



Academic and Student Affairs Committee Meeting

October 9, 2024 | 11 a.m.

Student Resource Center, Memorial Student Center



October 2024 Academic and Student Affairs Committee Meeting

AGENDA

11 a.m.

Academic and Student Affairs Committee

Kathy D'Antoni, Chair

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**Marshall University Board of Governors
Meeting of October 9, 2024**

ITEM: Approval of the Adoption of the Marshall University Shared Governance Charter

COMMITTEE: Academic and Student Affairs Committee

RECOMMENDED RESOLUTION: *Resolved*, that the Academic and Student Affairs Committee does hereby recommend that the Marshall University Board of Governors approve the Marshall University Shared Governance Charter.

STAFF MEMBER: H. Toney Stroud
Chief Legal Officer / Vice President for Strategic Initiatives and Corporate Relations

BACKGROUND:

The purpose of the charter is to codify the definition, guiding principles and structure of shared governance at Marshall University. The charter delineates the roles and responsibilities of each governing body at the university, and codifies the process by which these bodies will be reviewed. Neither this charter nor the actions taken by the bodies established under the charter may contravene public law or the authority of the Marshall University Board of Governors or the West Virginia Higher Education Policy Commission.

Shared governance is a systematized structure of transparent decision-making that reflects shared interests and shared responsibility of all constituency groups. Constituency groups—which include, but are not limited to, faculty, students, classified and non-classified staff, the Board of Governors, and administration—have assured, protected opportunities to influence decisions regarding the operation and direction of Marshall University and established organizational means by which they can carry these out. The role of constituency groups is not merely advisory; instead, decision-making is actively shared among relevant groups. Constituency groups thus contribute more than mere consultation before the implementation of a decision. Shared governance relies on an atmosphere of mutual understanding, respect and trust that can foster honest communication and consideration in decision-making. Shared governance promotes transparency, accountability, inclusivity, collaboration, collegiality and interdependence among constituency groups.

A copy of the proposed Marshall University Shared Governance Charter is attached.

Marshall University Shared Governance Charter

1. Introduction

1.1. Purpose of the Charter: The purpose of this Charter is to codify the definition, guiding principles, and structure of shared governance at Marshall University. The Charter delineates the roles and responsibilities of each governing body at the University, as well as codifying the process by which these bodies will be reviewed according to the shared governance guiding principles. Neither this Charter nor the actions taken by the bodies established under the Charter may contravene public law or the authority of the Board of Governors or the West Virginia Higher Education Policy Commission.

1.2. Definition of Shared Governance: Shared governance is a systematized structure of transparent decision-making that reflects shared interests and shared responsibility of all constituency groups. Constituency groups—which include, but are not limited to, faculty, students, classified and non-classified staff, the Board of Governors, and administration—have assured, protected opportunities to influence decisions regarding the operation and direction of Marshall University and established organizational means by which they can carry these out. The role of constituency groups is not merely advisory; instead, decision-making is actively shared among relevant groups. Constituency groups thus contribute more than mere consultation before the implementation of a decision. Shared governance relies on an atmosphere of mutual understanding, respect and trust that can foster honest communication and consideration in decision-making. Shared governance promotes transparency, accountability, inclusivity, collaboration, collegiality, and interdependence among constituency groups.

1.3. Importance of Shared Governance in Academic Institutions and at Marshall: The [AAUP Statement on Government of Colleges and Universities](#) states that “The variety and complexity of the tasks performed by institutions of higher education produce an inescapable interdependence among governing board, administration, faculty, students, and others. The relationship calls for adequate communication among these components, and full opportunity for appropriate joint planning and effort.” A shared governance approach is thus recommended as the best model for university governance. Shared governance places the [mission](#) and well-being of the institution above individual interests and fosters a unified direction for university development. For Marshall University, this approach is required by WV State Code 18B-2A-4(j), which states that the governing boards of all state universities should “Involve faculty, students, and classified employees in institution-level planning and decision making when those groups are affected.”

1.4. Definitions:

1.4.a. *Constituency groups*: A constituency group is an individual or group that has a vested interest in the mission and well-being of Marshall University. Constituency groups include but are not limited to:

Students: Any persons taking courses at or from Marshall University, both full-time and part-time, pursuing undergraduate, graduate or professional studies and who reside in University residence halls or utilize University facilities or services for the purpose of pursuing studies.

Faculty: All full-time or part-time employees who have current faculty appointments, including library track faculty, clinical faculty, associate deans, assistant deans, directors, associate directors, assistant directors, chairs, temporary faculty, and term faculty.

Classified Staff - Any regular full-time or part-time employee of Marshall University who holds a position that is assigned a particular job title and pay grade in accordance with the personnel classification system established by state code or by the Higher Education Policy Commission.

Non-Classified Staff - Any regular full-time or part-time employee of Marshall University who holds a position that is not assigned a particular job title and pay grade in accordance with the personnel classification system established by state code or by the Higher Education Policy Commission.

Administration – University employees whose role and responsibility are to manage and oversee institutional operations, led by the President and including cabinet members, divisional leaders (vice presidents and chief officers), associate and assistant vice presidents, deans, directors, etc.

Additional constituency groups who could possibly be called to give input on certain decisions include community members and alumni.

