

Fall General Faculty Meeting

THURSDAY, OCTOBER 3, 2024

4:00 – 5:30 P.M.

JOAN C. EDWARDS PLAYHOUSE

October 3rd, 2024



Welcome from the Faculty Senate Chair



The Year Ahead

The Transformation Accelerates

- Finalized
 - **Updates** to UP AA22 Annual Evaluation of Faculty
 - **Updates** to MU BOG AA1 Sabbatical Policy, in effect next year
 - **New** MU BOG AA16 Professional Responsibility, Academic Responsibility, And Academic Freedom
- In Process/Upcoming
 - Promotion and Tenure (MU BOG AA 6, 7, and 9)
 - Post-Tenure Review (new)
 - General Education revisions
 - Faculty Technology Committee
 - Student Experience Evaluations
 - Shared Governance Charter



Introduction of New Administrators and Faculty



New Administrators

- **Gabriel Brown** Director of Community Service & Family Programs
- **Cody Call** Director of Financial Aid
- **Ben Eng** Interim Dean, Lewis College of Business
- **April Fugett** Executive Director, Center for Teaching and Learning
- **Tiffany Hartman** Assistant Dean, Student Life
- **Doohee Lee** Associate Dean, Lewis College of Business
- **Amanda Means** AOVP of Enrollment Management
- **Oreatha Murray** Director of Recruitment
- **Kathryn Smith** Director of Student Advocacy & Success
- **Wes Spradlin** Director of Off Campus Centers
- **Susan Strait** AOVP of Research Development
- **Vicki Stroehler** Associate Dean, College of Arts and Media
- **Kyle Trapp** Director of Esports & Club Sports



New Administrators

School of Medicine Administration

- **Adam Franks** Vice Dean for Rural Health and Primary Care
- **Beth Hammer** Vice Dean of Administration
- **Linda Holmes** Associate Dean for Development & Alumni Affairs
- **Stephen Petrany** Vice Dean for Addiction and Behavioral Health
- **Nitin Puri** Senior Associate Dean of Medical Education
- **JT Schneider** Assistant Dean for Sponsored Programs & External Affairs
- **Darshana Shah** Senior Associate Dean of Faculty Advancement
- **Matt Straub** Vice Dean of Finance
- **Paulette Wehner** Vice Dean of Education



New Faculty

College of Arts and Media

- **Logan Reagan** Assistant Professor | Theatre & Dance
- **Ion Alexandru Malaimare** Assistant Professor | Music
- **James Stamm** Assistant Professor | Music

College of Education and Professional Development

- **Kari Mika-Lude** Assistant Professor | Counseling
- **Jill Minor** Assistant Professor | Counseling

College of Engineering and Computer Science

- **Ghassan Abu-Lebdeh** Associate Professor | Civil Engineering
- **Arka Chattopadhyay** Assistant Professor | Mechanical & Industrial Engineering
- **Ananya Jana** Assistant Professor | Computer Sciences & Electrical Engineering
- **Mehmet Kosa** Assistant Professor | Computer Sciences & Electrical Engineering
- **Charmaine Sample** Assistant Professor | Computer Sciences & Electrical Engineering



New Faculty

Lewis College of Business

- **Jeffrey Larson** Assistant Professor | Management & Health Care Administration
- **George Lu** Assistant Professor | Accountancy & Legal Environment
- **Trang Pham** Assistant Professor | Finance, Economics, & International Business
- **Qing Huang** Assistant Professor | Marketing, MIS, & Entrepreneurship
- **James Woodrum** Instructor | Marketing, MIS, & Entrepreneurship

College of Health Professions

- **Bethany Felinton** Assistant Professor | Social Work
- **Patricia Hunt** Assistant Professor | Communication Disorders
- **Lindsay Simpson** Assistant Professor | Physical Therapy
- **Brooke Leaberry** Assistant Professor | Nursing
- **Melissa Lovejoy** Assistant Professor | Nursing
- **Emily Wiseman** Assistant Professor | Nursing
- **Sumaira Khalid** Assistant Professor | Public Health
- **Liang Wang** Professor | Public Health



New Faculty

College of Liberal Arts

- **Aaron Adams**
- **Caitlin Trombley**
- **Rachel Witt**
- **Britani Black**
- **John McAulay**
- **Joshua Williams**
- **Nibal Abou Mrad**
- **Margaret Sullivan**
- **Sarah Trautwein**

Assistant Professor | Geography
Assistant Professor | Sociology & Anthropology
Assistant Professor | Sociology & Anthropology
Assistant Professor | Psychology
Assistant Professor | Psychology
Assistant Professor | Psychology
Instructor | English
Assistant Professor | English
Instructor | English

College of Science

- **Cheyenne Tait**
- **Michael Wade Wolfe**
- **Chanaka Kottegoda**
- **Sudipta Mallik**
- **Aleksandra Sobieska Snyder**

Assistant Professor | Biological Sciences
Assistant Professor | Chemistry
Assistant Professor | Mathematics & Physics
Assistant Professor | Mathematics & Physics
Assistant Professor | Mathematics & Physics

School of Pharmacy

- **Elizabeth Taylor**

Clinical Assistant Professor | Pharmacy Practice and Administration



New Faculty

School of Medicine

- **Brian Ferguson**
- **Miles Gray**
- **Sadia Akter**
- **Abdelnaby Khalyfa**
- **Fatiha Nassir**
- **Jolene Wise**
- **Dylan Maldonado**
- **Jeffrey Hawk**
- **Evan McClanahan**
- **Scott Mitchell**
- **Richard Sexton**
- **Ruttmann Desauguste**
- **Robin Arora**
- **Mirza Beg**
- **Haitam Buaisa**
- **Adnan Elghezewi**
- **Pruthvi Goparaju**
- **M Sehzad Haq**
- **Mujtaba Mohamed**
- **Miguel Rodriguez Guerra**
- **James Vaillant**

Assistant Professor | Anesthesiology
Assistant Professor | Anesthesiology
Research Assistant Professor | Biomedical Sciences
Professor | Biomedical Sciences
Associate Professor | Biomedical Sciences
Assistant Professor | Dentistry
Assistant Professor | Dermatology
Assistant Professor | Family Medicine
Assistant Professor | Family Medicine
Clinical Assistant Professor | Family Medicine
Assistant Professor | Family Medicine
Instructor | Family & Community Health
Assistant Professor | Internal Medicine
Assistant Professor | Internal Medicine
Instructor | Internal Medicine
Assistant Professor | Internal Medicine
Assistant Professor | Internal Medicine
Assistant Professor | Internal Medicine
Assistant Professor | Internal Medicine
Assistant Professor | Internal Medicine
Assistant Professor | Internal Medicine



New Faculty

School of Medicine, continued

- **Christopher Burrell** Assistant Professor | Neurology
- **Lindsay Littlehales** Assistant Professor | Neurology
- **Luis Bolano** Clinical Professor | Orthopaedic Surgery
- **Karim Boukhemis** Clinical Assistant Professor | Orthopaedic Surgery
- **Naveen Singanamala** Assistant Professor | Orthopaedic Surgery
- **Jarrold Smith** Clinical Assistant Professor | Orthopaedic Surgery
- **Yana Farah-Peterson** Clinical Assistant Professor | Orthopedics, Podiatry
- **Kevin Brown** Clinical Assistant Professor | Podiatry
- **Kirt Miller** Clinical Assistant Professor | Podiatry
- **Dustin Peterson** Clinical Assistant Professor | Podiatry
- **John Diks** Assistant Professor | Pathology
- **Madison Anderson** Assistant Professor | Pediatrics
- **Mariam Opel** Assistant Professor | Pediatrics, Cardiology
- **Jill Bange** Assistant Professor | Psychiatry & Behavioral Medicine
- **Heidi Johnson** Assistant Professor | Psychiatry & Behavioral Medicine
- **Dakota May** Assistant Professor | Psychiatry & Behavioral Medicine
- **Joseph Newman** Assistant Professor | Psychiatry & Behavioral Medicine



State of the University Address





Marshall for All, Marshall Forever

Fall General Faculty Meeting

October 3, 2024

It's been a busy year at
Marshall University



Our Storied History

187 YEARS OF GROWTH AND ADVANCEMENT



1837
Marshall Academy
created

1858
Becomes a
college

1907
Enrollment
passes **1,000**

1929
During the **Great
Depression**,
students pay for tuition
in "IOUs" and potatoes



1863
Civil War; **Salina Hite Mason**
saves Marshall College by
purchasing the property at
auction and supporting the
school financially

1937
Ohio River **flooding**
damages campus
facilities

1947- 48
Men's basketball wins
national championship;
football plays in Tangerine
Bowl



1992, 1999
First **football
championship** (Division
1-AA); **top 10 ranking**
and Motor City Bowl
win over BYU

2018
Receives **R2 research
institution designation**
from the Carnegie
Classification of Institutions

2020
Men's soccer wins school's
first **NCAA Division 1
National Championship**

1946
More than **500
veterans** enroll in
program **allowing
graduation in three
years**

1961
Receives **university status**



1990
Enrollment
exceeds
12,000

2023
"Marshall for All, Marshall
Forever" **strategic
roadmap** developed; first
cohort of 100 "**Marshall
for All**" students arrives

1938
Board of Education
authorizes Marshall to
offer **master's degrees**

1977
**Medical
School**
opens

2024
Second cohort of 100
"**Marshall for All**" students arrives

1970
Airplane crash kills 75
football players, coaches,
administrators and
community members



Marshall University

A VIBRANT ECOSYSTEM

- Public research university - R2
- 10 colleges | 2 professional schools
- 11,560 total | 2,889 graduate students
- 75% are from West Virginia
- 48% are first-generation college
- Admitted from 44 countries
- 1,858 full-time faculty and staff



Marshall University **Academics**

- Huntington
- South Charleston
- Point Pleasant
- West Virginia International
Yeager Airport/Huntington
Tri-State Airport



Joan C. Edwards **School of Medicine**



Marshall University **Research Corporation**



Marshall University **Athletics**



Marshall University **Foundation Inc.**



Marshall Health Network

Marshall University

OUR ROLE AND IMPACT

WE ARE ... A Prosperity Platform to Accelerate Individual Success, Innovative Ideas and Economic Impact

INDIVIDUAL SUCCESS

2,500 Graduates/Year
75% from West Virginia
48% First Generation



120,000 Alumni:
Admirals & Generals, Governors,
Fortune 500 CEOs, Emmy/Tony/Pulitzer
Prize Award-Winners, Doctors, Lawyers,
Scientists, Educators, Professional
Athletes & Coaches, Heisman Trophy
Finalists and Hall of Fame Inductees

INNOVATIVE IDEAS

Research
Scholarship
Creativity



\$73M Research, Grants & Contracts
Carnegie R2 (7% of Institutions)
Cybersecurity | Forensic Science
Addiction Science | Obesity | Gerontology
Rural Health | Neuro-Divergent Learning
Digital Humanities | Design Thinking
Entrepreneurship | Innovation District

ECONOMIC IMPACT

Educate
Innovate
Collaborate



61% Graduates Remain in WV
300+ Companies Helped/Year
900+ People Trained/Year
Flight School | Aviation Maintenance
\$1 Invested Yields 18X Return
\$1.2B Economic Impact/Year
"Choose West Virginia" Tour

Sources: Center for Economic and Business Research, West Virginia Higher Education Policy Commission Funding Formula

A Shifting Landscape Necessitates Change

HEADWINDS RESHAPING HIGHER EDUCATION

DEMOGRAPHICS



Enrollment Cliff
Interest in College
Return-on-Investment

DIGITAL



Digital Transformation
Knowledge Economy Demands
Non-Traditional Alternatives

DOUBT



Gallup Survey
Structural Deficits
Closed Operations

Our **PLAN-ON-A-PAGE**

VISION



“To inspire learning and creativity that ignites the mind, nurtures the spirit, and fulfills the promise of a better future”

CREED

Educational | Open | Civil | Responsible | Safe | Well | Ethical | Pluralistic | Socially Conscious | Judicious

