



TABLE OF CONTENTS FOR ACADEMIC AFFAIRS COMMITTEE

Committee Meeting: 8/23/2023

Board Meeting: 8/24/2023
Austin, Texas

Jodie Lee Jiles, Chairman
Christina Melton Crain
Robert P. Gauntt
Janiece Longoria
Nolan Perez
Stuart W. Stedman

	Committee Meeting	Board Meeting	Page
Convene	<i>3:30 p.m.</i> <i>Chairman Jiles</i>		
1. U. T. System Board of Regents: Discussion and appropriate action regarding Consent Agenda items, if any, assigned for Committee consideration	Discussion	Action	200
2. U. T. San Antonio: Approval to establish a Doctor of Philosophy in Computer Engineering degree program	Action <i>President Eighmy</i>	Action	201
3. U. T. System: Discussion and appropriate action regarding proposed renewal of Agreement of Cooperation in Higher Education and Research with The National Council of Humanities, Sciences and Technologies (CONAHCYT) of Mexico	Action <i>Dr. Holmes</i>	Action	204
4. U. T. System Academic Institutions: Discussion and appropriate action regarding extending previously approved non-resident and graduate tuition and non-academic mandatory fee increases for the academic institutions to the 2024-2025 Academic Year	Action <i>Dr. Holmes</i>	Action	206
5. U. T. Arlington: Report on the Long Range Financial Plan	Report/Discussion <i>Mr. Horton</i> <i>President Cowley</i>	Not on Agenda	207
Adjourn	<i>4:00 p.m.</i>		

1. **U. T. System Board of Regents: Discussion and appropriate action regarding Consent Agenda items, if any, assigned for Committee consideration**

RECOMMENDATION

The Board will be asked to approve the Consent Agenda beginning on [Page 352](#).

2. U. T. San Antonio: Approval to establish a Doctor of Philosophy in Computer Engineering degree program

RECOMMENDATION

The Chancellor concurs in the recommendation of the Executive Vice Chancellor for Academic Affairs and the institutional president that authorization, pursuant to Regents' *Rules and Regulations*, Rule 40307, related to academic program approval standards, be granted to

- a. establish a Doctor of Philosophy in Computer Engineering degree program at U. T. San Antonio; and
- b. submit the proposal to the Texas Higher Education Coordinating Board for review and appropriate action.

BACKGROUND INFORMATION

Program Description

U. T. San Antonio proposes a Doctor of Philosophy (Ph.D.) in Computer Engineering degree program, which will be designed to prepare graduates to be leaders in computer engineering industries and academia through strong academic preparation, with skills to solve current engineering challenges through performance of independent and interdisciplinary state-of-the-art research in the area of computer engineering.

The Department of Electrical and Computer Engineering (ECE) at U. T. San Antonio currently offers the following degree programs: B.S. in Electrical Engineering, B.S. in Computer Engineering, M.S. in Electrical Engineering, M.S. in Computer Engineering, and Ph.D. in Electrical Engineering. Both the B.S. in Electrical Engineering and B.S. in Computer Engineering programs are separately accredited by the Accreditation Board for Engineering and Technology.

Students entering the Ph.D. in Electrical Engineering degree program can choose from five different concentration areas: communications, computer engineering, digital signal processing, electronic materials and devices, systems and control, and electric power engineering. Computer engineering is the largest area among these concentrations; more than one third of students (44 out of 104 total students as of Fall 2020) in the Ph.D. in Electrical Engineering degree program choose computer engineering as their concentration area. This proposal will offer a new Ph.D. program in Computer Engineering for the students who are currently enrolled in the Ph.D. program in Electrical Engineering with computer engineering concentration.

A separate Ph.D. in Computer Engineering provides students the freedom to enhance their knowledge in the broad range of topics comprising computer engineering, including computer architecture; high performance computing; embedded systems; cybersecurity; hardware security; artificial intelligence and machine learning; mobile, distributed and cloud computing; advanced digital system and hardware design; and software systems. This flexibility in a more focused computer engineering research program is expected to attract additional students to the program who otherwise might not have chosen U. T. San Antonio.