1.4.b. *Governing body:* a governing body refers to a standing unit on campus that has decision-making powers regarding rules, policies, and/or procedures. These include Faculty Senate, Classified Staff Council, Non-Classified Staff Council, the Student Government Association, the Graduate Council, the President’s Office, and the Board of Governors (BOG).

1.5. Shared Governance Ad Hoc Committee: This committee was established in April 2022 to assess shared governance at Marshall and provide recommendations for its improvement. Its membership consists of appointed representatives from the faculty of each college/school, undergraduate and graduate students, non-classified and classified- staff, athletics, Academic Affairs, the administration, libraries, the governing bodies, and the Dean’s Council and Council of Chairs. The goals of the committee are to research and provide recommendations for university shared governance best practices, assess shared governance structures and practices at Marshall, and provide recommendations for improving shared governance at the university. When and if it becomes feasible and appropriate, this committee shall be transformed from an ad hoc committee to a standing committee of one or more of the governing bodies and codified in their constitution(s).

1.5.a. By the end of each spring semester, the Ad Hoc Committee shall establish an annual work plan that outlines its goals and priorities. Also, at the end of each spring semester, the Ad Hoc Committee will conduct an internal review of its work plan from the prior year, assessing its work product and the degree to which its goals are being achieved.

1.5.b. Membership terms and requirements for the Ad Hoc Committee shall be codified in a separate document and are subject to change by a majority vote of the committee. The committee operates on a 9-month work schedule unless there are needs that have to be addressed during the summer months, in which case special task forces will be created.

2. Principles of Shared Governance

2.1. Transparency and Communication: We strive for a system of governance that encourages and relies on open communication among stakeholders and governing bodies. Information must sometimes remain confidential during decision-making processes, but this principle assumes that each governing body makes a genuine attempt to communicate as much as possible about ongoing decision-making processes to stakeholders. Meaningful and productive lines of communication should be established for stakeholders to provide input on relevant decisions. The shared governance website will, as much as is possible, maintain an up-to-date record of decision-making processes and outcomes and/or links to the pages of the governing bodies where this information is kept.

2.2. Accountability: It should be clearly communicated to constituency groups which persons/bodies hold ultimate authority for which decisions. An appeal process for decisions made by each governing body should be established.

2.3. Shared Decision-Making: Each decision should be made with meaningful and adequate input from relevant constituency groups. This input should be provided during the process of decision-making, not simply after a decision has been made.

2.4. Inclusion and Respect for Diverse Perspectives: All governing bodies should strive for participation from a diverse, equitable, representative, and balanced sector of each group they represent. No single classification of constituents (e.g., women, non-tenured faculty, minorities) should shoulder the brunt of shared governance work.

2.5. Clarity of Roles and Responsibilities: The roles and responsibilities for each governing body should be clearly defined and communicated. Each governing body shall onboard new members by communicating these roles and responsibilities.

2.6. Freedom of speech: All constituents of Marshall University, including students, tenure-track and non-tenure track faculty, classified and non-classified staff, and members of the administration and governance of the university, have a right to provide open and honest input on decisions that affect them and the university mission without retribution. This Charter asserts that all constituents have the right and responsibility to contribute to Marshall University's mission and well-being.

3. Plan of Organization for Shared Governance

3.1 Governing Bodies: There shall be seven representative bodies, consisting of the Board of Governors, Student Government Association, the Faculty Senate, the Graduate Council, the

Classified Staff Council, the Non-Classified Staff Council, and the Administration (including the President and their cabinet). Each of these bodies has the following responsibilities:

3.1.a. To advise and make recommendations to the other governing bodies on issues on behalf of their constituent groups.

3.1.b. To establish and maintain its own constitution/bylaws, provided they are not in conflict with provisions of this Charter of Shared Governance nor state law or Board of Governors Rules. Each body shall operate in accordance with an agreed-upon set of Rules of Order and elect officers in accordance with, and for terms established by, its own constitution and bylaws.

3.1.c. To respond to initiatives brought forward by its constituents and by the University Advisory Council (defined in Section 4).

3.1.d. Each governing body will organize and maintain its own committees and will provide yearly reports of the committees' goals and work product.

3.2. Governing Bodies' Roles and Responsibilities. The following is a general outline of the roles and responsibilities of each of the governing bodies. More specific descriptions of the roles and responsibilities of each can be found in their respective constitutions and governing rules.

3.2.a. *Student Government Association:* The Student Government Association shall be composed of representatives elected from the various student bodies at Marshall by a plan and process established by its own constitution/bylaws. The Student Government Association shall have authority to recommend policies specifically regarding the following matters:

1. Student-related policies, procedures and issues that affect the overall wellbeing of students and their ability to complete their education.
2. The establishment of budget for funds allocated to it, the selection of appropriate representatives for university committees and workgroups, and the establishment and governance of clubs and other organizations of students entitled to the use of Marshall University facilities.

3.2.b. *Faculty Senate:* The Faculty Senate shall be composed of representatives elected from its constituent group by a plan and process established by its own constitution/bylaws. The Faculty Senate shall have authority to formulate and recommend policies, specifically regarding the following matters:

1. All academic policy matters and affairs which primarily affect the faculty, including curriculum, admission standards, student retention, scholarships and honors, degree programs, instructional standards and faculty welfare.

2. Major issues that affect the institution, including change to the mission, addition or deletion of programs, contracts with government agencies, and public questions that affect the role of the institution or endanger the principle of academic freedom.