2037 GOALS



Individual Success

100% Placement Rates for Graduates
Zero Students Graduate with Student Loan Debt



Innovative Ideas

\$150M Research, Grants, Contracts
3X Start-Ups Incubated



Economic Impact

30X Return for Every \$1 Invested
3X GDP Impact in West Virginia (\$2.3B)

STAKEHOLDER GOALS

Students

Offer an affordable education with a distinctively supportive and flexible experience to ensure lifelong prosperity

Team

Empower faculty and staff to do the best work of their lives

West Virginia

Improve the well-being of all West Virginians by creating breakthrough opportunities and solutions

Financial Stakeholders

Build a resilient and sustainable institution to outlast headwinds

STRATEGY

Marshall for All, Marshall Forever

In-Demand Curriculum • On-Demand Delivery • Distinctive Value Proposition

PRIORITIES

Increase access

Ensure affordability

Grow support programs

Deliver on demand

Enable lifetime achievement

METRICS

- Strategic Enrollment Mgt. Plan
 - New student enrollment
 - Target segments enrollment
- Recruitment contacts
- Conversion rates
- Stopped-out/returning students

- Student debt load
- Debt-free cohorts/retention
- Internships and jobs
- M4A fundraising campaign
- Undergraduate ROI

- HerdConnect mentorship
- Center for Student Success
- 1st yr retention/6 yr graduation
- E2E student experience
- AI-based customized support

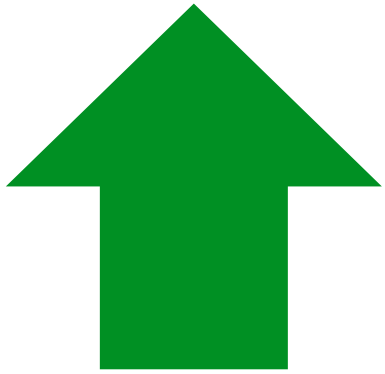
- In-demand programs & microcredentials
- HyFlex/Hybrid courses
- AI assessment/application
- Online degree programs

- Customized training - MAMC
- Academic pathways selected
- Career Engagement participation
- Lifelong learning

Accelerating Ideas to Impact

FIVE STUDENT-FIRST PRIORITIES

INCREASE ACCESS



Total Enrollment

Fall FY'24: + **5.2%**

Fall 22-24: +**11.9%**

ENSURE AFFORDABILITY

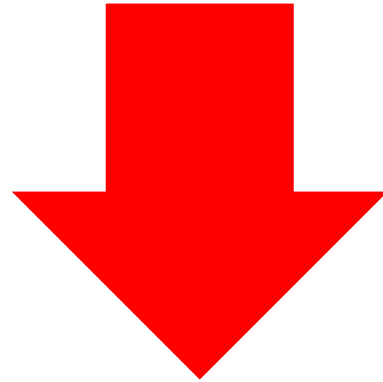


Metro Enrollment

Fall FY'24: +**12.5%**

Fall 22-24: +**35.7%**

GROW SUPPORT PROGRAMS



Retention

Fall 2022 **74.4%**

Fall 2023 **78.7%**

Fall 2024 **72.5%**

DELIVER ON DEMAND

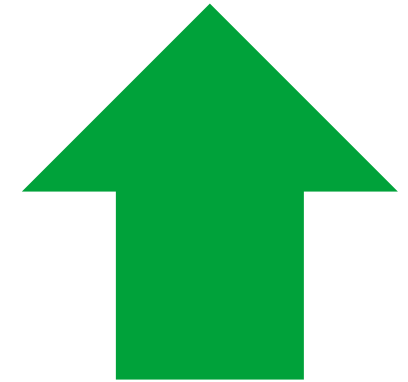


Online Enrollment

Fall FY'24: + **8.3%**

Fall 22-24: +**28.2%**

ENABLE LIFETIME ACHIEVEMENT



Internships/Practicums

Fall 21-Spring 22 **44.9% jr/sr**

Fall 22-Spring 23 **44.0% jr/sr**

Fall 23-Spring 24 **44.8% jr/sr**

Accelerating Ideas to Impact

SIX AREAS OF DISTINCTIVE EXCELLENCE

CYBERSECURITY & FORENSICS



"Academic Center of Excellence"

Groundbreaking
May 2024

Opening
Fall 2026

HEALTH SCIENCES



Academic Health System

Addiction
Obesity
Gerontology
Rural Health

ADVANCED MANUFACTURING



Robotics "Marshall Inside"

\$4.7M Grant-Funded
Activity/Year

Doubled footprint in
South Charleston

ADVANCED ENERGY



Hydrogen & Nuclear SMR's

Early Explorations
Strategic Partnerships

AVIATION



Pilots/ Maintenance Techs

Fall 2021
18 students
2 aircraft

Fall 2024
237 students
9 aircraft/1 rotorcraft
5 airports

ENTREPRENEURSHIP



Center for Business and Innovation

Grand Opening
January 2024

950+ Trained in
Design Thinking
Innovation District

Accelerating Ideas to Impact

INVESTING TO BUILD FOUNDATIONAL CAPABILITY

10-YEAR CAMPUS MASTER PLAN

DESIGN THINKING/ GENERATIVE AI

MARSHALL FOR ALL, MARSHALL FOREVER



**Community Cares Week
"Shock and Awe" Execution**



**President's Task Force on AI
SREB: AI in Education**



**100% Jobs Placement
Zero Student Loan Debt
2nd Cohort of 100 Students**

Accelerating Ideas to Impact

MARSHALL FOR ALL – 1ST COHORT

Graduation Rates

All Marshall Students

59% Graduated
Within 6 Years

42% Graduated
Within 6 Years

Marshall Non-Pell Students

Marshall Pell Students

Grade Point Average

Pell-Eligible Students

2.95 GPA

2.79 GPA

1st Marshall for All Cohort

Marshall Peers

Retention - Fall 2023→Fall 2024

Pell-Eligible Students

79% Retained

66% Retained

1st Marshall for All Cohort

Marshall Peers

Retention - Fall 2023→Fall 2024

Metro Students

79% Retained

68% Retained

1st Marshall for All Cohort

Marshall Peers

Key Takeaway

Early indications are that removing a financial barrier can lead to higher retention and graduate rates. This means improved economic prospects for individuals and economic benefits for the region through a better-educated workforce.

Manage our Strategic Resources

PROMOTE LONG-TERM SUSTAINABILITY

ENDURING FINANCIAL PRINCIPLES

1. Grow STUDENTS, Not Fees.

- ✓ Minimize tuition and fee increases.
- ✓ Institutional success is measured by our accessibility, affordability and lifetime value for the students we serve.

2. Invest in our TEAM.

- ✓ Align employee compensation with market.
- ✓ Incentivize for performance and living the Marshall University Creed.

3. Take Care of the HOUSE.

- ✓ Investments in facilities are essential to the university mission.
- ✓ Invest in innovative technologies to meet modern challenges.

4. Manage our Strategic RESOURCES.

- ✓ Build key reserves for fiscal/operational resiliency.
- ✓ Invest available resources to new market-driven opportunities.

STRATEGIC INITIATIVES

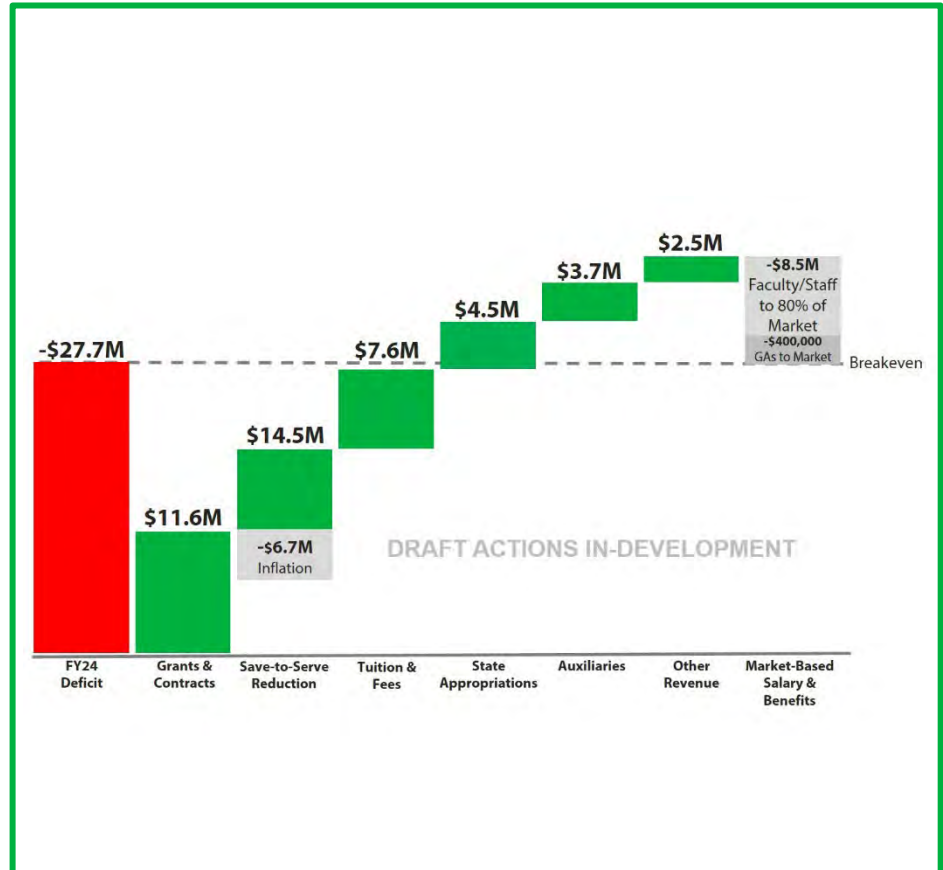
"Save-to-Serve"

- Identify/take action:
 - Savings opportunities
 - Spending habits
 - Areas of waste
- Guided by Budget Work Group
 - Monthly meetings
 - Purchasing best practices
 - Spending deep dives
- Goal of \$7M in savings over four years

Incentivized Budget Model

- Resources aligned with strategic goals
- Shared financial governance
- Culture of trust, responsibility, accountability
- Data informed

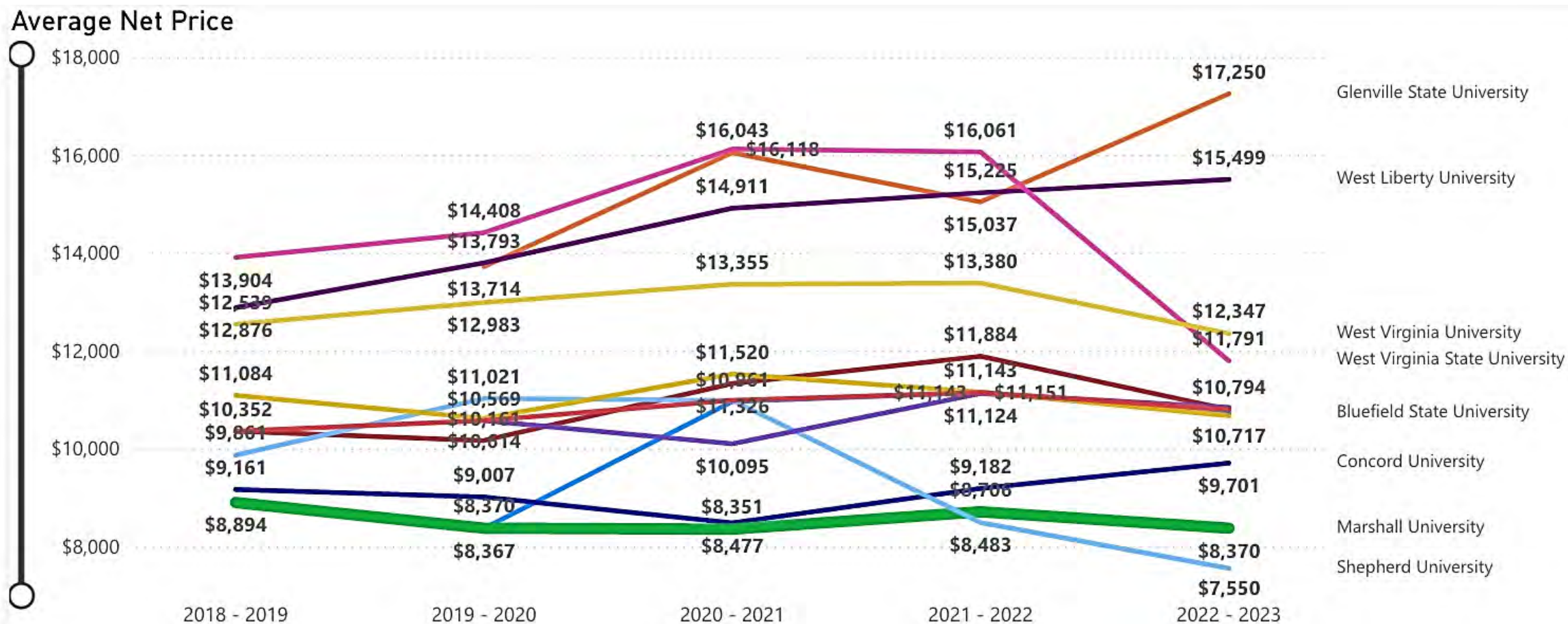
FINANCIAL ROADMAP FY24-27



Grow Students, Not Fees

TUITION/FEES AND AFFORDABILITY

Comparison to WV 4-Year Institutions



Source: Integrated Postsecondary Education Data System (IPEDS)

