UNIVERSITY OF WASHINGTON
Debt Management Annual Report

Board of Regents Finance and Asset Management Committee

May 10, 2018

AGENDA

- External Borrowing
  - Portfolio Overview
  - Approach to Variable Rate Debt
  - Debt Capacity Update
- Internal Lending
  - Portfolio Overview
  - Rate Recommendation

EXTERNAL BORROWING AND INTERNAL LENDING OVERVIEW

The University manages two separate but related portfolios

External Borrowing

Mission

- Achieve the lowest risk adjusted cost of capital
- Assure continued access to capital markets

Regental Roles

- Adopt Debt Policy
- Approve annual Bond Resolution
- Review portfolio performance
- Guide University credit and issuance standards, including debt capacity

Reporting

- Bondholders Report including audits to investors
- Periodic Debt Reports to Regents
- Future debt issuance and liquidity information to rating agencies

Internal Lending

Mission

- Offer stable and predictable interest rates to campus borrowers and allow for capital funding in a rising rate environment

Regental Roles

- Approve and monitor ILP loans
- Approve distributions and ILP rate
- Approve use of Capital Assets Pool
- Approve Financial Stability Plans

Reporting

- Semi-Annual Borrower Reports
- Semi-Annual ILP Report
- Debt Management Annual Report
- Annual ILP Audit

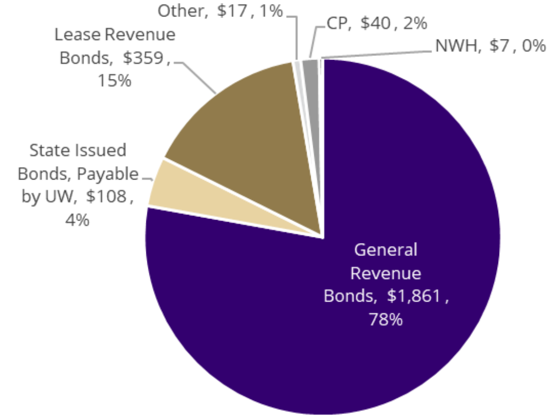
External Borrowing

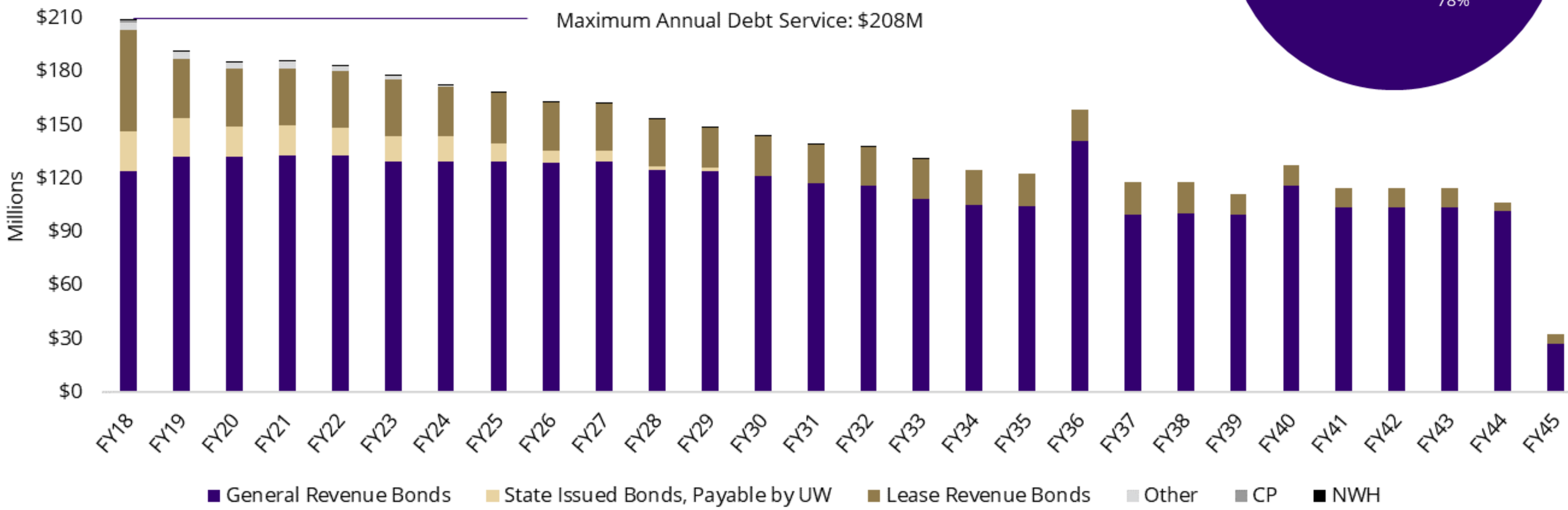
EXTERNAL DEBT PORTFOLIO

The University has a large and conservative debt portfolio

- The debt portfolio consists primarily of $2.4 billion fixed rate debt with $40 million of variable rate debt through the Commercial Paper program (CP)
- Average borrowing rate for portfolio is 3.89%
- There is $100 million in authorized debt remaining to be issued in 2019
- Approximately $80-$100 million of principal is repaid annually
- Nearly 80% of debt has been issued as General Revenue Bonds