The proposed degree program will require 81 Semester Credit Hours (SCH) beyond the bachelor's degree or 54 SCH beyond the master's degree. It also requires passing a qualifying examination, passing a dissertation proposal defense/examination, passing a final oral dissertation defense, and acceptance of the Ph.D. dissertation. The program includes courses that have been designed to provide advanced training in areas considered to form the foundation for the discipline of computer engineering.

Need and Student Demand

There has been a growing demand for Ph.D. graduates in computer engineering, both in Texas and in the nation. In searching Burning Glass Technologies' Labor Insight for the period between January 2022 and January 2023, there were 658 job postings requiring a Ph.D. degree for positions as computer hardware engineers, computer network support specialists, computer and information research scientists, and computer network architects in Texas. With respect to employment, Texas is only second to California in the top hiring regions in the nation. Furthermore, the San Antonio/New Braunfels region has "much higher demand than average" with 164 job openings during 2019 and 2020. Nationwide, there has been a demand of over 12,000 jobs between January 2022 and January 2023.

There is a major shortage of Ph.D. graduates in computer engineering in the San Antonio region, the State of Texas, and the nation. Recent data on job demand and degrees conferred underlines the shortage of Ph.D. graduates in the Computer Engineering field. For instance, the San Antonio area had 71 job openings between January 2022 and January 2023. However, the supply of Ph.D. graduates in computer engineering from this geographic area from the previous year between 2020 and 2021 was zero. While U. T. San Antonio offers a Ph.D. in Electrical Engineering degree program with a concentration in Computer Engineering, it puts our graduates at a major disadvantage in the job market. This gap between supply and demand is just as pronounced at the state and national levels. In Texas, only 21 Ph.D.s in Computer Engineering were conferred between 2020-2021, while job demand for this credential was at 658. Nationally, 365 Ph.D.s in Computer Engineering were conferred during that same time period, with more than 12,000 job postings requiring the credential.

Year One enrollment is estimated to be 40 students and is based on the current enrollment in the Ph.D. in Electrical Engineering with a Computer Engineering concentration. For the enrollment estimation for Year Two to Year Five, it has been assumed that the current increase in enrollment rate in Ph.D. in Electrical Engineering with Computer Engineering concentration will be sustained and an additional seven students per year will be enrolled.

Program Quality

The ECE department currently has 26 tenured/tenure track faculty members that direct both master's and Ph.D. students. ECE core and support faculty have been highly productive in terms of publications and research grants. Support faculty for the proposed Ph.D. degree program are from the ECE department but not in the Computer Engineering concentration.

Scholarly productivity for the current core and support faculty of the proposed Computer Engineering Ph.D. program for the past five years has been active, with a total of 964 refereed papers. In addition, the external grant awards for core and support faculty members for the past five years are substantial, with total grant funding at \$66,879,250. The ECE department faculty have received prestigious awards and recognitions and include National Science Foundation career awards, National Academy of Inventors, and fellowships of professional organizations including the Institute of Electrical and Electronics Engineers.

Revenue and Expenses

Expenses	5-Year Total
<i>Faculty</i>	
Salaries	\$4,441,700
Benefits	\$1,026,244
<i>Graduate Students</i>	
TA Salaries	\$ 120,000
TA Benefits	\$ 10,500
GRA Salaries	\$ 180,000
GRA Benefits	\$ 14,000
<i>Staff & Administration</i>	
Graduate Coordinator Salary	\$ 75,000
Staff Benefits	\$ 22,500
<i>Other Expenses</i>	
Supplies	\$ 25,000
Faculty Start-up	\$1,000,000
Program Administration	\$ 30,000
Total Expenses	\$6,944,944

Revenue	5-Year Total
<i>From Student Enrollment</i>	
Formula Funding	\$ 2,780,097
Tuition and Fees	\$ 5,635,631
<i>From Other Revenue Sources</i>	
Reallocation of Existing Resources	\$ 5,467,944
Total Revenue	\$13,883,672

Coordinating Board Criteria

The proposed program meets all applicable Coordinating Board criteria for new doctoral degree programs.