3.2.c. *Graduate Council*: The Graduate Council shall be composed of representatives elected from its constituent group by a plan and process established by its own constitution/bylaws. The Graduate Council shall have the authority to formulate and recommend policies specifically regarding the following matters:

1. Issues related to the graduate education mission of the university, including long-range planning for graduate education, the recommendation of new programs and courses, the evaluation of existing programs and courses, the facilitation of graduate accreditation, the recommendation of promotion and tenure policies related to graduate education, and the recommendation of approval of graduate faculty.
2. Major issues that affect the institution, including change to the mission, addition or deletion of programs, contracts with government agencies, and public questions that affect the role of the institution or endanger the principle of academic freedom.

3.2.d. *Classified Staff Council*: The Classified Staff Council shall be composed of representatives elected from its constituent group by a plan and process established by its own constitution/bylaws. The Classified Staff Council shall have authority to formulate and recommend policies, subject to the advice of the other governance bodies, specifically with regard to the following matters:

1. Human resource policies and procedures that may directly affect the classified employees.
2. Non-academic policies and procedures that support student learning, experience and responsibility both within and outside of the classroom environment.
3. Selection and appointment of administrators, budget and planning matters for the University, the organizational structure of the University, and other issues that affect the overall welfare of the University.
4. Methods and means by which employment conditions may be improved and operating efficiency of the University increased.

3.2.e. *Non-Classified Staff Council*: The Non-Classified Employees Staff Council shall be composed of representatives elected from its constituent group by a plan and process established by its own constitution/bylaws. The Non-Classified Staff Council shall have authority to formulate and recommend policies, subject to the advice of the other governance bodies, specifically with regard to the following matters:

1. Human resource policies and procedures that may directly affect the non-classified staff members.
2. Non-academic policies and procedures that support student learning, experience and responsibility both within and outside of the classroom environment.
3. Selection and appointment of administrators, budget and planning matters for the University, the organizational structure of the University, and other issues that affect the overall welfare of the University.
4. Methods and means by which employment conditions may be improved and operating efficiency of the University increased.

3.2.f. *Administration*: The Cabinet members and other administrative leaders shall have authority to formulate and recommend university policies and administrative procedures according to the process set forth in University Procedure ADMIN-20.

3.2.g. *Board of Governors*: Marshall University's state-appointed governing board (the positions of faculty, staff, and student representatives are elected), which holds ultimate fiduciary responsibility for the university and oversees the university's operations and establishes rules.

4. *The University Advisory Council*

4.1. The purpose of the University Advisory Council is to coordinate the activities and serve as a conduit of information among the governing bodies. It does not serve as a governing body in and of itself. It provides counsel to the University President on establishment of strategic priorities for the University.

4.1.a. The University Advisory Council shall consist of the president of the Student Government Association; the chairs of the Faculty Senate, Graduate Council, Classified Staff Council and Non-Classified Staff Council; and the University President or their designee.

4.1.b. Regular meetings of the University Advisory Council shall be held twice annually, in July and January. Special meetings may be called by any member on an as-needed basis.

4.1.c. Members of the University Advisory Council shall meet with the Cabinet twice annually, in August to kick off the new academic year and in April to review the Administration's proposed budget for the next fiscal year.

4.2. The University Advisory Council shall have the following functions:

4.2.a. In conjunction with the Administration, identify and develop strategic initiatives for the University and the shared governance bodies. These initiatives will be reviewed and ratified by each of the governing bodies and do not preclude any group from modifying and/or developing additional initiatives throughout the course of the year.

4.2.b. Refer matters to appropriate University committees or governing bodies, receive reports of ad hoc committees responsible to it, and inform each governing body promptly of the actions of the other governing bodies.

4.2.c. Appoint ad hoc governance committees on matters of interest to more than one governing body or to resolve differences among the governing bodies.

4.2.d. Call special meetings of the Council to address timely matters or those that need special attention outside of the regular meeting schedule of the Council.

4.2.e. Represent the interests of the governing bodies, when appropriate, to the Board of Governors.

4.2.f. Make proposals to the governing bodies to improve the functioning of this Charter or other matters as required.

5. *Decision-Making Processes*: See Appendix 1 for a matrix outlining the purview of each constituent group in different types of decision-making processes.

5.1. Creation and amendment of rules, policies, and procedures. The process for posting, creating, reviewing, and approving BOG Rules, University Policies, and Administrative Procedures is codified in University Administrative Procedure ADMIN-20. ADMIN-20 establishes the shared governance process through which rules, policies, and procedures are created. These include BOG Rules on academic affairs, financial affairs, general administration, and student affairs; University policies for academic affairs, financial affairs, general administration, and human resources; and University Administrative Procedures for academic affairs, financial affairs, financial aid, general administration, human resources, information technology, and student affairs. All rules, policies, and procedures are vetted by the governing bodies and then undergo a period of public comment before approval.

5.2. Budget decision-making structure: Budget and resource allocation decisions are made under a shared governance management structure (diagrammed in Appendix 2). Committee structure is designed to promote broad constituent involvement and information sharing. Continuous feedback and data sharing is encouraged from subject matter experts and committee members.

5.2.a. The Budget Advisory Committee (BAC) receives all budget proposals directly from unit-level leadership, considers requests, and makes recommendations to the units. Membership on this committee includes the CFO; Provost; Budget Director; Finance Director; Asst. Provost, Institutional Efficiency and Academic Analytics; Business Operations Manager; two Cabinet members (other than CFO); three academic deans; Faculty Senate President; Classified Staff Council President; Non-classified Staff Council President; and an Athletics representative.