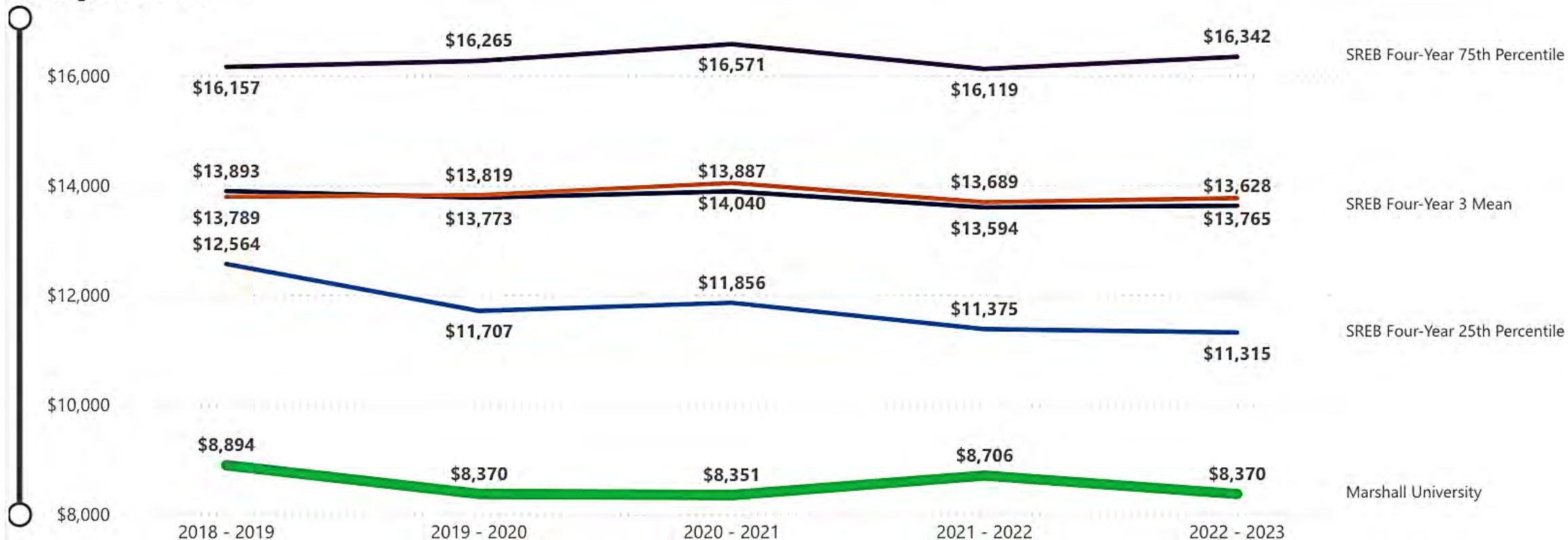


Grow Students, Not Fees

TUITION/FEES AND AFFORDABILITY

Comparison to SREB 4-Year Institutions

Average Net Price



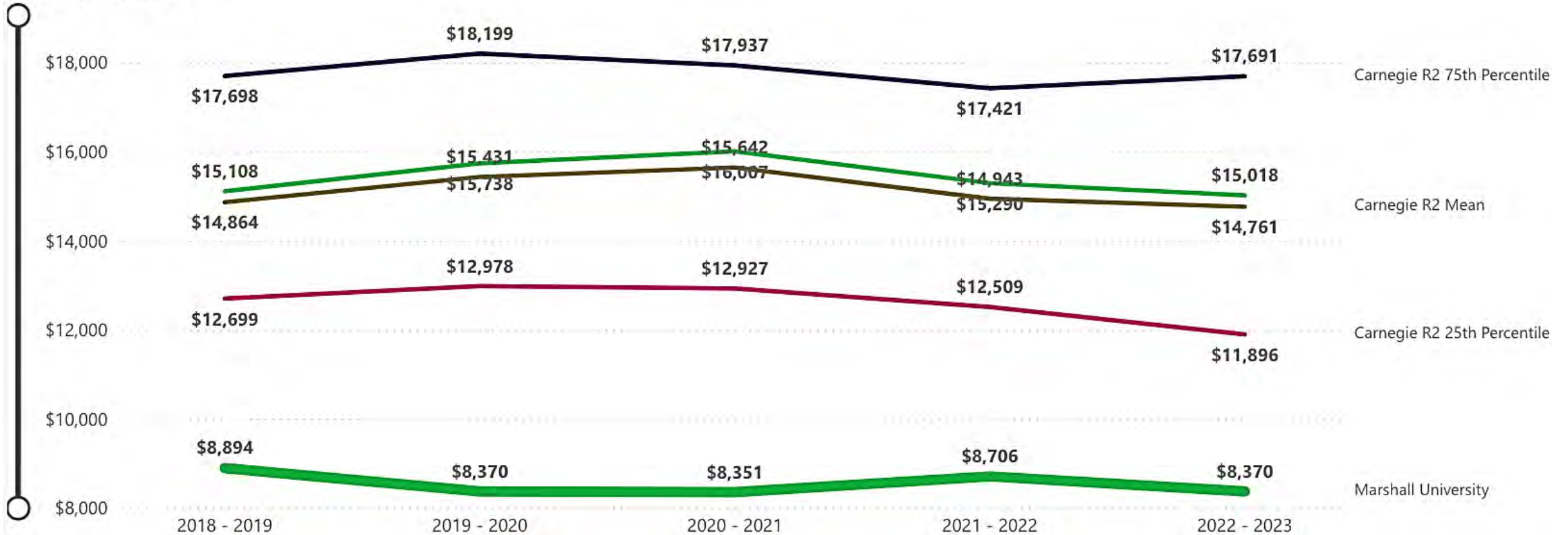
Source: Integrated Postsecondary Education Data System (IPEDS)

Grow Students, Not Fees

TUITION/FEES AND AFFORDABILITY

Comparison to Carnegie R2 Institutions

Average Net Price

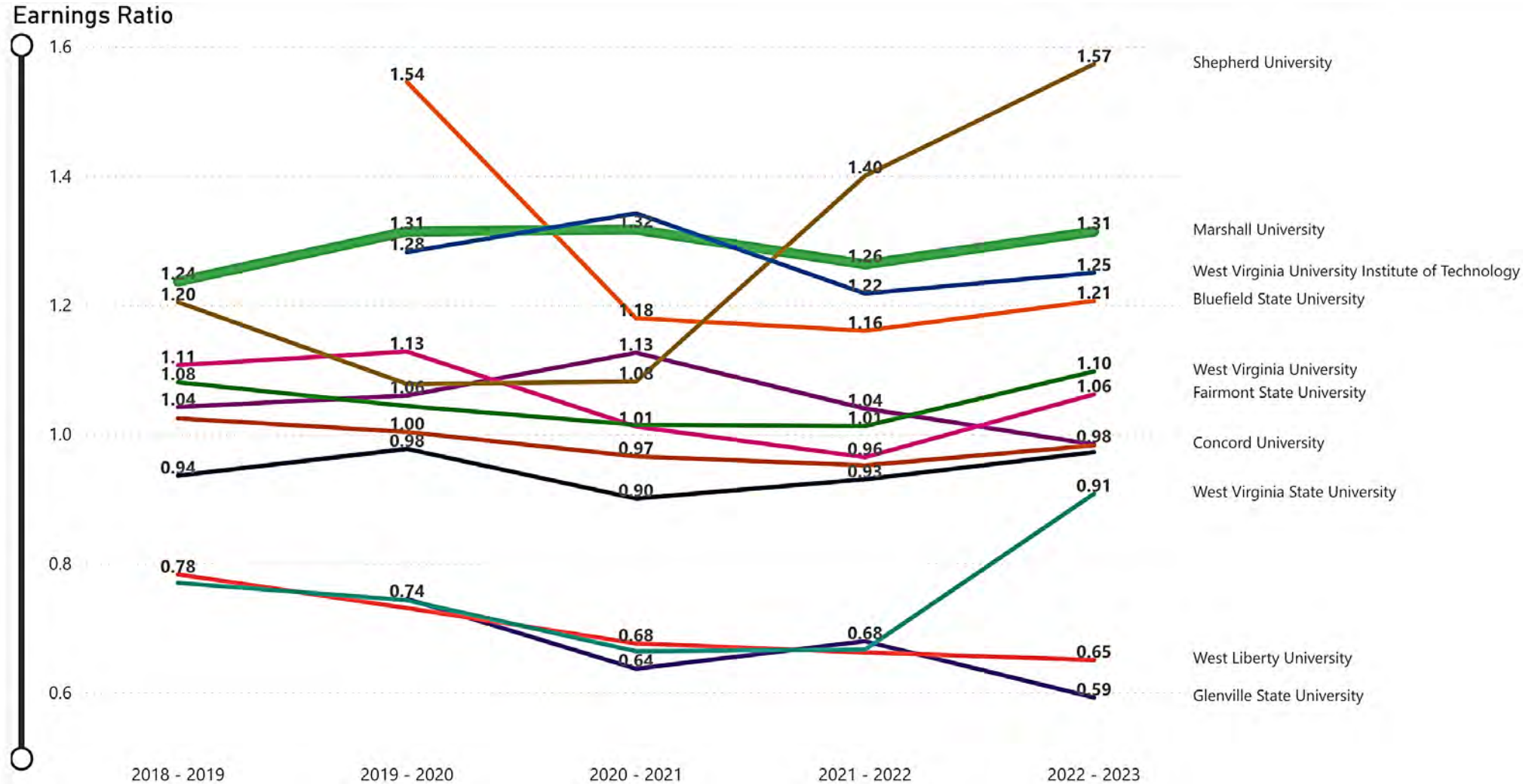


Source: Integrated Postsecondary Education Data System (IPEDS)

Grow Students, Not Fees

RETURN ON INVESTMENT

Comparison to WV 4-Year Public Institutions



Sources: Integrated Postsecondary Education Data System (IPEDS) and College Scorecard, U. S. Department of Education