Outstanding Debt by Type
Total Debt: $2,392
(In millions as of March 31st, 2018)

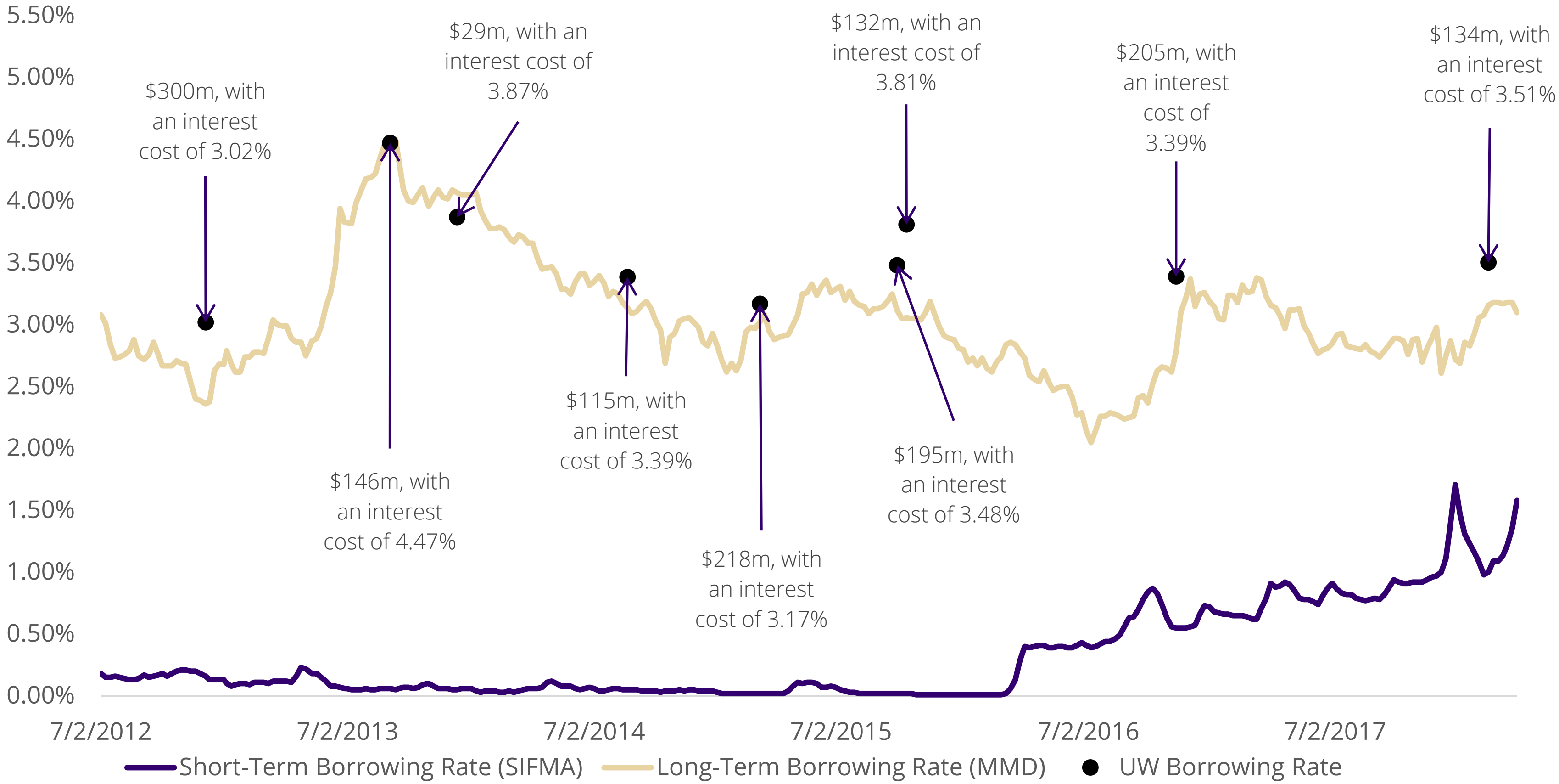




Note: Excludes Valley Medical Center bonds and Commercial Paper principal payments. Includes a $24.5 million upfront lease payment from SLU Phase 3.2 paid in March 2018

ISSUANCE HISTORY

Long and short-term rates have increased in the past year



> Since fiscal year 2013, the University has borrowed $1,474 million (includes refundings of $412 million) at an average rate just under 3.5%

> The University's borrowing rate is impacted by a variety of factors including market conditions, term, debt type, tax status, couponing, etc.