5.2.b. The BAC then provides a consolidated, recommended budget to the Executive Budget Committee (EBC) for approval. Membership on the EBC includes the President, Provost, CFO, Chief of Staff, Budget Director, and Institutional Research representative. This budget is then

presented to the Board of Governors for approval. The annual university and athletics budgets are ultimately approved by the Board of Governors once a year.

5.2.c. The Budget and Academic Policy Committee, University Curriculum Committee, and Graduate Council provide feedback to the BAC. The Model Operations and Review Committee, Tuition Planning and Financial Aid Working Group, Space Committee, and Academic Planning Committee provide feedback both the BAC and EBC.

5.2.d. *Financial Transparency*: The annual university budget and core operating budget can be found here: <https://www.marshall.edu/finance/>. The proposed budget is posted publicly before it is voted on by the Board of Governors.

5.3. Information Technology Decision-Making: Decisions regarding information technology will be made by the Chief Information Officer in conjunction with the Technology Executive Committee, the Faculty Technology Committee, and the Administrative Technology Committee. The detailed decision-making structure for information technology can be found in Administrative Procedure ITP-1, the Technology Governance and Procurement Review.

5.4. Strategic Planning: The current master plan for Marshall University was developed through a listening tour initiated by the president with additional input from all constituency groups as the plan was developed. The plan can be found here (2023): <https://www.marshall.edu/strategicplan/>. Future master plans shall be created through the same process of engagement with constituent groups. In addition, A 10-year campus development plan is required by WV State Code and is approved by the Board of Governors. The current campus development plan can be found here: <https://www.marshall.edu/masterplan/2023-master-plan/>. The development plan should also be created with input from each constituent group.

5.5. Final responsibility and dispute management

5.5.a. While participation in shared governance by the Administration, Students, Faculty, and Staff is necessary and important for the well-being and advancement of Marshall University, the final responsibility for decision making rests with the university President, Board of Governors, or West Virginia Higher Education Policy Commission, who are ultimately held accountable by the public and its elected leaders.

5.5.b. Shared governance disputes arising between/among the governing bodies shall ultimately be resolved by the President, after conference with representatives of the appropriate governing bodies.

6. *Reporting, Review, and Accountability*

6.1. Annual Reports on Shared Governance: The Shared Governance Ad Hoc Committee shall submit a yearly report to each governing body and to the president that outlines shared governance developments and updates, including an assessment of the status of shared governance at Marshall.

6.2. Shared Governance Review: A Shared Governance Review Committee shall be established to oversee review of each governing body at Marshall to ensure they are abiding by the shared governance principles outlined in this Charter.

6.2.a. The Shared Governance Review Committee shall have the following functions (full list of duties can be found in the Review Committee's bylaws):

1. Conduct a review of each of the governing bodies at Marshall according to criteria established by the committee to assess their adherence to shared governance principles. Each governing body will be reviewed at least once every four years on a rotating basis and will receive a report of the Review Committee's findings.
2. Conduct a survey every four years to assess campus community satisfaction with the shared governance process and present results and any recommendations for improvements to the Ad Hoc Committee.

6.2.b. The membership of the Shared Governance Review Committee shall consist of:

1. A designee elected by the Student Government Association
2. A designee elected by the Faculty Senate
3. A designee elected by the Graduate Council
4. A designee elected by the Classified Staff Council
5. A designee elected by the Non-Classified Staff Council
6. A designee elected by the Board of Governors
7. A designee from Academic Affairs appointed by the Provost
8. A member of the Cabinet appointed by the President
9. The Chair of the Shared Governance Ad Hoc Committee (ex officio, non-voting)

Additional details about membership, terms, and duties of this committee can be found in the committee bylaws.

7. Amendment procedure for this Charter

7.1. Amendments to this Charter may be presented by a governing body or the University Advisory Council by the following procedure:

7.1.a. The initiator of the amendment shall promptly transmit the text of proposed amendments to the chairs/directors of each governing body. Each governing body has three working months to act or forfeit its right to decide on the issue.

7.1.b. Each governing body shall distribute the text of the proposed amendment in writing to its members at least ten (10) working days before the meeting at which it is to be voted on.

7.1.c. Amendments to portions of this Charter affecting three or more governing bodies require a two-thirds vote in each of the governing bodies that exercise their right to decide within the timeframe set forth.

7.1.d. Each governing body may amend the portions of this Charter relevant only to its own structure by a two-thirds vote of that body.

7.1.e. Upon ratification, the amendment(s) shall be forwarded to all parties for final approval and signature.

