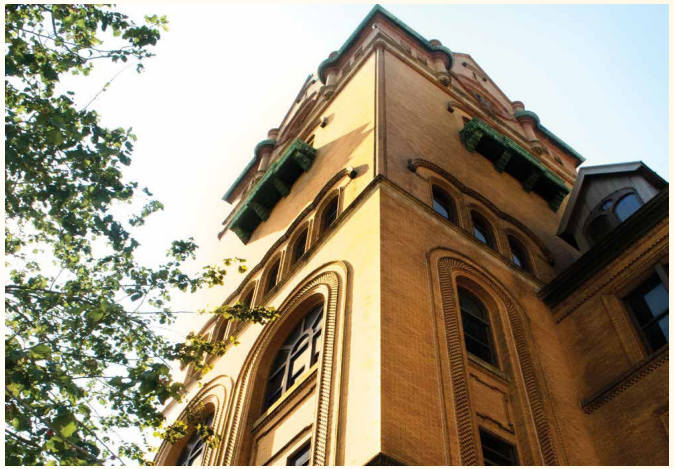
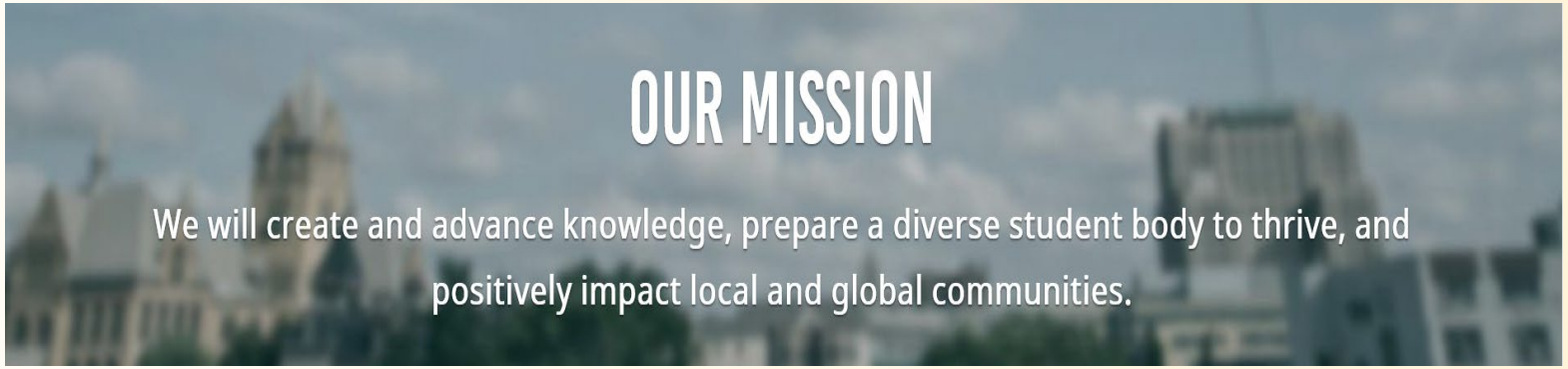
Debt Capacity Analysis and Financing Plan





Purpose of a Debt Capacity Analysis and Debt Financing Plan

- A debt capacity analysis can help an institution test the feasibility of their capex needs, expansion plans, or acquisition capabilities.
  - The University completed a Capital Master Plan that identified important strategies and necessary investments in the physical plant that should be implemented over the next couple decades.
  - Based on a recent assessment by a third-party, the University has more than $3 billion in replacement value and $436 million in total capital deficiencies, resulting in a Facilities Condition Index (FCI) score of 13%.
- The purpose of a Debt Financing Plan is to determine a prudent amount of new debt the University can issue over the next decade that can fund important capital strategies and investments while maintaining a solid financial position.
  - A deterioration in financial position directly affects an institutions credit profile, which affects the ratings assigned to it by rating agencies. Lower ratings negatively effect the cost of debt and in some instances access to capital.

Process

- Evaluate the University's **debt capacity** using Moody's Investor Services' *Global Higher Education Scorecard* model, other key capital ratios, and public university median data.

- Select a prudent **debt strategy** balancing capital needs, University financial condition, and credit rating profile.

- Create a **debt financing plan** to provide a funding framework to assist in the development of capital investment plans in accordance with the University's new capital master plan.

Debt Capacity Analysis

DEVELOPED ECONOMIC SCENARIOS

Considered three different economic paradigms:
(1)“downside” scenarios
(2**)“stable” scenarios**
(3)“upside” scenarios

PERFORMED STRESS TEST

- Analyzed impact of economic factors on key financial ratios.
- Reviewed various new debt scenarios.

EVALUATED CREDIT RATING IMPACT

- Compared the scenario based ratios to the public university medians
- Estimated impact on WSU credit profile

DETERMINED DEBT CAPACITY

- Determined debt capacity of (1) holding current rating (2) one rating level lower, and (3) two rating levels lower for each scenario.

Debt Strategy

Model strategy based on “STABLE” economic outlook

- Want a balanced approach: “Upside” overly optimistic and “Downside” is overly pessimistic.