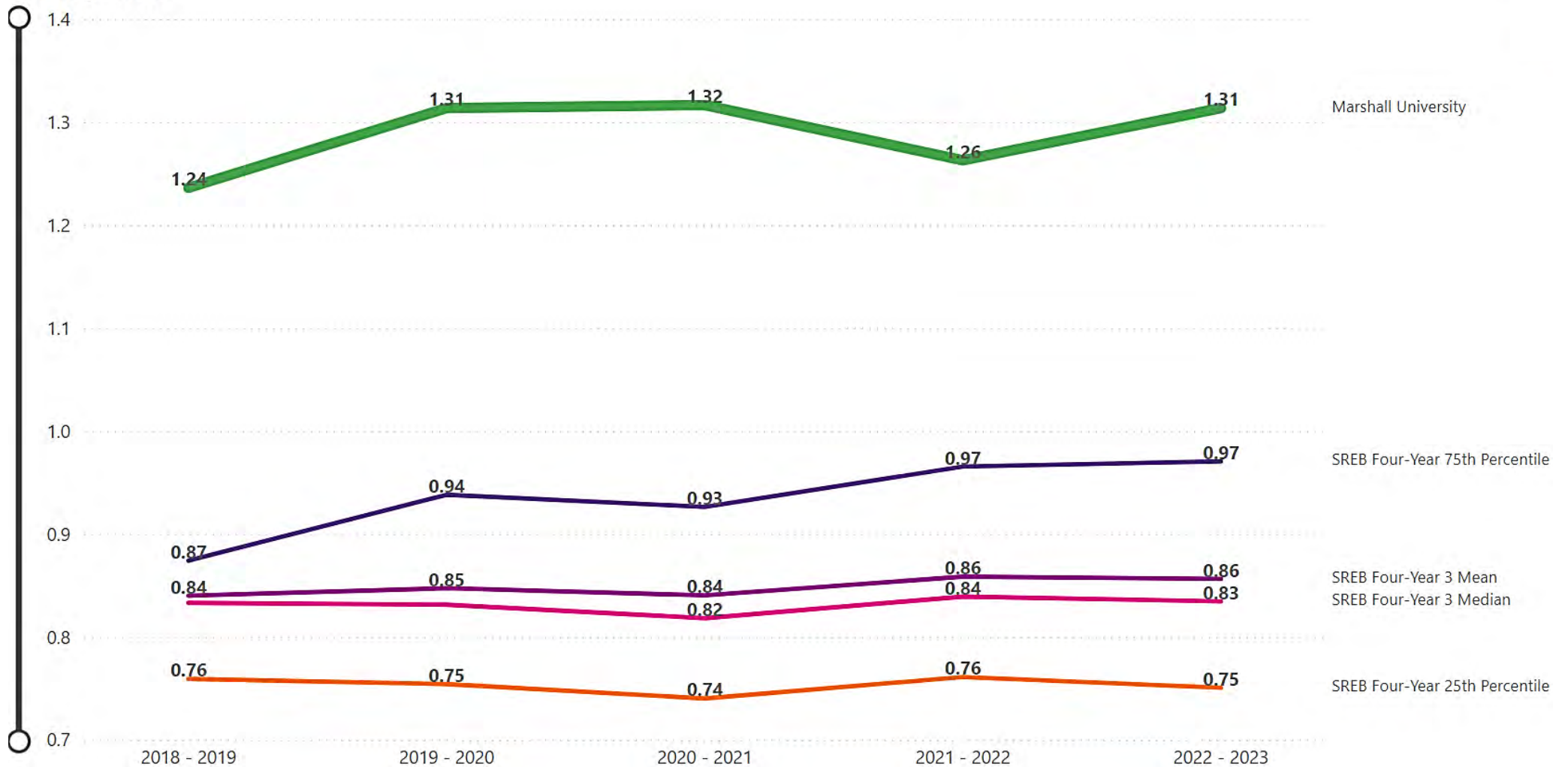


Grow Students, Not Fees

RETURN ON INVESTMENT

Comparison to SREB 4-Year Institutions

Earnings Ratio



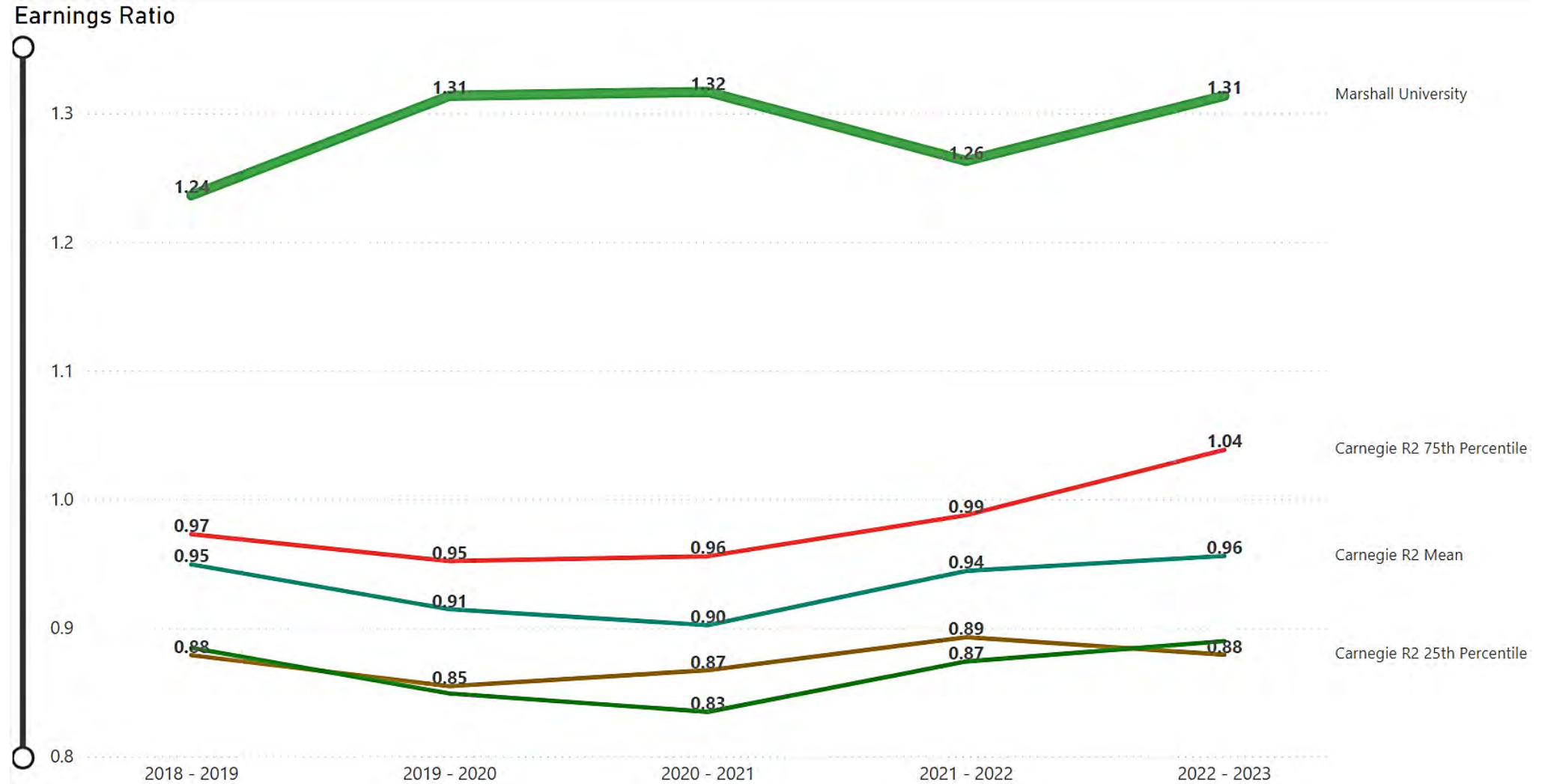
Sources: Integrated Postsecondary Education Data System (IPEDS) and College Scorecard, U. S. Department of Education



Grow Students, Not Fees

RETURN ON INVESTMENT

Comparison to Carnegie R2 Institutions



Sources: Integrated Postsecondary Education Data System (IPEDS) and College Scorecard, U. S. Department of Education

Invest In Our Team

PAY RAISES → MARKET RATES

FY25 ACTIONS

State Funded Salary Increases

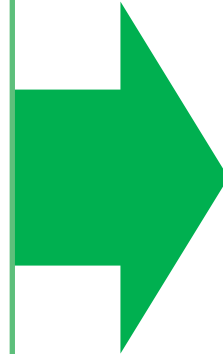
- ~\$1,000 Lump Sum
- +1% Base Increase

Market Equity Adjustments

- \$1.25M from Save-to-Serve
Distributed based on Compa-ratio (position relative to mid-point)

Introducing:

- Total Rewards Statements
- Performance Management



PROGRESS

- New **market-based** system
- Paygrade **midpoints** ↑14-31%
- Nearly everyone received market-based **salary increase**
- **Avg. raise July/August 2024:**
 - Faculty = 4.33%
 - Classified Staff = 5.75%
 - Non-Classified Staff = 4.14%
- Only **\$900K to 80% goal** for all
- *And that's not the end!*

FY26-28 CONSIDERATIONS

State Funded

- \$1.5M Appropriation

Market Equity Adjustments

- Performance-Based

Take Care of the House
PROJECT “SHOCK AND AWE”