> The University issued $134 million in 2018 to (a) fund Life Sciences and Housing and Food Services Phase 4a and (b) refund CP for HR Payroll

CREDIT RATING OVERVIEW

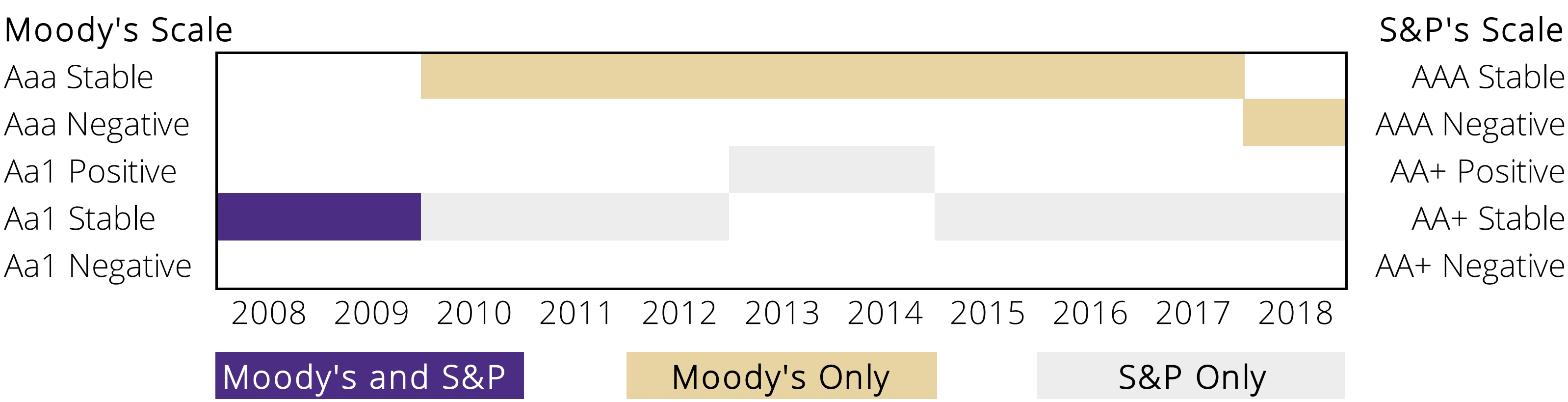
In January 2018, Moody’s changed the University's outlook from stable to negative

> The University’s ratings remain at Aaa/AA+ (Moody's/S&P). The change in outlook did not have a measureable impact on borrowing cost

> Factors that could lead to a downgrade:

- Failure to improve consolidated and health system operations in fiscal 2018 and beyond
- Further declines in unrestricted liquidity
- Material debt plans beyond those outlined
- Significant reduction in research funding and revenue

Agency Credit Rating by Year



VARIABLE RATE DEBT

Many issuers use variable rate debt to lower the cost of external borrowing

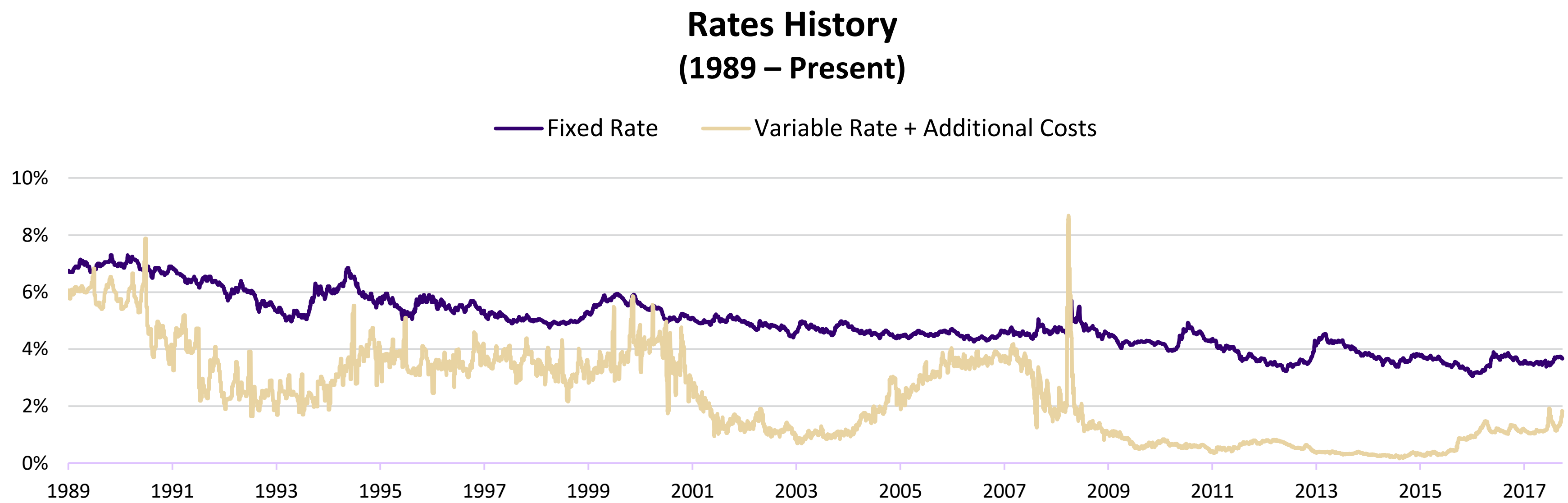
- Under policy the University has a maximum variable rate of 20% of the external portfolio
- The University's use of variable rate debt is currently limited to its commercial paper (CP) program
  - $25 million as a permanent variable rate allocation (1% of portfolio)
  - Remaining CP (up to $225 million) is used to manage project cash flows between long-term bond issuances