3. U. T. System: Discussion and appropriate action regarding proposed renewal of Agreement of Cooperation in Higher Education and Research with The National Council of Humanities, Sciences and Technologies (CONAHCYT) of Mexico

RECOMMENDATION

The Chancellor concurs in the recommendation of the Executive Vice Chancellor for Academic Affairs and the Executive Vice Chancellor for Business Affairs that the U. T. System Board of Regents renew U. T. System's agreement with The National Council of Humanities, Sciences and Technologies (CONAHCYT) through December 31, 2025. A summary of the terms of the Agreement is on the following pages.

BACKGROUND INFORMATION

On August 25, 2015, during an event at U. T. San Antonio, U. T. System signed a Memorandum of Understanding (MOU) with The National Council of Humanities Science and Technology (CONAHCYT), formerly The National Council of Science and Technology (CONACYT), establishing the basis for programs of cooperation between the parties to promote and strengthen relations between both countries in regard to higher education and research.

Following the signing of the MOU, an Agreement of Cooperation in Higher Education and Research was signed in 2016 to establish jointly-funded educational and research programs, and on May 12, 2016, the Board approved a \$5 million allocation of Available University Funds (AUF) in support of that agreement for four years, followed by another \$5 million AUF allocation approved on November 14, 2019.

The proposed second Agreement of Cooperation in Research and Higher Education will enable U. T. institutions to continue to offer funded doctoral education to Mexican students at U. T. System institutions. No additional funding is being requested at this time.

The partnership with CONAHCYT will continue to be administered through the ConTex office located on the U. T. San Antonio campus. The U. T. System Administration, through the Office of Academic Affairs, will reimburse U. T. San Antonio with previously allocated AUF based on invoices submitted or other appropriate means. The previous allocation of AUF will also be used to reimburse U. T. Austin for expenses related to their participation in the program. Funds provided by CONAHCYT will be used to reimburse the cost of institutional participation for those choosing to participate.

Summary of Terms of Agreement

This will be the second Agreement of Cooperation in Research and Higher Education between The National Council of Humanities Science and Technology (CONAHCYT) and U. T. System. The agreement renews and continues joint support of doctoral graduate programs for Mexican students who have been selected as awardees of the CONHACYT doctoral scholarship and who are admitted to a doctoral program at a U. T. institution.

The agreement stipulates that for the first four years of the students' doctoral study, CONAHCYT will provide a scholarship that will include a monthly stipend, tuition scholarship, and annual support for health insurance. During the students' fifth year of study, U. T. System agrees to provide comparable funding support. Additionally, U. T. System will continue supporting the ConTex office, including its operations, which are administered through an office located at U. T. San Antonio, to implement the agreement and ensure the success of the doctoral students.

4. **U. T. System Academic Institutions: Discussion and appropriate action regarding extending previously approved non-resident and graduate tuition and non-academic mandatory fee increases for the academic institutions to the 2024-2025 Academic Year**

RECOMMENDATION

The Chancellor concurs in the recommendation of the Executive Vice Chancellor for Academic Affairs and the Executive Vice Chancellor for Business Affairs that the U. T. System Board of Regents extend its approval of increases to non-resident undergraduate tuition, graduate tuition, and non-academic mandatory fees for the 2023-2024 Academic Year to the 2024-2025 Academic Year.

BACKGROUND INFORMATION

On May 4, 2023, the Board of Regents approved increases to non-resident undergraduate tuition, graduate tuition, and non-academic mandatory fees for the 2023-2024 Academic Year. This item requests approval to extend those increases through the 2024-2025 Academic Year, again not to exceed the 2022 Higher Education Price Index of 5.2%, as reported by Commonfund Institute, and with the understanding that the U. T. System Office of Academic Affairs will verify that the institutions' changes comply with these requirements.

U. T. System understands the importance of offering world-class, affordable higher education opportunities within the state and remains fully committed to controlling costs for students wherever possible. As such, resident undergraduate academic costs, including tuition, mandatory academic fees, all academic-related general fees, and college course fees will remain at currently approved levels for the next two academic years.