8. *Approvals*

This Charter has been approved by the University's Governing Bodies:

_____	_____
Student Government Association President	Date
_____	_____
Faculty Senate Chair	Date
_____	_____
Graduate Council Chair	Date
_____	_____
Classified Staff Council Chair	Date
_____	_____
Non-Classified Staff Council Chair	Date
_____	_____
Board of Governors Representative	Date

Approved by the President:

President

Date

Appendix 1: Shared Governance Matrix

DECISION TYPE	CONSTITUENCY GROUP							
	Faculty	Classified Staff	Non-classified staff	Students	Administration	Cabinet	President	Board of Governors
Strategic plan	I	I	I	I	I	DD	DD	AD
Hiring president	I	I	I	I	I	I		DD/AD
Hiring administrators*	I	I	I	I	AD	AD	AD	
Campus master plan	I	I	I	I	DD	DD	AD	AD
Capital projects					DD	DD	AD	AD
University budget	I	I	I	I	I	DD	DD	AD
Salaries/benefits	I	I	I	I	DD	DD	AD	AD
Curriculum changes	DD/AD				DD/AD		AD	AD
Program creation/discontinuance	DD/AD							AD
Information technology	I	I	I	I	I	AD	AD	
College/department budget allocations	DD				AD	AD	AD	
Promotion/tenure	DD				DD	AD	AD	
Creation/amendment of BOG rules	I	I	I	I	I	I	DD	AD
Creation/amendment of university policies	I	I	I	I	I	I	DD/AD	
Creation/amendment of administrative procedures	I	I	I	I	DD/AD	DD/AD		

Key: I (provides input), DD (drafts decision), AD (approves decision)

*Who approves the decision depends on the type of position being filled.