\$21.4M from State for deferred maintenance

First round of funding (\$5.4M) received December 2023

All 21 approved projects under way

Before
LAIDLEY HALL



After
GREENSPACE



Before
SMITH HALL 263



After
TECHI CLASSROOM



Before

MEMORIAL STUDENT CENTER HALLWAY

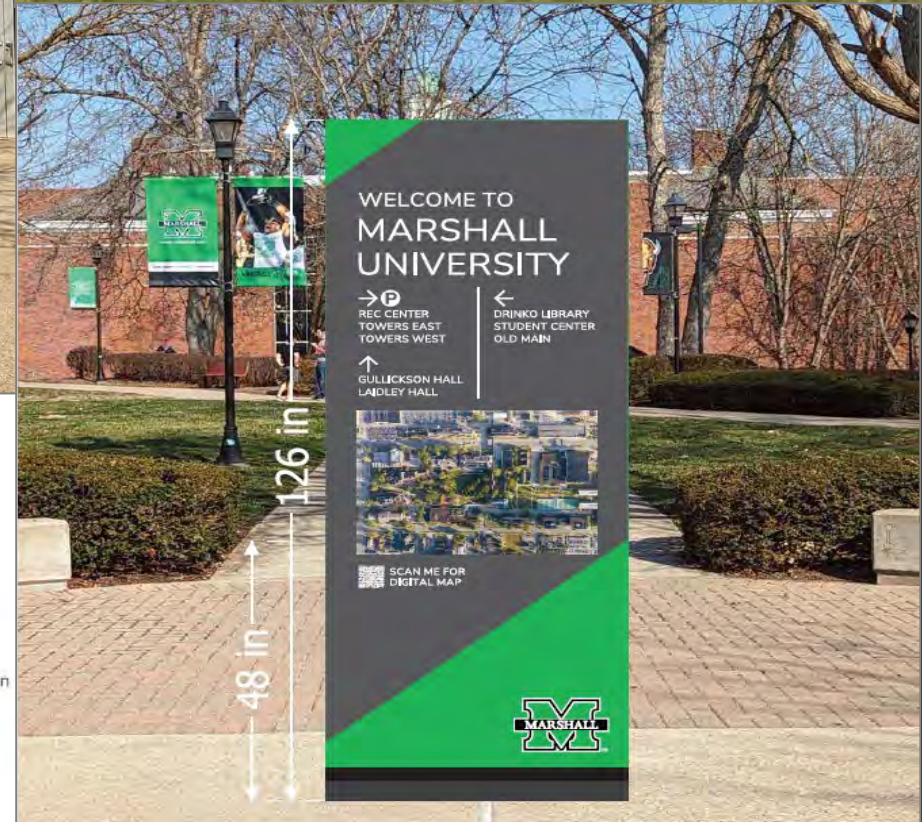


After
NEW RESTROOMS



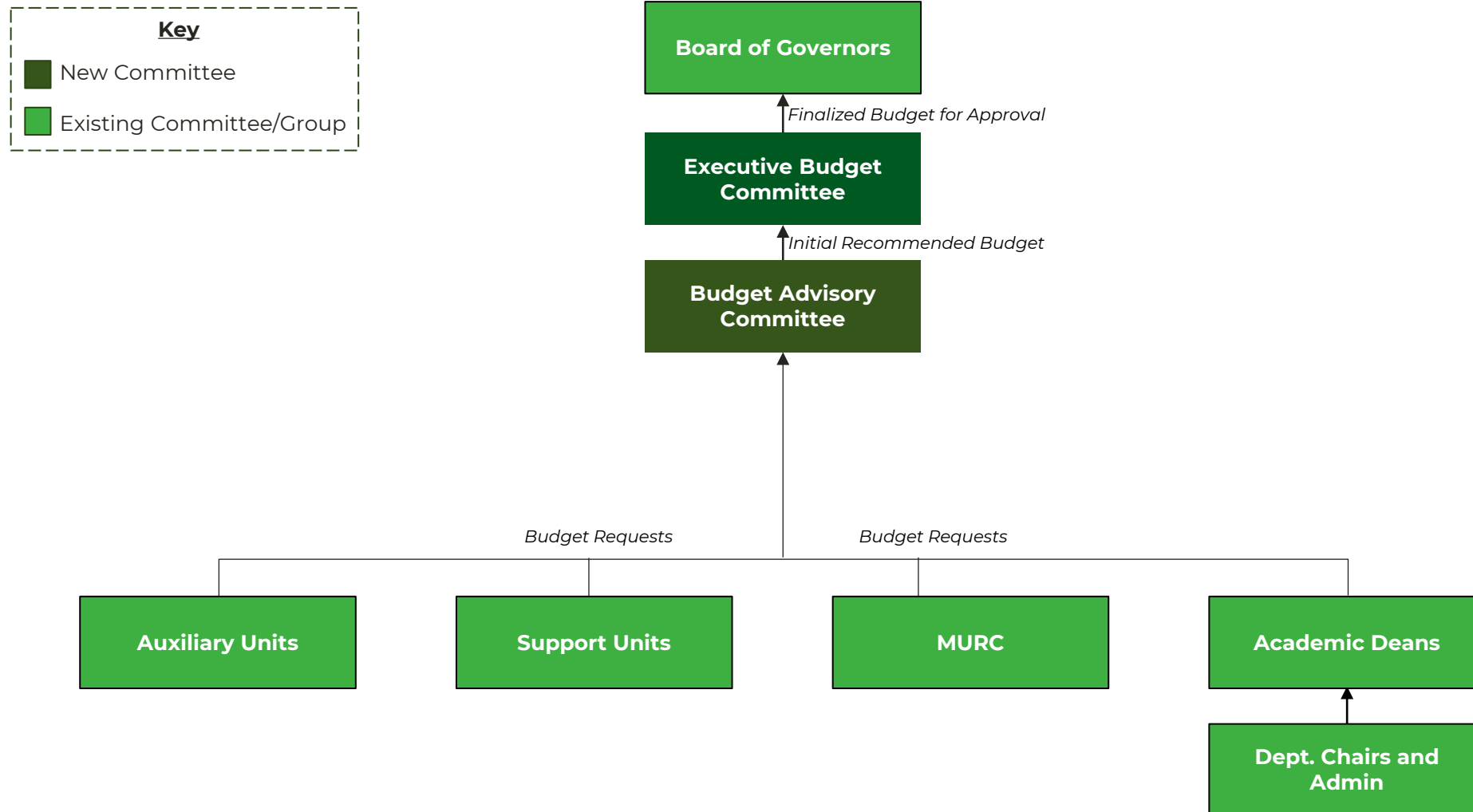
Coming Soon!