Benefits	Risks
> Historically lower cost of capital – Floating rates on average have been 45% of fixed rate debt since 1989 > Prepayment flexibility – Typically payable at any time without penalty – Internal loan prepayments able to directly pay off debt > May reduce institutional risk by matching variable rate liabilities (debt) with variable rate assets (investments)	> Continuous exposure to changes in short-term rates > Changes in tax law can increase borrowing cost after issuance > Counterparty risk > Liquidity support may be required > Additional reporting and operating requirements

FIXED vs VARIABLE RATES

Variable rates have historically been lower than fixed rates

- The current interest rate differential of issuing variable rate debt is significant
- The University is considering issuing $100 million of variable rate debt in early 2019
- After this $100 million issuance, variable rate exposure would be at 5% and well below target levels



	Trailing Averages from Prior Years to Present							
	20	15	10	7	5	3	2	1
Fixed Rate	4.4%	4.2%	3.9%	3.7%	3.7%	3.5%	3.5%	3.6%
Variable Rate	1.8%	1.4%	0.8%	0.7%	0.7%	0.9%	1.1%	1.2%

ESTIMATING DEBT CAPACITY

The University estimates debt capacity by projecting institutional growth and benchmarking to peers

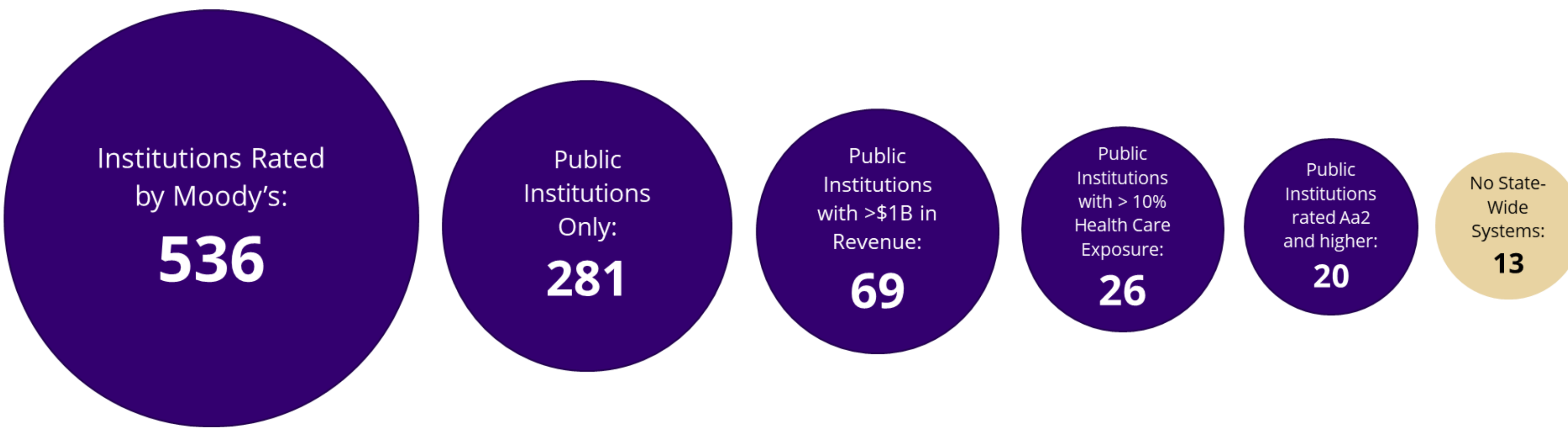
> Debt capacity is estimated semi-annually
  – In the spring as part of Debt Management Annual Report, and
  – In the fall after fiscal year results become known