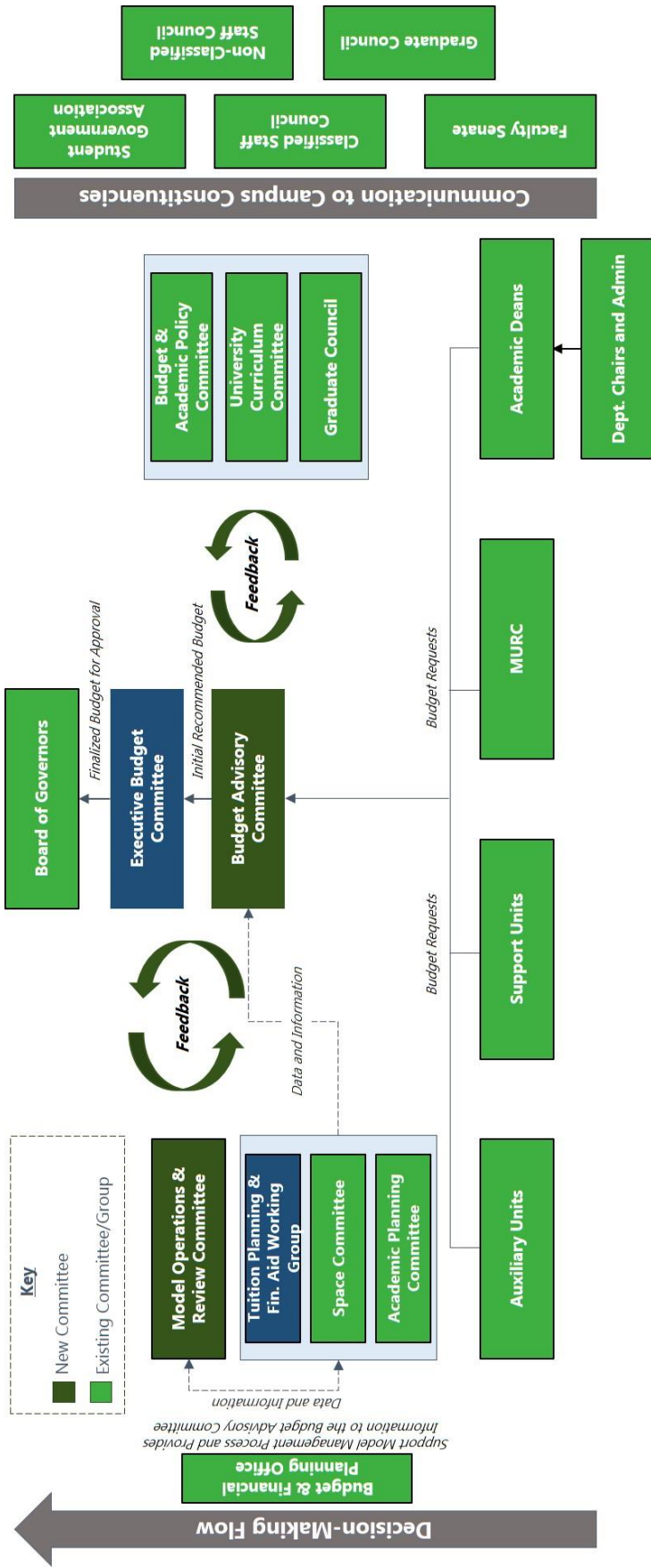
Appendix 2

Budget Decision-Making Model



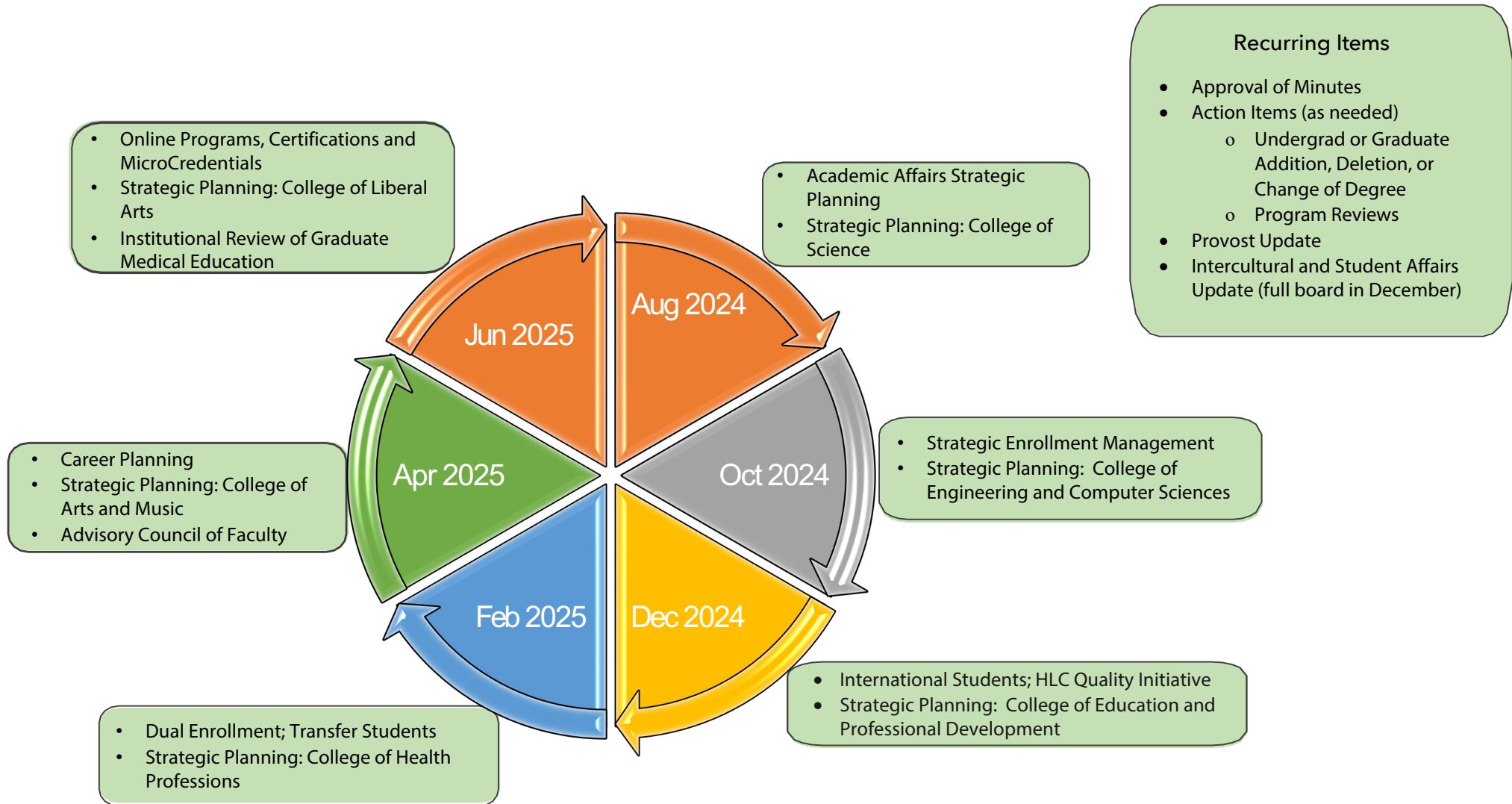
Marshall Budget Model Management Structure

The structure below reflects Marshall's budget model governance structure and feedback loops to support University-wide input and feedback.



Annual Activity Calendar

Academic and Student Affairs Committee





Strategic Enrollment Management

Where We Have Been & Where We Are Going

Jerry Ross

Vice President for Enrollment Management



Fall 2024 Successes

ENROLLMENT GROWTH

- **2nd consecutive year of growth**
- **Largest Freshmen class since ~2016**
- **Increases across each academic college and most every student segment**

NEW CRM

- **Conversion to Salesforce ecosystem**
- **With that increased collaboration with key campus partners**
- **Opportunities for enhanced processes**

EXPERIENCE

- **Revamped campus experience**
- **Direct Admissions**
- **Streamlined application**



Fall 2025 Planning

CRM OPTIMIZATION

- **Data Informed Territory Management**
- **Auto admitting within system**
- **Enhanced and automated communications**

FOCUS AREAS

- **Ten student segments**
- **Metro and expanding footprint**
- **Expanding direct admissions**
- **Scholarship leveraging**

END USER EXPERIENCE

- **High School Counselors**
- **One application**
- **Collaboration across campus and beyond to enhance experience**



Ongoing Challenges and Opportunities

- 1. Demographics**
- 2. Competition**
- 3. Enrollment Forecasting**
- 4. Student Success and Support**
- 5. Melt reduction and yielding from admit pool**



QUESTIONS?

Thank You!



Strategic Planning:
College of Engineering and Computer Sciences

Dr. Dave Dampier, Dean

College of Engineering and Computer Sciences

Executive **SUMMARY**

- The College of Engineering and Computer Sciences is thriving!
 - Funded research has grown by an order of magnitude since 2020.
 - We have 38 faculty who are engaged, enthusiastic, and motivated to achieve results in teaching, research, and service.
 - We have eight undergraduate programs across four departments.
 - We have nine M.S. programs across three departments (**3 ranked top 3 by Fortune**).
 - We have a **new Ph.D.** program that started this semester with five students.