NEW WAYFINDING SIGNAGE



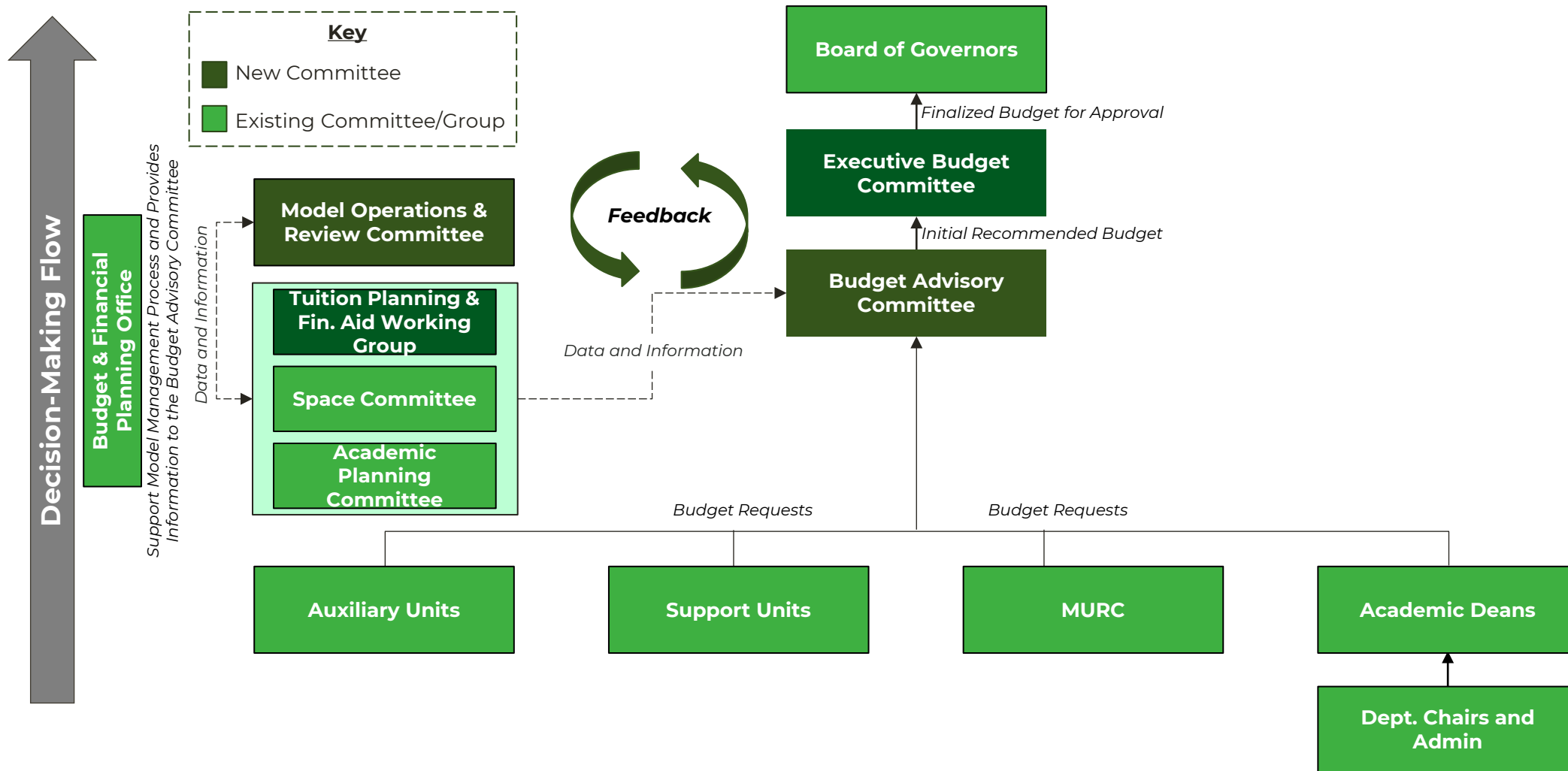
Manage Our Strategic Resources

BUDGET MODEL GOVERNANCE STRUCTURE



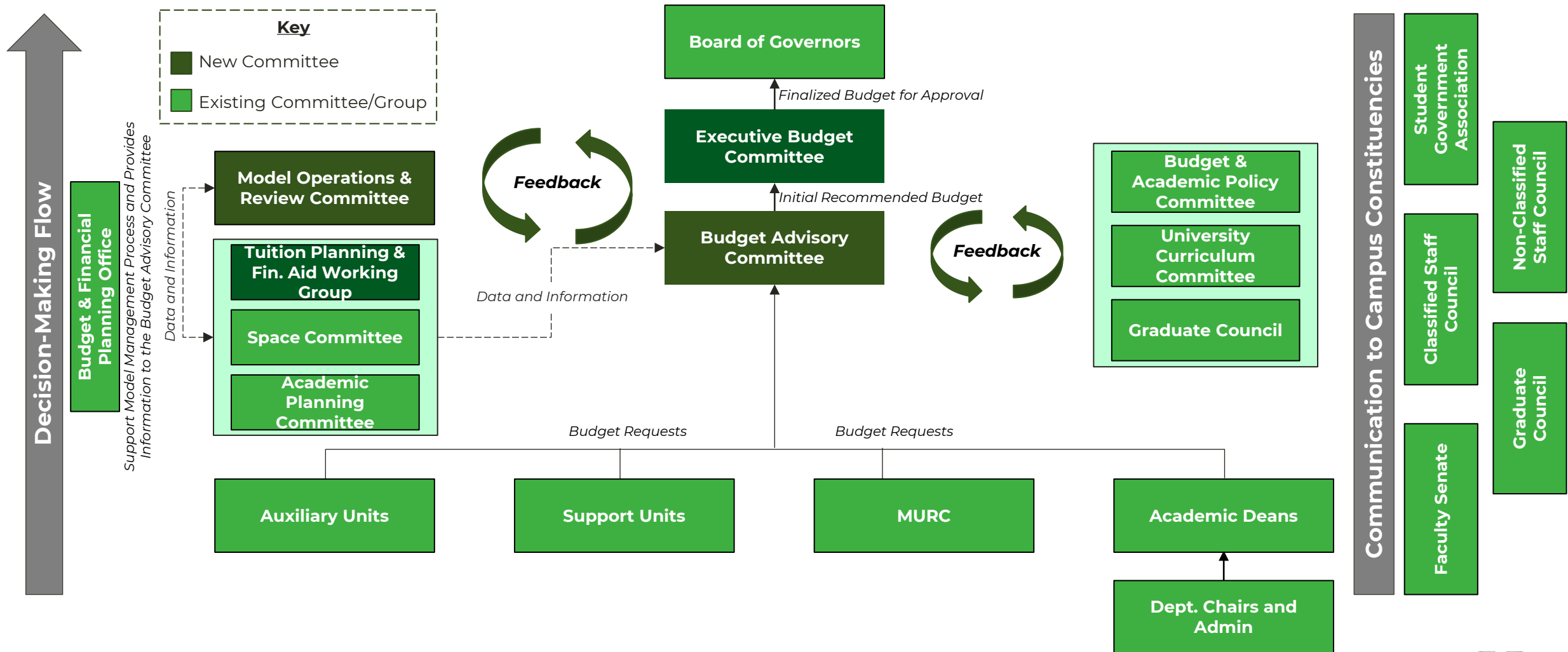
Manage Our Strategic Resources

BUDGET MODEL GOVERNANCE STRUCTURE



Manage Our Strategic Resources

BUDGET MODEL GOVERNANCE STRUCTURE



Manage our **STRATEGIC RESOURCES**

Key Assumptions

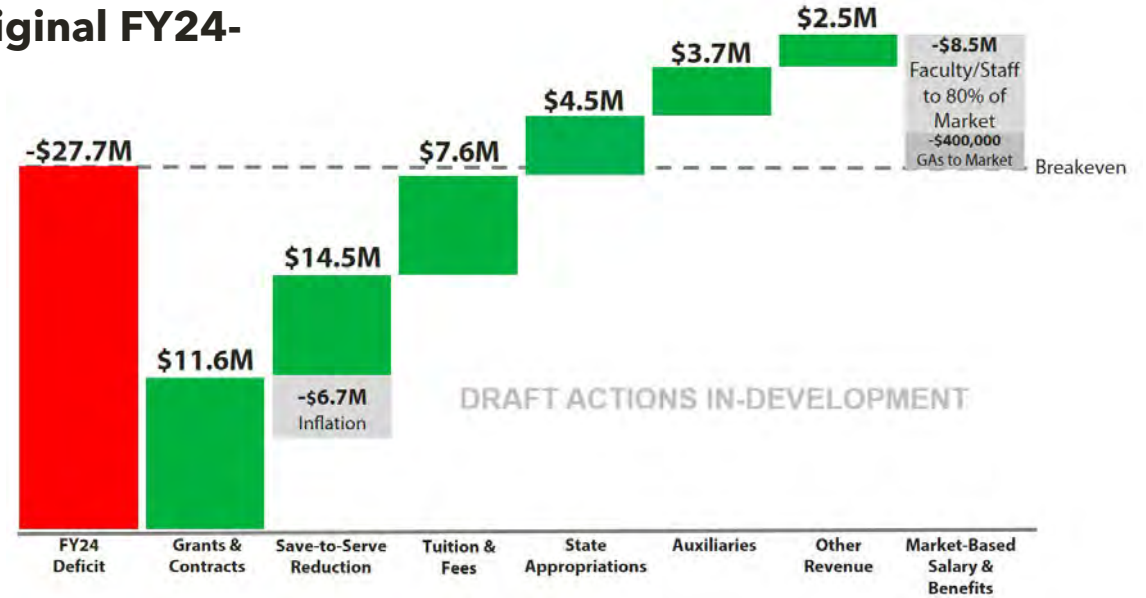
REVENUES

	Original	Current
✓ Grants and Contracts	3.5%	3.7%
✓ Net Tuition/Fees		
• FY25	+2.2%	+5.4%
• FY26	+2.5%	+4.8%
• FY27	+2.5%	+2.5%
• FY28	+2.5%	+2.5%
✓ State Appropriations	+\$3.3M	+\$3.3M
• FY25	+\$1.5M	+\$1.5M
• FY26 – FY28		
✓ Auxiliary Revenue		
• FY25	+1.8%	+1.8%
• FY26	+3.5%	+1.8%
• FY27	+3.5%	+1.8%
• FY28	+3.5%	+1.8%

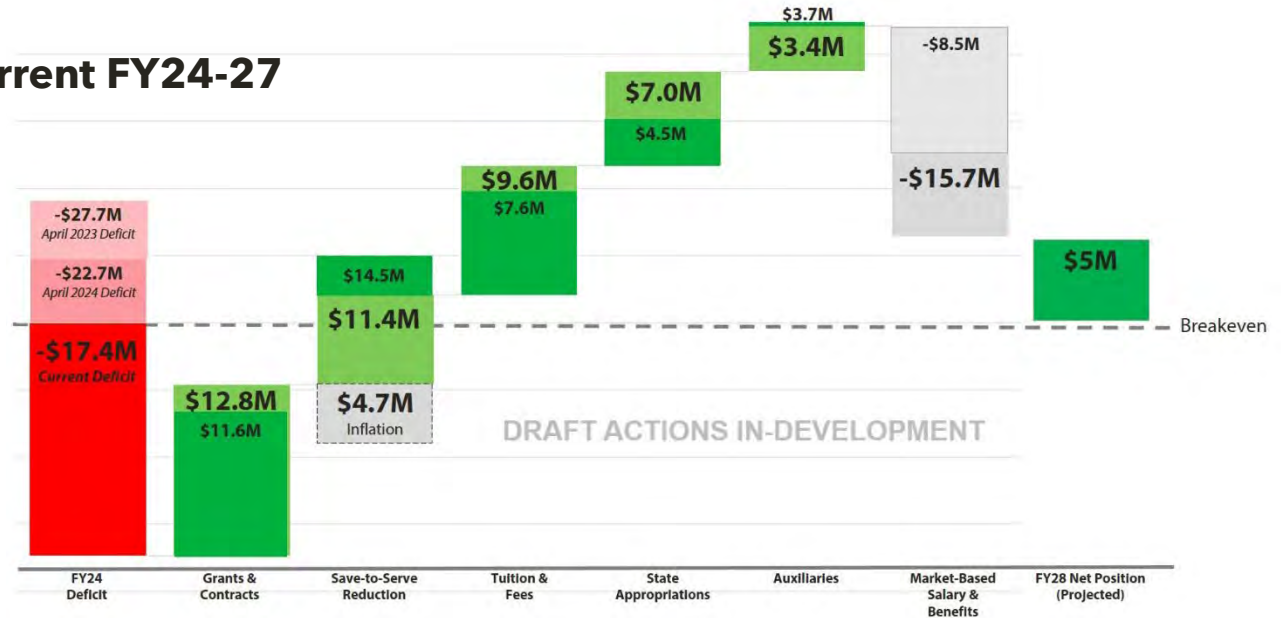
EXPENSES

✓ Salaries and Benefits	+\$3.5M	+\$3.5M
✓ FY25		
✓ FY26 - FY28	+\$1.5M State / \$2M Performance	
✓ Supplies and Other Services: \$11.4M spend decrease from FY24-FY28		

Original FY24-27



Current FY24-27



Summary

MARSHALL FOR ALL, MARSHALL FOREVER

THANK YOU ... for your leadership, your partnership and your support

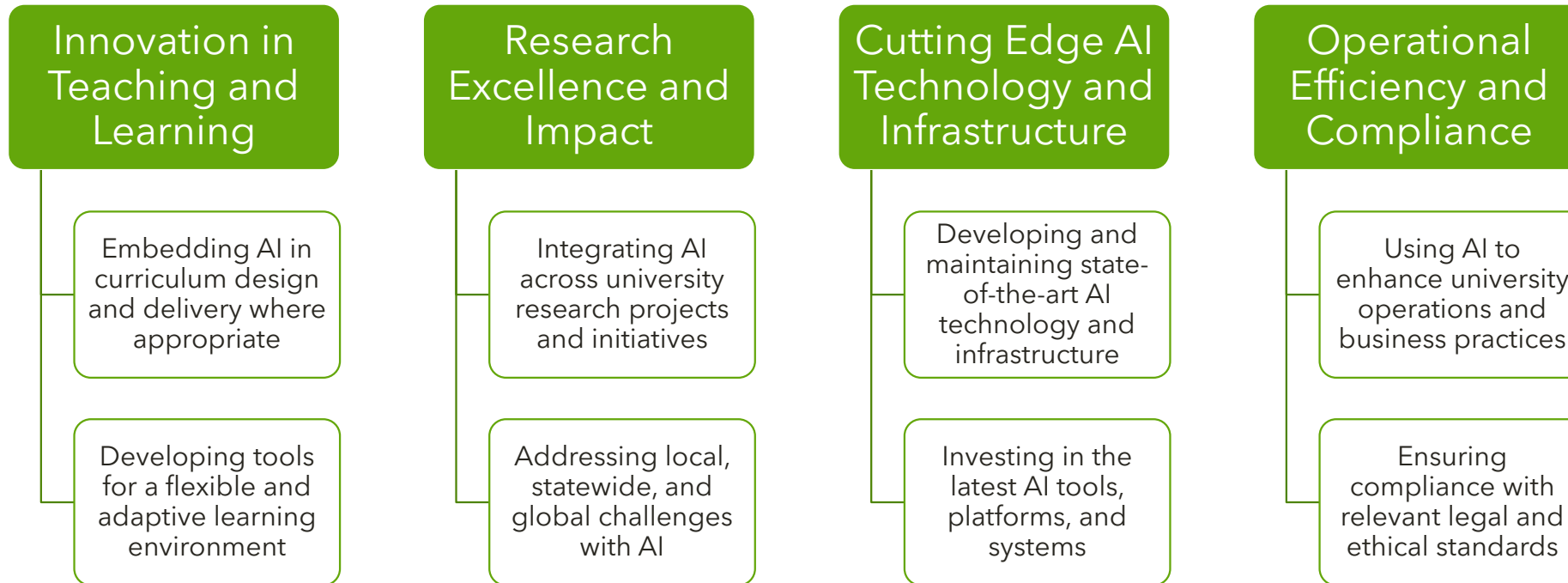
- Marshall is a prosperity platform for West Virginia and Appalachia.
- We're navigating transformational change and choosing to play offense.
- We've charted a strategic roadmap to future prosperity and it's working.
- Your partnership and support are sincerely appreciated.

State of the Faculty Address



Presidential AI Task Force

Guiding Principles

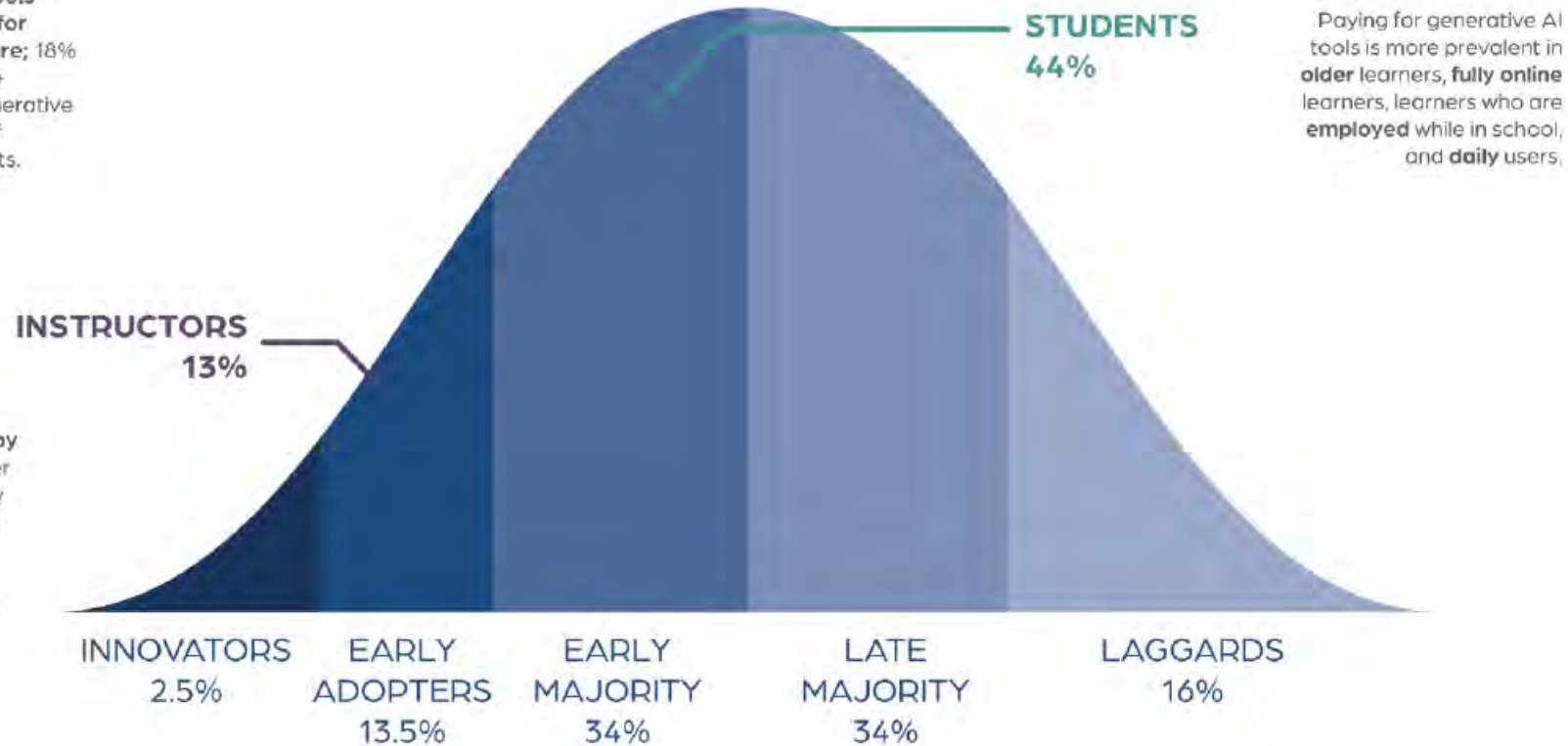


Instructor vs. student use of paid generative AI tools

Respondents who are regular generative AI users*

Paying for generative AI tools increases with course size for instructors using courseware; 18% of instructors teaching 100+ student classes pay for generative AI tools compared to 8% of instructors with <50 students.