A public hearing opportunity regarding the proposed changes to designated tuition will be held in front of the full Board prior to consideration of this item during the Committee meeting.

5. U. T. Arlington: Report on the Long Range Financial Plan

President Cowley will report on the long range financial plan at U. T. Arlington using the PowerPoint on the following pages.

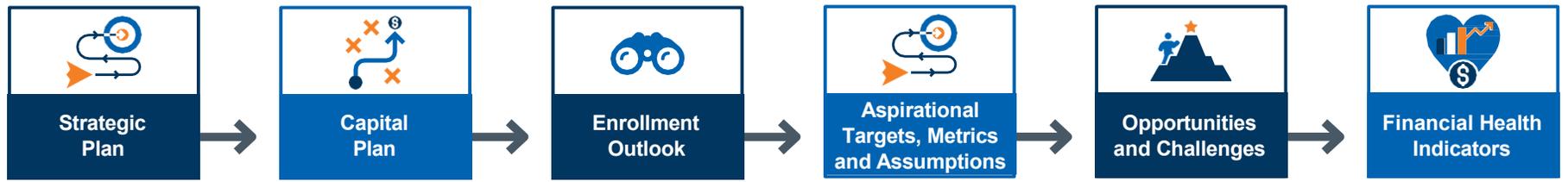
Long Range Financial Planning

Dr. Jennifer Cowley
President

U. T. System Board of Regents Meeting
Academic Affairs Committee
August 2023



Framework, Opportunities, and Challenges



- **Enrollment Trends**
- **University Expansion**
 - Debt and available cash
 - Operational needs
- **State Appropriations**

- **Recruitment and Retention**
 - Students, faculty, and staff
 - Merit and market adjustments for faculty and staff
 - Employee benefits
- **Tuition and Financial Aid**

- **Inflationary Pressures**
- **Strengthening Revenue Position**
- **Competing Priorities**

Strategic Themes



People and Culture



Student Success



Alumni and Community Engagement



Research and Innovation



Finance and Infrastructure

▶ Learn more at go.uta.edu/strategicplan.

Strategic Themes (cont.)

People and Culture

- Retain and expand a strong sense of community and engagement
- Focus on competitive employee compensation
- Strengthen reputation as Hispanic-Serving and Asian American Native American Pacific Islander-Serving Institution
- Align organizational structure to emphasize priorities

Student Success

- Enhance student experience (e.g., academic advising and support for student mental health) and engagement opportunities
- Expand career enhancing experiences
- Provide competitive graduate student support
- Grow scholarship and financial aid programs

Alumni and Community Engagement

- Build a community engagement strategy
- Develop strategies to increase alumni engagement
- Elevate brand identity and awareness
- Expand corporate and foundation engagement

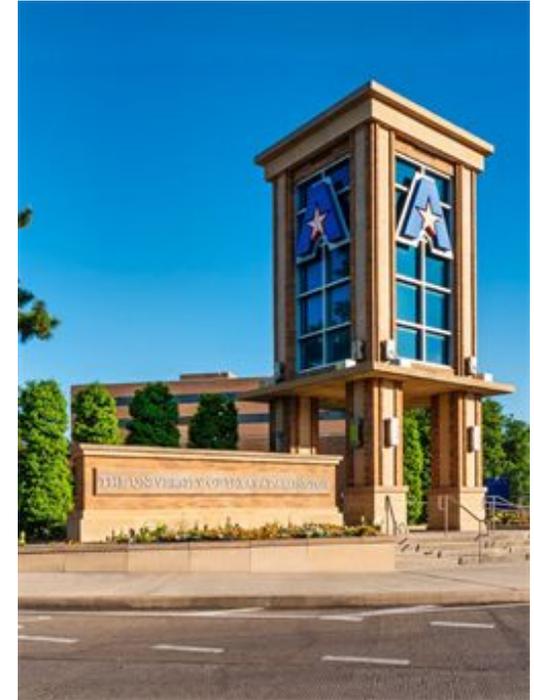
Strategic Themes (cont.)

