Executive Summary

Responding to both pressures that confront nonprofit institutions of higher education nationwide and those unique challenges that confront us on the local and institutional level, the Herff College of Engineering has created a new ten-year strategic plan that departs from past strategies. Some of the highest priority factors fueling the urgency of the plan include the need to boost the low number of engineering graduates in West Tennessee (2/3 below the national average), the need to drive state funding given the new performance-based metrics, the need to adopt the University’s Responsibility Center Management policies and the need to contribute to the University’s ambitious research goals.

The plan was developed in a rigorous process that included multiple teams of vested stakeholders (including administration, faculty, FedEx facilitators and key staff members) and the process required agreement upon the parameters that could best
be used to quantify the current status and to set quantifiable targets to assess future success. The resulting gap analysis became the foundation of the plan:

| Current Status and Recommended Goals for the Herff College of Engineering |
|-------------------------------------------------|-----------------|-----------------|
| Number of B.S. Degrees Awarded                  | 2012-2013       | 2022-2023       |
|                                                 | 117             | 235             |
| Number of M.S. Degrees Awarded                  | 41              | 80              |
| Number of Ph.D. Degrees Awarded                 | 10              | 25              |
| Research Expenditures                            | $6.3M           | $25M            |
| Private Funding/Year                             | $385K           | $1.5M           |
| U.S. News Ranking                                | Not Ranked      | Ranked          |
| Student/Faculty Ratio                            | Approx. 20:1    | Approx. 20:1    |

Most importantly, the group developed six strategic objectives, and workstream teams were then tasked with developing initiatives to achieve each of the strategic objectives. Their work included establishing short-range goals (2-year horizon), medium-range goals (5-year horizon), and timelines for implementing their initiatives.

**Objective 1: B.S. Student Growth**

The overall goal is to double the number of B.S. degrees awarded per year to 235 by FY23.

B.S. Student Growth has two distinct threads which resulted in the formation of two workstream teams: one that emphasizes increasing the number and quality of B.S. students and another one that emphasizes student retention and success. These teams developed objectives and strategies for:

- expanding the pool and increasing the quality of candidates
- eliminating the drivers of attrition
- building community of students, loyalty, experience
- building and developing opportunities for students
- increasing undergraduate research and student employment opportunities

**Objective 2: Graduate Student Growth**

The overall goal is to double M.S. degrees to 80 per year and increase Ph.D. degrees 150% to 25 per year by FY23.

Success in meeting this objective is highly dependent on growth in research, since this provides much of the funding to support graduate students. Workstream teams developed objectives and strategies for:

- expanding the pool and increasing the quality of candidates
- expediting degree completion

**Objective 3: Research Growth**

The overall goal is to quadruple annual research expenditures to $25M by FY23.

Workstream teams developed objectives and strategies for:

- increasing the level of funding per faculty member
- developing new collaborations within the College
- developing new collaborations with other institutions
- developing sustainable models for research centers
Objective 4: Improved Talent Management
The overall goal of this objective is to maintain the current student to faculty ratio. Workstream teams, in addition to focusing on the private funding necessary to fund this ratio, also developed objectives and strategies for:
- attracting high-quality faculty members
- increasing the number of endowed chairs and professorships
- growing the size and expertise of the staff

Objective 5: Increased Private Funding
The goal is to increase new private funding from an average of $385K per year to $1.5M per year by FY23. The College is currently engaged in a $5M campaign over a two-year period in recognition of the College’s 50th anniversary. Initiatives will be needed to ensure that private funding does not decline precipitously after the end of the campaign but that it is able to be maintained at the target level. Workstream teams developed strategies and objectives for:
- maintaining campaign funding levels
- expanding capacity

Objective 6: Increased Visibility and Reputation
The goal is for the College to be ranked by the U.S. News and World Report by FY23. Because ranking is viewed as important by many parties such as prospective students, prospective faculty members, corporate recruiters, donors and funding agency personnel, it is imperative that the College achieves this ranking. Initiatives determined by workstream teams include:
- increasing and improving brand exposure
- building awareness on U.S. News and World Report judging criteria

Conclusion
As the Herff College of Engineering is celebrating its 50th anniversary, the College faces challenges (internally, institutionally and environmentally) that it has never faced before. Increasing the size and quality of the undergraduate student body is foundational in meeting those challenges. It is this growth in enrollment that will lead to a growth in faculty size and, ultimately, to an increase in research productivity. With this strategic plan, the College has set a course that focuses on the key metrics we aim to move and focuses on the specific tactics that will drive those increases.