No significant differences by discipline, although younger instructors (<35) are slightly more likely to have paid for generative AI tools in the past (10%) compared to older instructors (>35, 3%).



Paying for generative AI tools is more prevalent in **older learners, fully online learners, learners who are employed while in school, and daily users,**

Notes: Survey questions: “Do you pay for the use of any generative AI tools?” Instructor n = 654. “Do you pay for any subscriptions to any generative AI tools or services (e.g., ChatGPT Plus, Cheggmate) that you use for school-related work or activities?” Student n = 903. *Regular generative AI users are those who indicated that they use generative AI tools at least monthly.

Sources: Time for Class 2024, Tyton Partners analysis

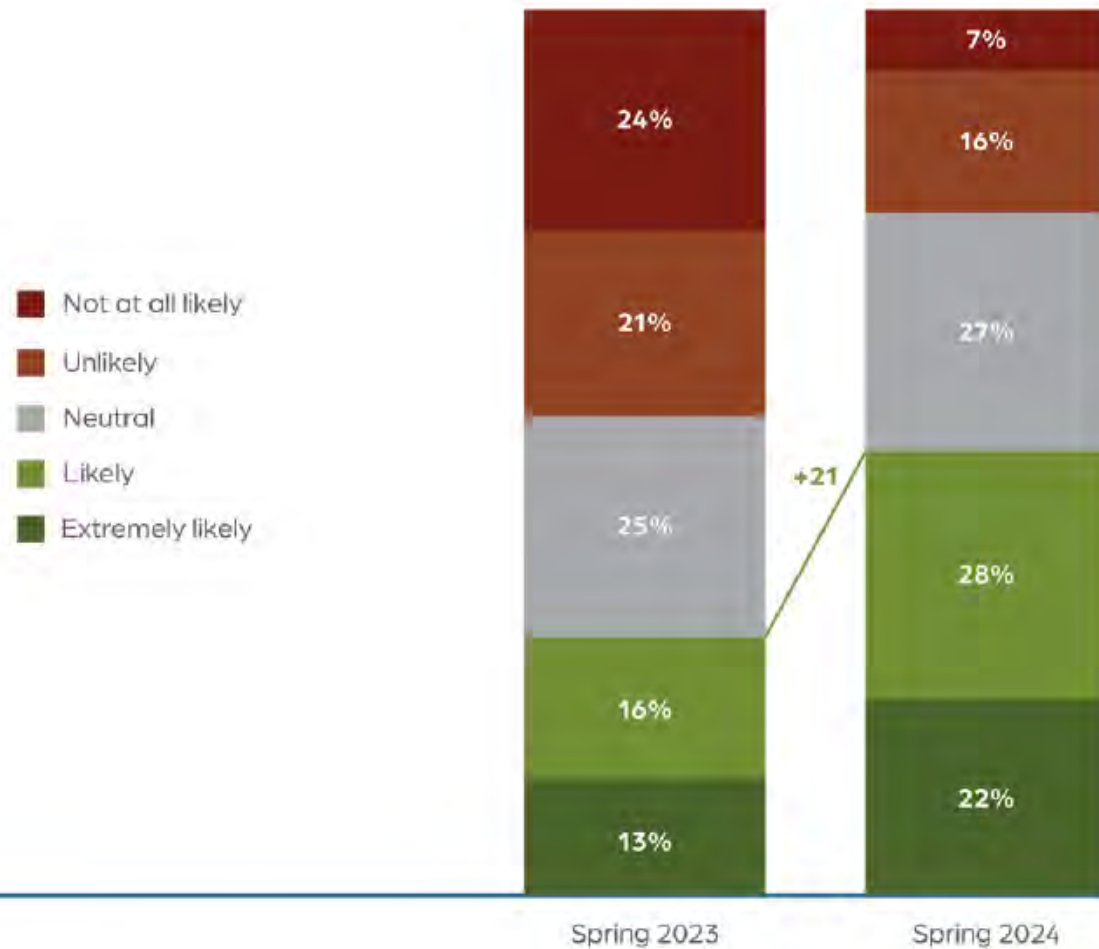
AI is an In-Demand Skill

Cengage Group Employability Report (July 2024)

- **70%** of graduates believe basic Generative AI training should be integrated into courses
- **55%** of graduates said their programs did not prepare them to use Generative AI tools
- **51%** of recent graduates second-guessing their career choices because of Generative AI and other emerging technologies, with
 - **39%** fearing that Generative AI could replace them in the workforce entirely
- **62%** of employers believe candidates and employees should have foundational knowledge of Generative AI tools
 - **58%** being more likely to interview and hire those with AI experience.



Likelihood of using generative AI tools if institution or instructor banned them



Notes: Survey questions: "If your instructor or college/university banned the use of generative AI tools (e.g., ChatGPT or Google Bard/Gemini) for completing academic assignments, how likely would you be to still use generative AI tools?" n = 1,326 and 1,147.

Sources: Time for Class 2023 and 2024, Tyton Partners analysis

AI Detection?

Neither Humans nor machines can reliably detect AI generated writing

Research Methods in Linguistics

- “Findings suggest that despite employing multiple rationales to judge texts, reviewers were largely unsuccessful in identifying AI versus human writing, with an overall positive identification rate of only 38.9%.” (<https://doi.org/10.1016/j.rmal.2023.100068>)

Journal of Applied Learning and Teaching

- “...writing instructors have a moderate level of confidence in their ability to distinguish between student and AI-generated writing but a low level of accuracy—only 35% of instructors could correctly identify the authorship...” (<https://doi.org/10.37074/jalt.2024.7.2.12>)

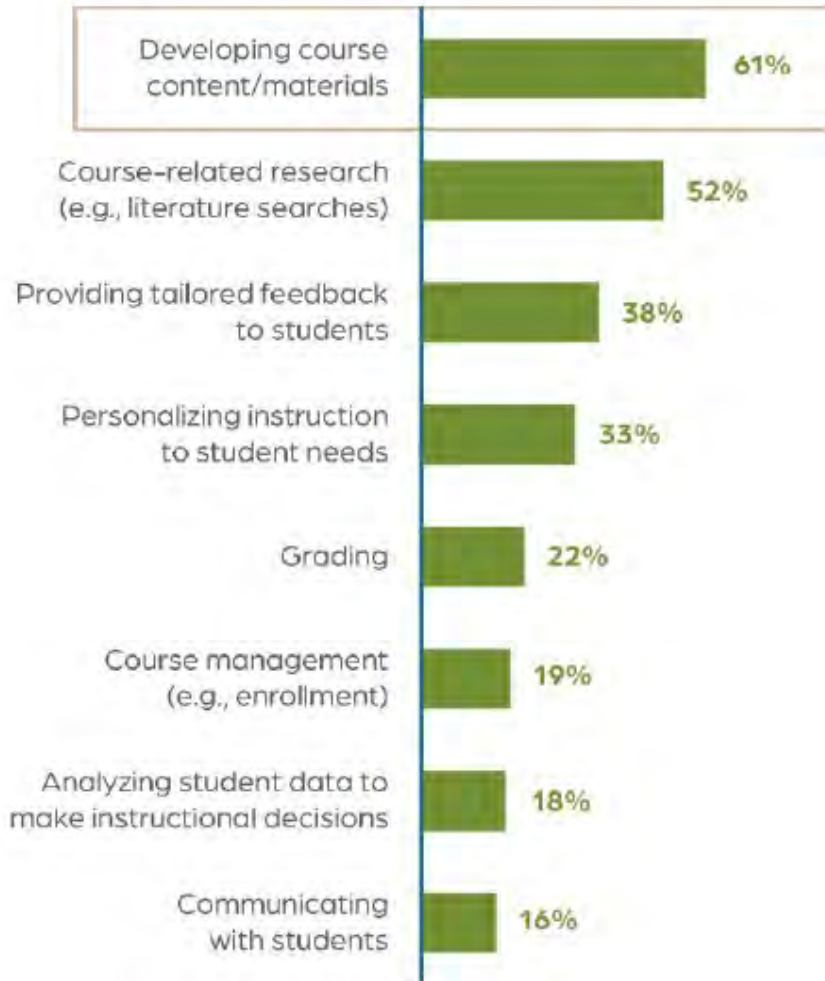
Accusations without robust evidence can be harmful

- Biased against certain types of students, such as ESL, autism, etc.