Increase WSU’s Leverage Position (higher debt level)

- Need an impactful amount of funding for capital strategies and deferred maintenance.
- Need to compensate for the lack of consistent State Capital Appropriation Funding.
- Need to compensate for limited capital funding available from operations.
- Fundraising opportunities are generally not available for deferred maintenance projects and limited to specific projects

Manage Financial Impact / Credit Rating Impact

- Limit credit rating downgrade to one level; maintain “LOW RISK” category.
- Plan for manageable increases to debt service
- Maintain a prudent financial condition

Financing Structure

- Issue debt in consistent tranches over the next 10-year period
- No bullet payments or deferred principal structure

Debt Capacity Modeling

- As Wayne State continues to refine its campus master plan, it is important to consider the University's capacity to issue additional debt at various rating categories.
- Given that Moody's Scorecard model is more flexible to the examination of a long-term forecast of assuming a gradual addition of new debt, the debt capacity model for the University is based on stress testing key Moody's financial metrics that respond to additional debt.
  - This model allows for consideration of multiple debt issuances spread over the next ten years, as well as the incorporation of financial growth assumptions (positive or negative) to the University's balance sheet, revenues, and expenses.
  - The model has been updated the model to reflect the added consideration of Total C&I to Total Adjusted Debt, now a ratio emphasized by Moody's in their updated rating methodology published in August 2021.
- Debt capacity with S&P, while not directly considered in this analysis, will also continue to be an important factor to review the University's capital plans going forward.
  - S&P's scorecard model is not well suited to multi-year forward projections, and it does not break out median data with the same granularity as Moody's (subcategories such as "A+," "A," and "A-" medians are not available), making it more difficult to generate reliable results through similar analysis using S&P metrics.

Key Assumptions

- WSU's potential future debt capacity was modeled under the **"stable"** economic scenario since it delivers a more balanced approach for WSU.
- After factoring in these growth projections, the University's metrics were stress-tested to find the edges of WSU's debt capacity while maintaining either an A1 (Scenario 1) or A2 (Scenario 2B) rating.
- The growth assumptions are maintained over an 10-year horizon (FY 2022-2031).
- All debt scenarios assume new debt is issued in 4 equally-sized issues every two years, beginning in FY 2023 and continuing in 2025, 2027, and 2029.
  - For conservatism, assumed interest rates increased by 75 bps from current levels every 2 years, resulting in rates peaking at +300 bps above current market levels in FY 2029.

Results:

- Scenario 1: A1 w/ A2 Downgrade Pressure
  - BR estimates that **WSU can issue an additional $300M split between four $75M issues every two years (2023-2029)** before facing significant pressure for a downgrade to the A2 level.
  - In this scenario, balance sheet ratios generally remain relatively stable and improve slightly over time. The most stressed factors remain cashflow-impacted metrics such as Annual Debt Service Coverage.
  - When factoring in projected bond premium/discount and scheduled principal amortization, the University's net increase in total debt outstanding from FY 2021 to 2029 would be approximately $120M.

- Scenario 2: A2 w/ A3 Downgrade Pressure
- BR estimated that **WSU can issue an additional $460M of debt broken out between four $115M issues every 2 years (2023-2029)** before facing significant downgrade pressure to the A3 level.
  - This shows a rough estimate of $160M of additional incremental debt capacity between the A2 and A3 rating levels under "stable" growth assumptions, though other qualitative factors could come into play as well.
  - The University's cash flow remains under greater stress than WSU's balance sheet ratios. Total Debt to Operating Revenue and Debt Service to Operating Expenses also show greater strain here, with both falling into the A2/A3 indicative range over time.
  - When factoring in projected bond premium/discount and scheduled principal amortization, the University's net increase in total debt outstanding from FY 2021 to 2029 would be approximately $280M.

Summary of Results

Rating Projection	
A1 (Negative)	A2 (Negative)
$300 million	$460 million
($75 million every 2 yrs x 4 yrs)	($115 million every 2 yrs x 4 yrs)

- Projected debt capacity levels for the scenarios considered are shown in the table above.
  - Each of these debt totals assume the University fully stresses its debt capacity at the A1 or A2 rating levels – as such, a negative rating outlook at the A1 or A2 level, respectively would be likely in each of these scenarios.
  - Debt totals assume four equal-sized issues of new debt every 2 years beginning in spring 2023.
- Moody's recently published a new rating methodology in August, and while the quantitative metrics in the model were updated where appropriate, some uncertainty remains as to how this change will impact their view of institutions' credit quality and debt capacity.
  - The increased weighting of qualitative factors creates some ambiguity with regard to how a school such as WSU will be scored on the new qualitative Moody's scorecard inputs.
- The assumptions in the model assume continuous compounding of growth or decline in key metrics over 5-11 years. This smooth and uninterrupted growth/decline can have significant impact on results over time.
  - The significant volatility created in the higher education sector by the COVID-19 pandemic means that future operating results and balance sheet growth will remain difficult to predict.