Positive Trends in the College of Engineering and Computer Sciences

- Enrollment is up nearly 50% since 2020.
- Research: CECS has
 - ... **29 active research projects** worth approximately **\$21,000,000**.
 - ... **\$8,700,000** in new awards in FY 24.
 - ... **first NSF CAREER Grant in the college**.
 - ... **~\$5.2 M** in research expenditures each year for the last two years.
 - ... averaged \$136,000 in research expenditures across all faculty. For funded faculty, the average is \$198,000.
 - ... averaged approximately 3 published articles per faculty member annually.

College of Engineering and Computer Sciences

University
Vision



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

College
Mission



To be recognized as a leader in practice-oriented education and research.

Values

Serve lifelong learning needs

Student-focused

Cutting edge research

Service-oriented

Education when and where needed

Technology-based education

Objectives or Goals

Be financially stable and self-reliant

Support as many students as possible: BS, MS, PhD

Maintain experienced and qualified faculty to support engineering education

Grow research to support faculty in their professional needs while maintaining undergraduate education

Priorities, Programs, or Initiatives

Ensure financial stability of the college

Achieve and maintain 100% ABET Accreditation

Grow enrollment by 10% per year

Grow faculty talent to meet educational demands

Grow research expenditures to \$150K per faculty

Metrics

Revenues
Expenses
Indirect Cost Recovery

Assessment Metrics
Faculty Support
Program Alignment

Enrollment
Retention
Scholarships

Number of faculty
Prof. Dev. Opportunities
Recognitions

Research Expenditures
Proposals Submitted
Awards Received

CECS Programs

Biomedical Engineering

B.S. in Biomedical Engineering

Computer Sciences & Electrical Engineering

B.S. in Computer Sciences
B.S. in Electrical & Computer Engineering
M.S. in Computer Science (#1 Online by Fortune)
M.S. in Cyber Security (#1 Online by Fortune)
M.S. in Data Science (#3 Online by Fortune)
M.S. in Electrical & Computer Engineering

College Wide Programs

B.S.E. in General Engineering
PhD in Engineering
- Biomedical, Civil, Computer Science,
Electrical & Computer, Mechanical

Civil Engineering

B.S. in Civil Engineering
M.S.E.: Civil and Environmental Engineering
M.S.E. in Engineering Management

Mechanical and Industrial Engineering

B.S.E. in Industrial Engineering
B.S. in Mechanical Engineering
B.S. in Occupational Safety & Health
M.S. in Mechanical Engineering
M.S. in Mine Safety (3rd Party Contract)
M.S. in Environmental Health & Safety

CECS Area of Distinction: Research

- Marshall University is no longer a regional teaching institution.
- We Are ... a National Research University.
 - We Are ... a Carnegie Doctoral Granting University – High Research Activity – R2
 - Marshall’s current focus is on increasing and strengthening our research activity to solidify our position as an R2 research institution.
- CECS is committed to doing our part in this endeavor.
 - CECS has increased our research expenditures by an order of magnitude since 2020.

FY 20	FY 21	FY 22	FY 23	FY 24
\$ 501,511.61	\$ 1,651,576.07	\$ 1,980,223.59	\$ 5,191,389.17	\$ 5,172,726.63

- CECS has over \$21 Million in active research contracts currently.
- One of our faculty just got awarded the National Science Foundation CAREER Grant in 2024. This is a first in CECS and only the second at Marshall.

CECS Area of Distinction: Research (continued)

- Faculty Research
 - CECS has 26 of 34 research faculty involved in funded research (76%).
 - Faculty are publishing an average of 3 peer-reviewed publications each annually.
- The Ph.D. in Engineering program provides a significant opportunity to grow the research enterprise.
 - Not only has the Ph.D. program been successfully started without additional cost to Marshall ...
 - The addition of Ph.D. students to our research programs will enable additional research activity.
 - More grants because funding agencies are more interested in funding projects with doctoral student participants.
 - Ph.D. students will significantly enhance our ability to publish in well respected venues.
 - The Ph.D. program is intended to support additional library holdings as the program grows.
- CECS now has five Ph.D. students, four fully funded on research grants, and are likely to have 2 more in January.
 - Principal Investigators pay approximately \$250,000 of research funds per student over 4 years, including stipends, tuition and fees.
 - CECS expects to admit three to five additional students each year into the program.
 - CECS hopes to grow to 25 or more students by year 5, when we expect to graduate our first cohort.

CECS Grant Awards

Major Grants Awarded since August 2023

Alzarrad, A., McIntosh, J., Chowdhury, S., Perry, T., & Shen, R. (2023). Heat-related Injury Prevention Training for Disadvantaged Construction Workers (Grant Proposal). Department of Labor - Occupational Safety and Health Administration. **\$160,000.**

Alzarrad, A., H. Malik, H. Narman, P. Zhu, S. Chowdhury, G. Michaelson, A. Chattopadhyay, “Automatic Assessment and Repair for Military Railroads,” **\$2,050,000**, U.S. Army Engineering Research and Development Center.

Chowdhury, S. and A. Alzarrad, “REU Site: Safety Analysis and Design Nexus: Bridging Theory and Practice,” *National Science Foundation*, **\$352,310.**

Dampier, D. and J. Sammons, Establishment of a Critical Infrastructure Cyber Security Center at Marshall University, U.S. Cyber Command through Civil Military Innovation Institute (CMI2), **\$250,000.**

Dampier, D. and J. Sammons, “Soldier Cyber Skills Training Project Validation at the Center of Excellence in Cybersecurity for Critical Infrastructure,” Civil Military Innovation Institute (CMI2), **\$2,516,993.**

CECS Grant Awards

Major Grants Awarded since August 2023 (continued)

Malik, H. P. Zhu, and W. Yoo, “AI-CRAFT: Artificial Intelligence Cybersecurity Readiness and Future Training,” Department of Defense Advanced Research Projects Agency (DARPA), **\$1,250,000**, 4/22/2024 to 4/21/2026.