> 4 main drivers of the quantitative analysis are:
  – Forecast assumptions (Planning Case)
  – Peers
  – Financial Ratios
  – Weighting

PEER GROUP BENCHMARKS

Benchmarking criteria helps identify schools similar to the University

- Moody's rates over 500 colleges and universities
- The peer group is evaluated annually
- 13 schools meet peer criteria:
  - Ohio State University
  - Pennsylvania State University
  - State University of Iowa
  - University of Alabama at Birmingham
  - University of Arkansas
  - University of Colorado
  - University of Kentucky
  - University of Michigan
  - University of New Mexico
  - University of North Carolina at Chapel Hill
  - University of Utah
  - University of Virginia
  - University of Washington



Note: The University of Nebraska was removed from the peer group due to a significant decrease in healthcare exposure

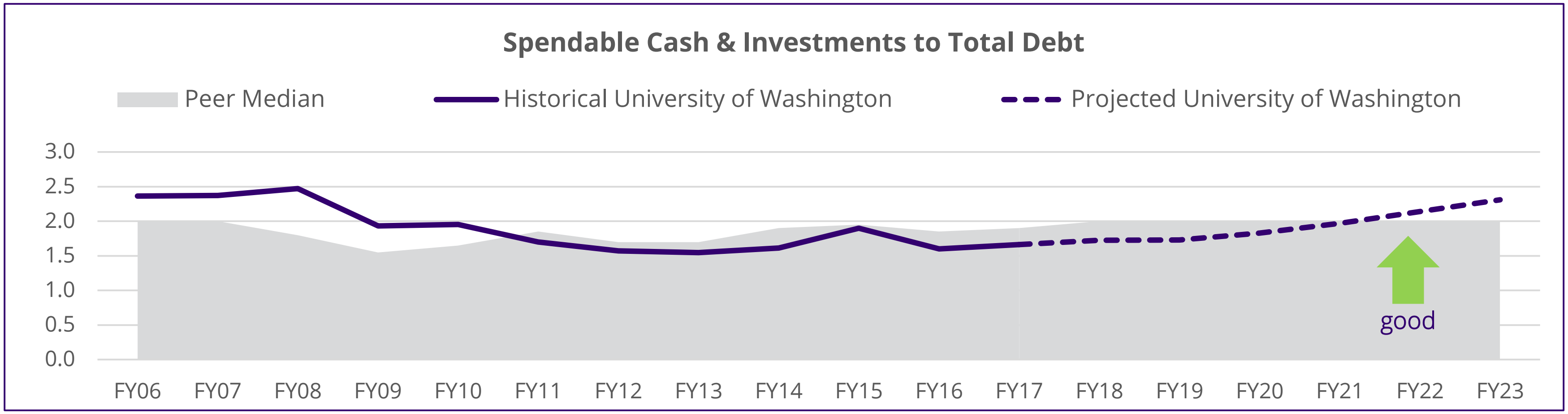
RATIO WEIGHTING

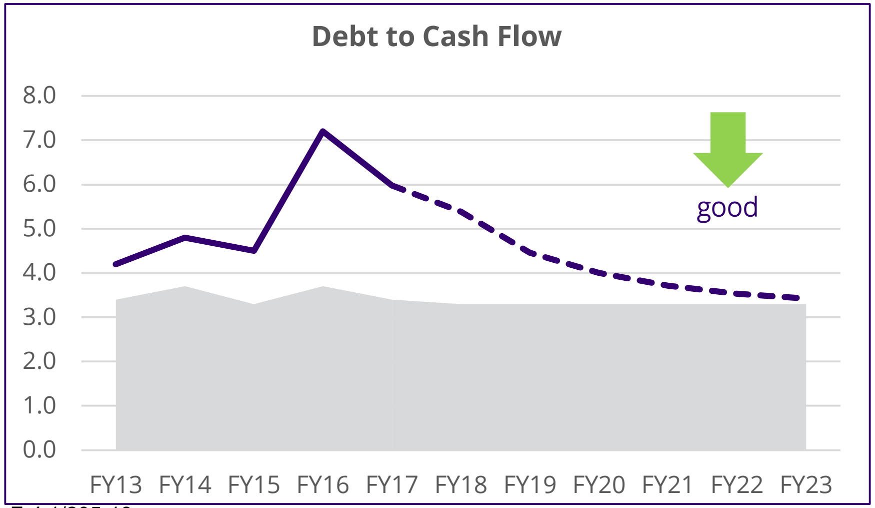
Weighting ratio approximates rating agency decisions