Research and Innovation

- Increase impact of research and creative activities to transform the innovation ecosystem
- Enhance institutional grant capacity
- Support regional economic development

Finance and Infrastructure

- Align resources to strategic goals and priorities
- Expand student-centered spaces on campus
- Enhance technology resources and availability
- Develop campus master plan and 10-year capital plan



Planning Priorities



Strategic

- Expand research outcomes
- Competitive doctoral student support
- Faculty hiring plan
- Enhance career readiness
- Increase alumni engagement
- Enhance student success



Enrollment

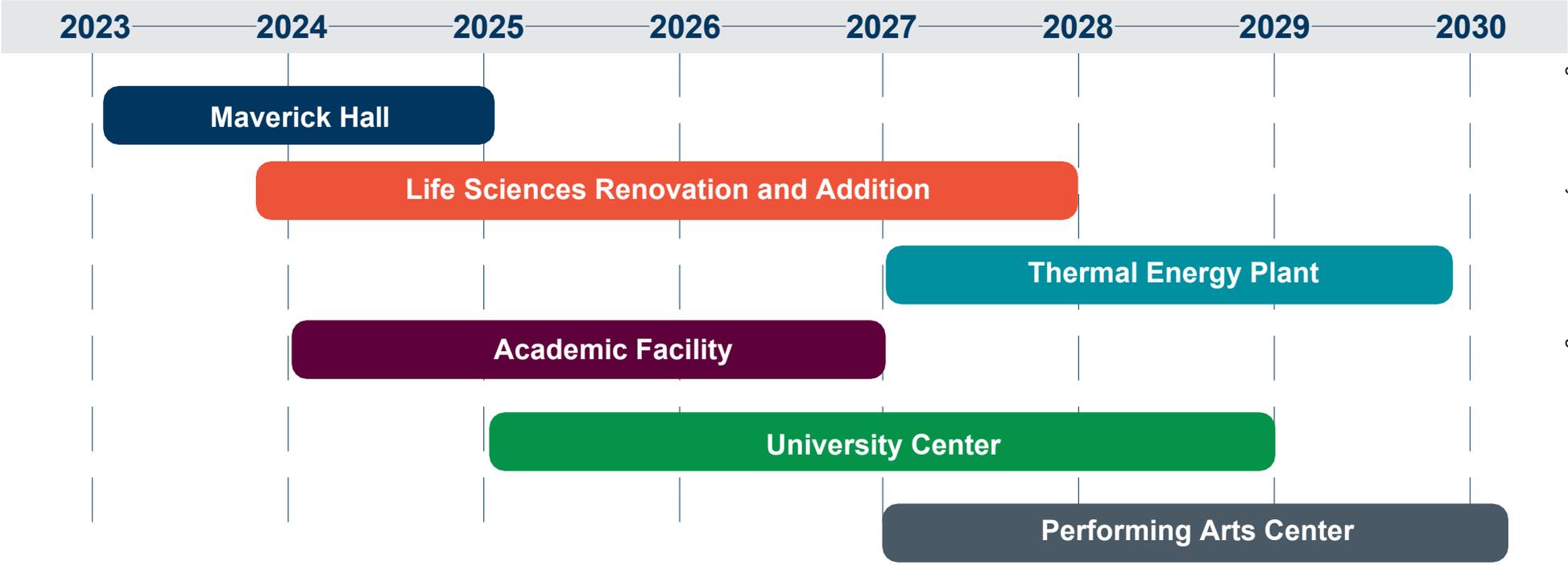
- Enrollment strategies
- Financial aid leveraging
- Housing scholarships



Capital

- Maverick Hall
- Life Sciences Renovation and Addition
- Thermal Energy Plant
- Academic Facility
- University Center
- Performing Arts Center
- Technology Enhancements

Capital Plan



Planning Inputs and Assumptions



Revenues

- Tuition aligned with Higher Education Price Index (HEPI)
- Student Union Fee aligned to support union expansion
- State appropriations two-year lag, formula rate increase aligned with HEPI
- Gifts and endowments
- External research funding



Compensation

- Merit and market-based increases
- Increase related to additional faculty and staff
- Benefits related increases
- Faculty hiring plan