Malik, H., “A Wrapper Based Methodology to Intercept Black Box Models,” **\$113,320**, Federal Bureau of Investigation.

Michaelson, G., A. Chattopadhyay, M. Esmailpour, P. Zhu, “Detection of Subterranean Threat Activity,” **\$2,998,647**, U.S. Army Engineering Research and Development Center.

Nosoudi, N., “CAREER: , “Exploring the Differentiation of Mesenchymal Stem Cell to Chondrocytes After Electrospraying,” National Science Foundation, **\$ 604,047**.

Salary, R., “Investigation of Two-Phase Aerosol Formation, Transport, and Deposition in Aerosol Jet Printing for Submicron Manufacturing of Printed Electronic Devices,” **\$353,493**, National Science Foundation.

Sardahi, Y., “Optimized Single-Operator Lift System for MTRS Loading and Unloading in and out of the M-ATV,” **\$500,000**, CMI2.

CECS Grant Awards

Major Grants Awarded since August 2023 (continued)

Shen, R. and S Youn, “EPA Phase I: Climate Pollution Reduction Grant,”, **\$450,000**, Environmental Protection Agency.

Shen, R., McIntosh, J., Chowdhury, S., Perry, T. and Alzarrad, A., “Occupational Hazard Recognition and Mitigation of Exposures to Respirable Dust and Crystalline Silica in Mining Operations”, Department of Labor, **\$100,000**.

Shim, S., “Relative G-force regulating GLP-1 receptor in human stem cells”, NASA WV EPSCOR Seed Grant, **\$18,000**.

Shim, S., “Mutable Effects of Radiation on Mouse and Chimpanzee Genome,” NASA, **\$5,000**.

Shim, S., “Mutated Clonal Hematopoiesis-Driver Genes in Astronauts after Space Missions, “ NASA, **\$10,000**.

Zhu, P., “Study of Wasserstein Metric in Obstacle-Deployed Environments and Its Application to Multi-Scale Robotic Spatial Exploration Systems,” NASA WV EPSCOR Seed Grant, **\$22,138**.

Total: \$8,755,301

Research Opportunities

- Research infrastructure at Marshall is still growing...
 - CECS is investing college research funds in additional staff to help track and manage grants.
 - It is possible that our college will need additional staff as the research load grows...
- It is unknown exactly how the new budget model will affect use of research funds.
 - Currently, units receive 38.5% of indirect cost recovery (ICR) funds generated in the college.
 - That is distributed to the department and faculty to be used strategically.
 - Under the proposed IBM, 100% of ICR funds would be distributed to the college, but would be subject to help pay the costs of the university.
 - Currently, colleges carry forward any ICR funds that are generated to use for strategic investment.
 - If all ICR funds are used by the university at the end of the fiscal year, there is no budget for strategic investment at the college level, and it will be more difficult to grow capabilities.
- Facilities are somewhat limited.
 - CECS is currently using all of available space for laboratories. We have even had to capture some offices and storage areas for labs, and are considering converting some classrooms.
 - Research active faculty and doctoral students need lab spaces.

Research Opportunities

- CECS faculty are at capacity. Many have research responsibilities beyond their normal capacity.
 - We have managed to be able to give all research active faculty 3 hours of teaching release each semester, but some are still overloaded.
 - They can pay themselves overloads from their grants for the extra work they are doing, but it leaves little time for other worthwhile activities, i.e., developing microcredentials, moving classes online, etc.
 - We are hiring more teaching-only faculty in the last couple of years, but it has to be done by attrition, as faculty leave.
 - We need more faculty, but there is a reluctance to allow us to hire additional faculty without the state funds to underpin their salary.
 - I understand this reluctance because of the history of Marshall as a teaching school, but research universities, like WVU, UTSA, and MSU routinely pay as much as 15-20% of tenure track salaries with soft money.
 - One faculty member in CECS costs approximately \$100K fully loaded. We could easily afford 2-3 additional faculty with the extra funds we are generating.

College of Engineering and Computer Sciences

Executive **SUMMARY**

- The College of Engineering and Computer Sciences is thriving!
 - Funded research has grown by an order of magnitude since 2020.
 - We have 38 faculty who are engaged, enthusiastic, and motivated to achieve results in teaching, research, and service.
 - We have eight undergraduate programs across four departments.
 - We have nine M.S. programs across three departments (**3 ranked top 3 by Fortune**).
 - We have a **new Ph.D.** program that started this semester with five students.

Positive Trends in the College of Engineering and Computer Sciences

- Enrollment is up nearly 50% since 2020.
- Research: CECS has
 - ... **29 active research projects** worth approximately **\$21,000,000**.
 - ... **\$8,700,000** in new awards in FY 24.
 - ... **first NSF CAREER Grant in the college**.
 - ... **~\$5.2 M** in research expenditures each year for the last two years.
 - ... averaged \$136,000 in research expenditures across all faculty. For funded faculty, the average is \$198,000.
 - ... averaged approximately 3 published articles per faculty member annually.