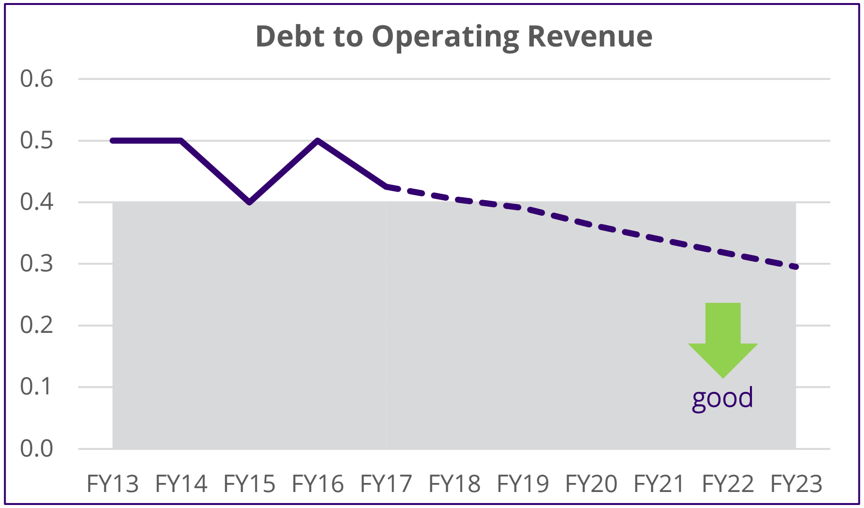
	FY20 – FY23 Incremental Capacity		Weighting
Spendable Cash and Investments to Debt	$319 M	×	60%
Debt to Operating Revenue	$716 M	×	30%
Debt to Cash Flow	-$67 M	×	10%
	Total Incremental Capacity	=	$400 M
	Authorized Debt Issued in 2019	+	$100 M
	Total Debt Capacity	=	$500 M

RATIO TRENDS

Under the Planning Case, the University's debt capacity ratios are projected to increase compared to the 2018 peer median (1)







(1) The University of Nebraska was removed from the peer group due to a significant decrease in healthcare exposure

Note: Reflects most recent data from Moody's Financial Ratio Analysis through 2017

DEBT CAPACITY ESTIMATES

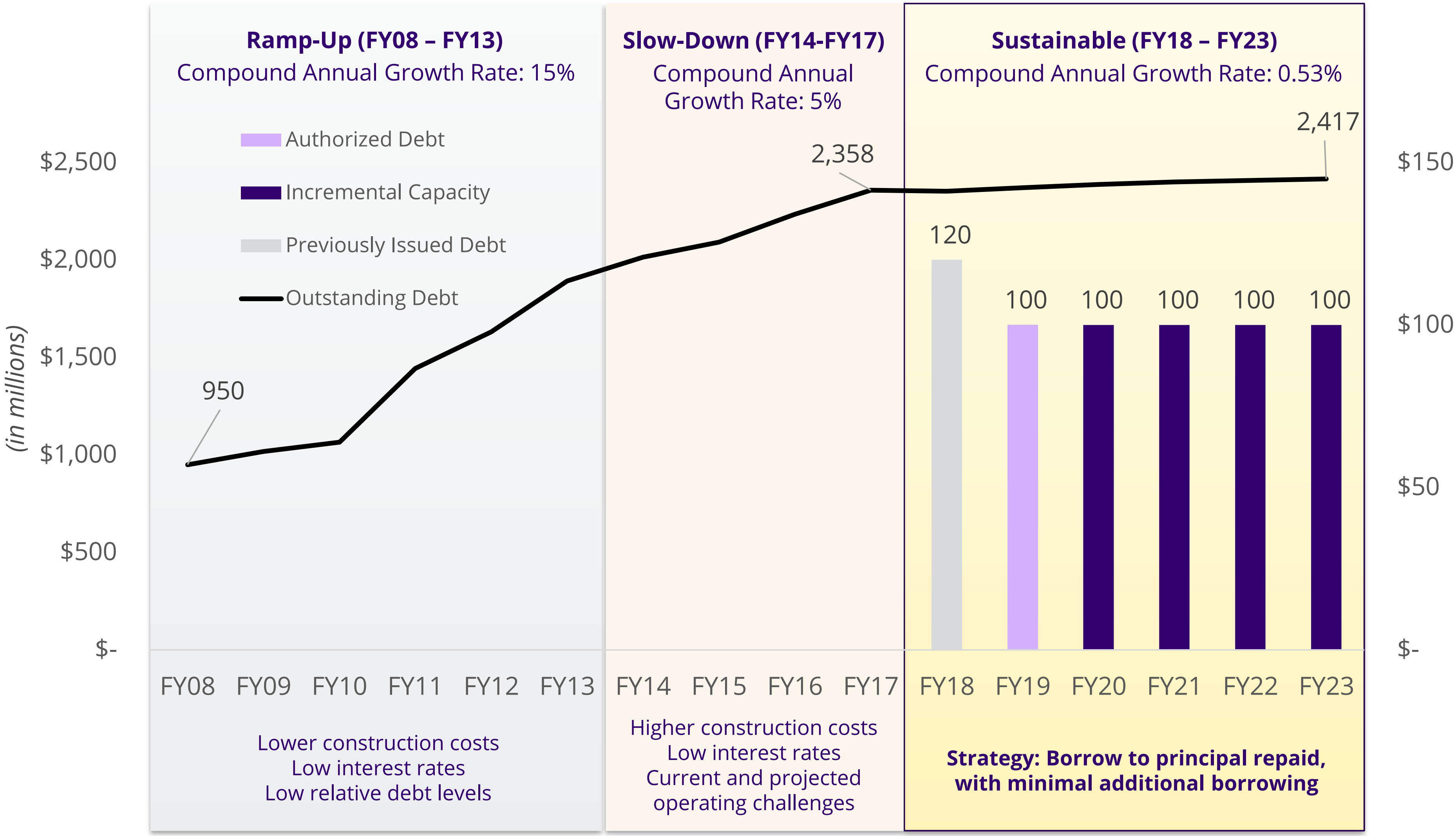
The University issued $120 million in new debt during FY18 to support previously authorized projects. It will issue an additional $100 million in FY19