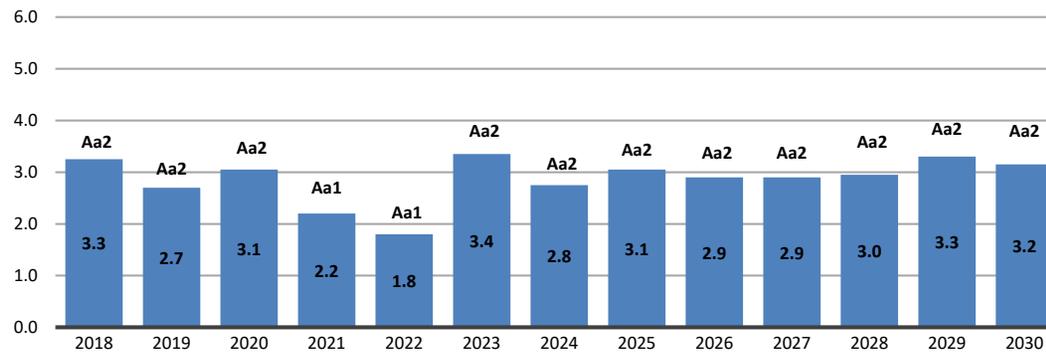


Operations

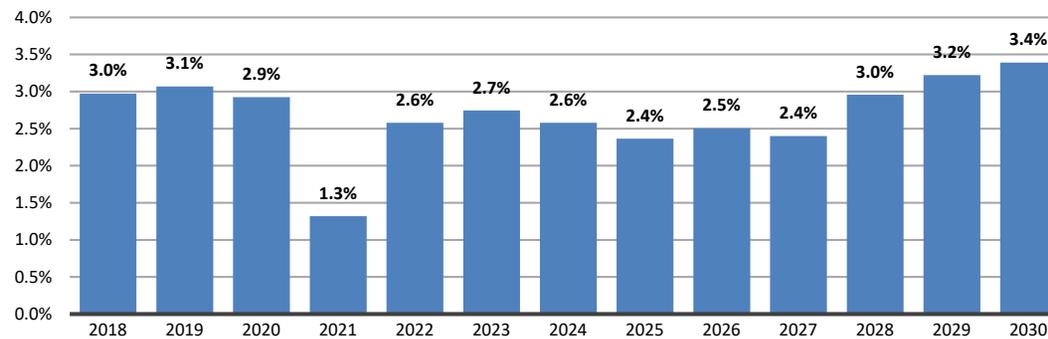
- Debt service increases in FY26-FY30
- New facilities operating support in FY26-FY30
- Operating expenditures increases aligned with HEPI

Financial Outcomes

Overall Scorecard Rating

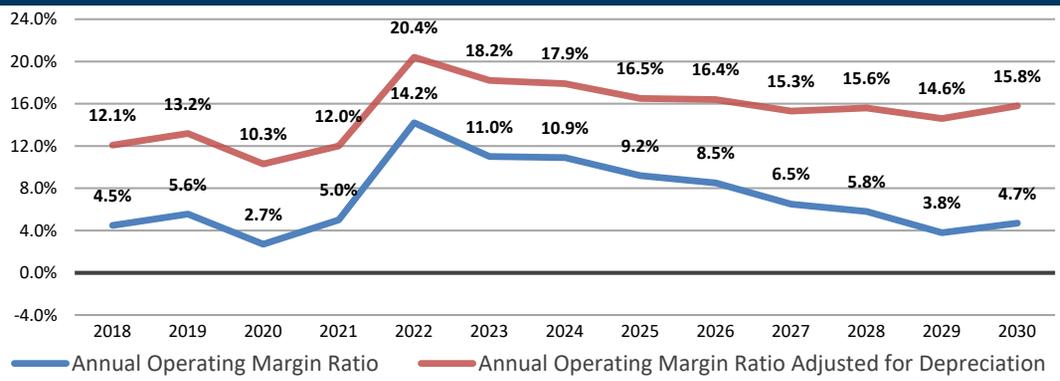


Debt Service to Operations



Financial Outcomes (cont.)

Operating Performance



Spendable Cash and Investments to Total Debt

