17 Number of months since date of issue: ☐ 6 mos ☐ 12 mos ☐ 18 mos ☐ 24 mos ☐ Other. No. of mos ☐

18 Date of termination election (MM/DD/YYYY)

19 Penalty upon termination

Part IV Late Payments

20 Does failure to pay timely qualify for waiver of penalty? See instructions. Yes ☐ No ☐

21 Penalty for failure to pay on time (see instructions)

Part V Total Payment

22 Interest on underpayment (see instructions)

Part VI Miscellaneous

23 Total payment. Add lines 13, 14, 15, 17, 19, 21, and 22. Enter total here

24 Unspent proceeds as of this computation date

25 Proceeds used to redeem bonds

26 Gross proceeds used for qualified administrative costs for guaranteed investment contracts (GICs) and defeasance escrows

27 Fees paid for a qualified guarantee

28 Is the issue a variable rate issue?

29 Did the issuer enter into a hedge?

30 Were gross proceeds invested in a GIC? Name of provider Term of hedge

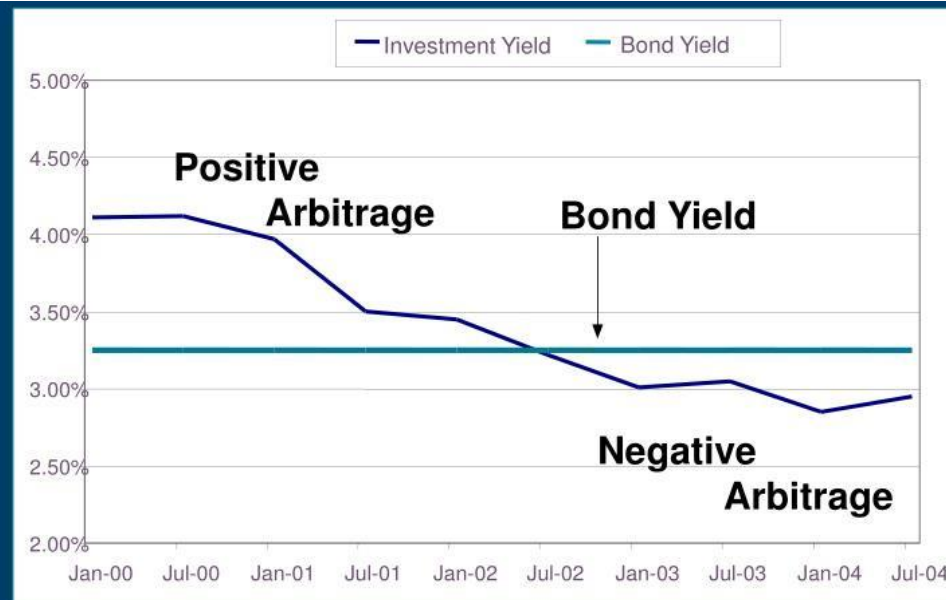
31 Were any gross proceeds invested in a hedge? Name of provider

32 Calculations for

ARBITRAGE



- If earning 4.25% on invested proceeds
- And cost of borrowing is 3.25%
- Advantageous to borrow and keep investments working
- Net result is earn 1% per year



CASE STUDIES

BEST PRACTICES

- Build the best financing team possible
- Plan...plan...plan...
- Engage in the process
- Measure the risks
 - Understand long-term commitments *before* issuing debt
- Know your limits
 - Legal, debt capacity, time staff can commit
- Life after issuance...
 - Ratings
 - Continuing disclosure
 - Arbitrage rebate

***Remember
that your
institution is
committed to
these terms
for the life of
the bonds***