- In November 2017, the 5-year estimated project (FY18-FY22) capacity was $550M, including $220M in funding for authorized projects
- Based on the updated analysis, 5-year debt capacity (FY19-FY23) is $500M, including $100M in funding for authorized projects
- 5-year estimates will be revised this winter based on FY18 actual results and the Planning Case forecast

Projected Debt Balances FY19-FY23
(in millions)

	Beginning Balance	Debt Retired	Authorized Issuance	Estimated Incremental Capacity	Ending Balance
FY19	2,354	(83)	100	0	2,371
FY20	2,371	(82)	0	100	2,388
FY21	2,388	(88)	0	100	2,400
FY22	2,400	(91)	0	100	2,409
FY23	2,409	(92)	0	100	2,417
Totals		**(437)**	**100**	**400**	

DEBT HISTORY AND FUTURE



Internal Lending

LENDING PROGRAMS

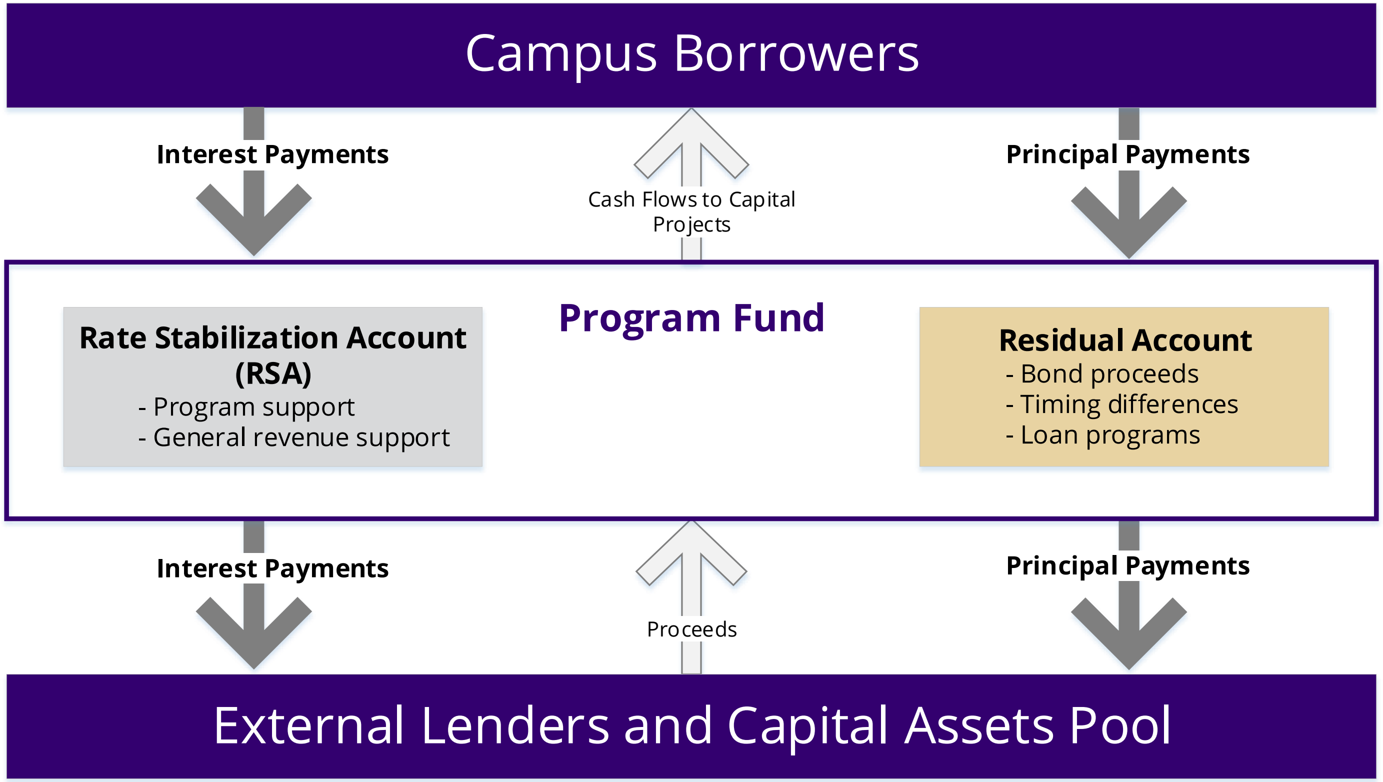
Treasury offers a variety of loan programs to meet the needs of campus borrowers