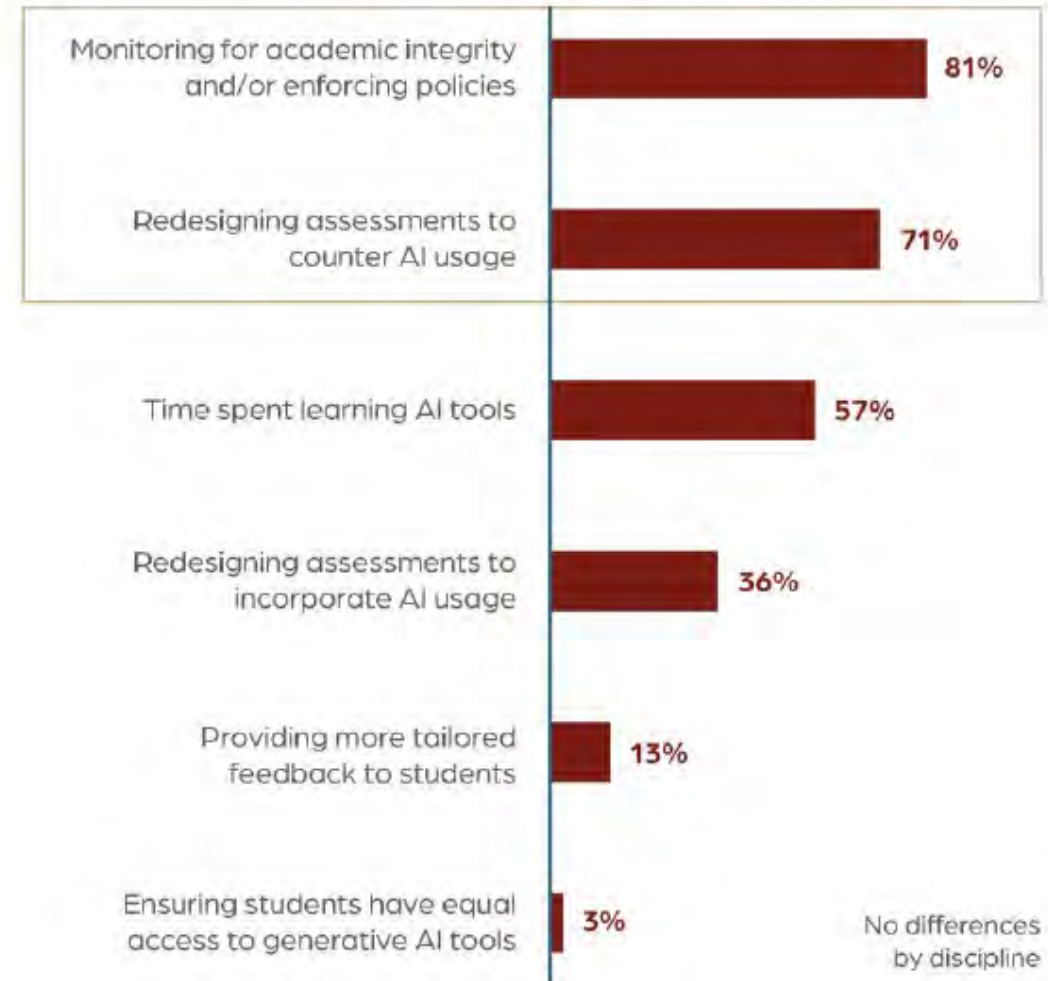
Overall shift in instructor workload

Facets of teaching workload that decreased



Overall impact on workload

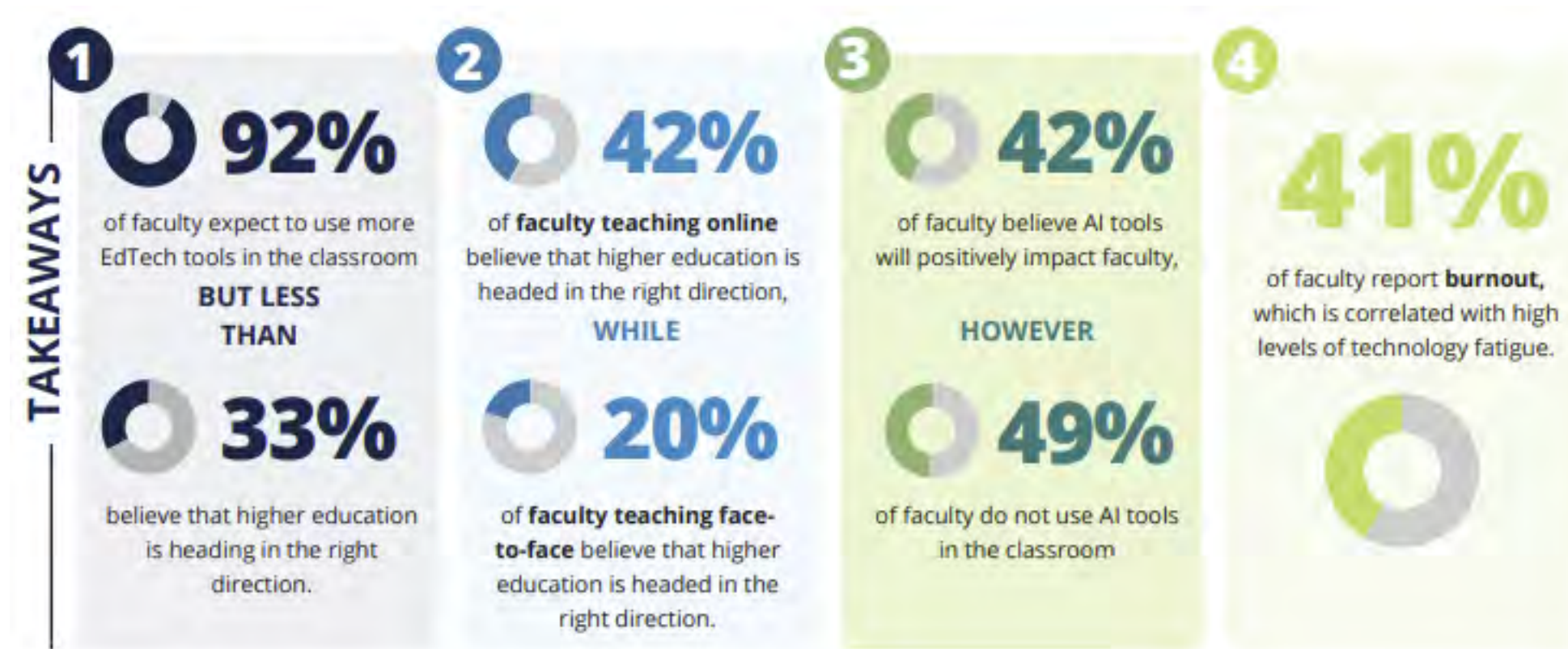
Facets of teaching workload that increased



No differences by discipline

Faculty are getting burnt out by technology

College Innovation Network Faculty EdTech Survey (August 2024)



<https://www.wgulabs.org/posts/2024-cin-faculty-edtech-survey-edtech-and-the-evolving-role-of-faculty>



AI and the University

Where does this leave us?

1. AI is here, it is not going away, and it cannot be ignored
2. Students are ahead of faculty in knowledge and use
3. Students and employers want it
4. Students will use it regardless of prohibition
5. Neither humans nor machines can reliably detect AI generated work
6. This will increase faculty workload (before it decreases it?)
7. Faculty feelings on Generative AI are still mixed



Recommended Next Steps

Now

1. Adopt a clear course syllabus policy
 1. Range of options now included in university's syllabus template
 2. Students want and need clarity
2. Adjust pedagogy to add new guardrails
 1. Students will use it regardless of prohibition, and not just for "cheating"

Thinking ahead

1. Think about AI policies not just course-to-course but programmatically
2. Do the research on how this will affect your disciplines and humanity
3. Explore not just how AI can be used for "cheating," but how it can enhance teaching and learning



Resources for Teaching and Learning

Status of Projects

Data Gathering

- Faculty Survey (Spring 2024): 181/899 Responses
 - Knowledge and use on par with faculty from other universities
 - Results: Need TRAINING and TOOLS
- Student Knowledge and Use Survey (October)

Task Force

- Individual department visits upon request
- One-stop-shop website

Center for Teaching and Learning

- Faculty Learning Community
- Bi-weekly Faculty “Playgrounds”
- Faculty and Student Open Forums (3)

Design Center

- Anthology (Blackboard)
- Training and Resources
- Short courses



Resources for Teaching and Learning

Upcoming Trainings

Design Center

- **Tech Tuesday: AI Ultra Tools** (11/28 [Virtual](#), 2-2:30PM)
- **Short Courses** (On Demand at <https://www.marshall.edu/microcredentials/>)

Center for Teaching and Learning

- **AI Playground: CTL Community of Practice** (10/25, 11/1, 11/11 in DL 349, 2-3PM)
- **Pedagogy Matters 1: AI and Academic Dishonesty: A Fun Beginner's Guide** (10/4 in DL 349, 1:30-2:30PM)
- **Pedagogy Matters 2: Become an AI Prompt Virtuoso** (10/22 in DL 349, 3:00-4:00 PM)
- **Pedagogy Matters 3: Outsmarting AI: Crafting Clever Course Assignments** (11/14 in DL 349, 2:30-3:30 PM)



Resources

Free short courses on the Marshall Skills Exchange

BASICS

1. Intro to Generative AI
 1. *available now*
2. Ethics of Generative AI
 1. *coming soon*
3. Prompt Engineering

• USES

1. AI for Teaching
2. AI for Researching
3. AI for Learning
4. AI for Efficiency

• TOOLS

1. Images
2. Video
3. Audio
4. Agents



Research Excellence and Impact

A lot is happening here: Faculty Research (sample)

Cecchetti, A. A. 2018. "Why Introduce Machine Learning to Rural Health Care?" Marshall Journal of Medicine.

Cox, B., Coustasse, A., Gupta, R., & Kimble, C. 2023. "AI Is Revolutionizing Oncology With a Quantum Leap in Cancer Treatment," Pharmacy Times.

Cox, B., Coustasse, A., & Kimble, C. 2023. "Artificial Intelligence Is Revolutionizing Controlled Substance Diversion Detection," Pharmacy Times.

Denvir, J. 2019. "Artificial Intelligence and the Challenge for Rural Medicine. Marshall Journal of Medicine.

Dillon, E. M., Carpenter, C., Cook, J., Wills, T. D., & Narman, H. S. 2022. "A Machine LearningBased Automatic Feedback System to Teach Cybersecurity Principles to K-12 and College Students," in 2022 IEEE Global Humanitarian Technology Conference.

Li, X., Akkerman, V., Li, L., Li, W., Liu, B., Romero, A., Fan, X., & Nguyen, H. (2023). "Data Driven Autonomous Experiments for Energy Sciences Principles of Machine Learning." [Grant]
Oudghiri, A. 2023. "Imagining AI: How the World Sees Intelligent Machines," Critical Humanities.

Postema, B., and Puspa, D. 2024. "Introduction Issue 2: Humanities in the time of ChatGPT and other forms of AI," Critical Humanities.

Sovine, S., & Han, H. 2013. "A Computationally Efficient System for High-Performance Multi-Document Summarization," in The Twenty-Sixth International Florida Artificial Intelligence Research Society Conference.

Tabassum, N., Neha, F. F., Hossain, M. S., & Narman, H. S. 2021. "A Hybrid Machine Learning based Phishing Website DetectionTechnique through Dimensionality Reduction," in 2021 IEEE International Black Sea Conference on Communications and Networking.

Zhao, D., Hart, C., Weese, N. A., Rankin, C. M., Kuzma, J., Day, J. B., & Salary, R. 2020. "Experimental and Computational Analysis of the Mechanical Properties of Biocompatible Bone Scaffolds, Fabricated Using Fused Deposition Modeling Additive Manufacturing Process," in ASME 15th Manufacturing Science and Engineering Conference.

August 26, 2024



Research Excellence and Impact

A lot is happening here: Student Research

Aljumaily, S. E. 2021. "An artificial intelligence-based evasion attacks detection for software-defined networks." [Thesis]

Eniodunmo, O. 2022. "A Predictive Model to Predict Cyberattack Using Self-Normalizing Neural Networks." [Thesis]

Shoemaker, E. 2023. "Leveraging Explainable Artificial Intelligence (XAI) to understand performance deviations in load tests of large software systems." [Thesis]

Xu, W. 2021. "Artificial Intelligence Aided Receiver Design for Wireless Communication Systems." [Thesis]



Research Excellence and Impact

AI-CRAFT: Artificial Intelligence Cybersecurity Readiness and Future Training, funded by DARPA

Overview:

- **PI:** Dr. Haroon Malik (CECS)
- **Partners:** MU, WVU, FIU (leader)
- **Grant Amount:** \$4.5 m (\$1.25 m to Marshall)

Tasks:

1. Development of Two Next-Generation Courses
2. Creating a Knowledge Dissemination Framework
3. Research on AI Robustness, Explainability, Efficiency, and Privacy to Ensure State-of-the-Art Curriculum

Impact and Support for Students:

- Funding for 4 MA students, 1 PhD student, and a 2nd-year summer camp
- **Developing infrastructure:** an AI-enabled server for testing research approaches
- Enhancing AI education at Marshall University
- Preparing students for high-assurance AI applications
- Contributing to advancements in AI security



AI Technology and Infrastructure

Status of Projects

Microsoft

- CoPilot.Microsoft.com chatbot
 - Large Language Model (LLM) in data tenet
 - Available for all campus exchange users
- M365 Copilot Pro for Apps (pilot)
 - Integrated Microsoft experience
- Copilot Studio for custom GPTs (pilot)

Adobe

- Creative Campus with Firefly AI
- Photoshop Express

Anthology

- Microsoft Skills Exchange
 - Microcredential platform
- Blackboard Ultra
 - Fall 2023: AI tools for teaching
 - Course Design Assistant: Course Shells, Rubrics, Grading
 - Fall 2024: Socratic tutors

OpenAI

- ChatGPT (pilot?)



AI Technology and Infrastructure

Status of Projects

Salesforce Einstein GPT

- Customer service manager chatbot
- August 2024: IT customer service
- 2024-25: Connecting other systems for student 360

Amazon Web Service (AWS)

- Many other AI services
- Custom GPTs
- 2024-25 Pilots: Finance, transfer credit, and more

Khan Academy's Khanmigo

- Pilot run by the Office of Student Success to improve
- Offers personalized learning and tutoring

Reviewing Other Needs and Uses

- Other technologies (e.g., Glean, Otter.ai, and Coconote)
- Considerations: Security, intellectual property, privacy, accessibility, "fundamental alterations" to course



Operational Efficiency and Compliance

Institutional Research Projects

2023-24 Internal IR Projects

- Data Validation Scripts: 25+ scripts to reduce data errors, ensuring data quality improvement & report reliability
- Query Optimization in SQL
 - Improved data retrieval efficiency
- Enhanced PowerBI Dashboards
 - Created complex dashboards with AI training, saving costs and time.

2024-25 Scaling

- Admissions application screening
- Financial aid processing
- Employee recruitment and hiring
- Regulatory compliance
- Accreditation reporting
- Resource allocation
- Communications



External Recognition

We are...being recognized

SREB Commission for AI in Education

- President Smith is Co-Chair

Chronicle of Higher Education

- Discussion of MU AI efforts in article "Colleges bootstrap their way to AI literacy" (May 2024)

Tambellini Future Campus Awards

- MU received an honorable mention in Operational Efficiency and Sustainability category (June 2024)



Adjournment

THANK YOU & GO HERD!