Program	Internal Lending Program (ILP)	Short-Term Financing Program (FAST)	Bridge Program
Purpose	Provide stable long-term rate to campus borrowers	Finance short-term assets at low cost of funds	Short-term loans for gift funded capital projects (up to 5 years)
Program Description	Loans for long-lived capital assets	Provide small short-term (up to 10 years) fixed rate loans to campus borrowers	Fund timing gap of construction cash flows and gifts
Financing Rate	ILP Rate, currently 4.50%	Short-term market rate	Short-term market rate
Funded By	Debt and CAP	ILP Balances and External Debt	ILP Balances
Recent Examples	Childbirth Center	IT Servers	CSE II

MECHANICS OF LENDING PROGRAMS

External borrowing and internal lending come together in the Program Fund. The Program Fund is the mechanism used to facilitate University lending

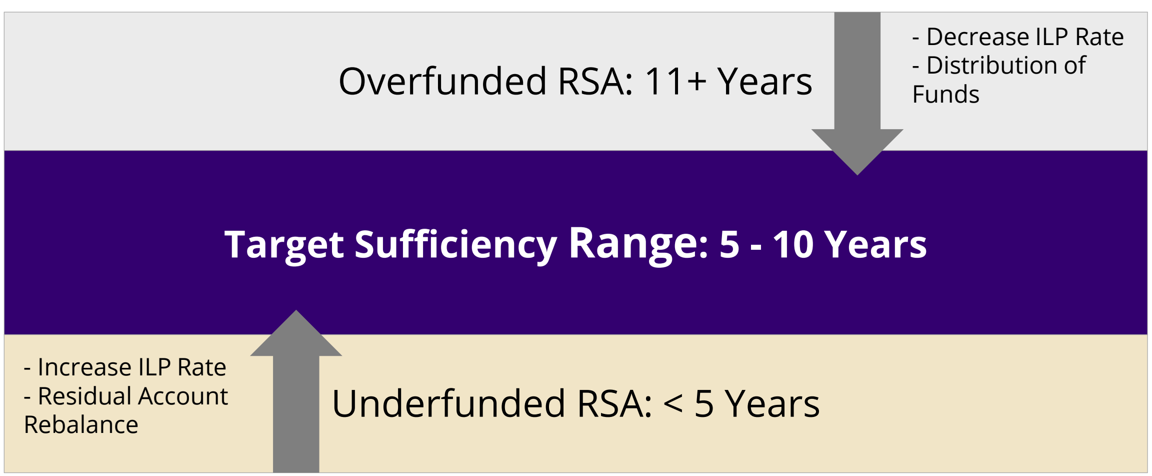
- Benefits of the ILP
  - Provides stable long-term rate to campus borrowers
  - Generates balances that can be used for short-term financing programs such as BRIDGE



ILP RESERVE EVALUATION

UW Treasury Office recommends no change to the ILP rate

- The Rate Stabilization Account (RSA) is used to maintain the ILP lending rate in a rising external rate environment
  - As of FY18, the RSA has 12 years of sufficiency
- The Residual Account (RA) is used for a variety of purposes, including debt service payments and funding ILP loan programs (e.g. the "Bridge" program)
  - RA balances are expected to grow over time as bond premium is realized
- An extensive evaluation is underway to identify future calls on reserves. Available funding above minimum could be redeployed with Regental approval
- The Board must approve any changes to the ILP rate or distributions from the ILP



(1) Assumes future transfers from funds not yet collected