

**Moore, Marsha M.**

---

**From:** Naufel, Brenna R. on behalf of Thompson, James E.  
**Sent:** Friday, January 13, 2012 4:19 PM  
**To:** Ward, Gary (MU Campus Facilities)  
**Subject:** New Plans: Space needs, College substantial growth

---

## Memorandum

---

**Date:** January 13, 2012  
**From:** Jim Thompson, Dean College of Engineering  
**To:** Gary Ward, Associate Vice Chancellor for Campus Facilities  
**Subject:** New Plans: Space needs, College substantial growth

I have been working over the last several months with the department chairs to understand the College's current and future space needs. An important meeting occurred on December 9, 2011, where the College administration team met together for the morning to collectively discuss our situation and develop ideas. There were several important points discussed at this meeting:

1. The College's research volume has increased to AAU levels. Expenditures are now \$33M (as reported to the American Society for Engineering Education) with full credit research totaling \$58M. This impacts the quantity and quality of research space required now.
2. Undergraduate enrollment is now about 3,000, which includes an increase of 12% this year and a 21% freshman enrollment increase this fall. International student enrollment has grown to 120 this year (from basically zero three years ago). Assuming a conservative 6% enrollment increase for domestic students and 100 additional international students per year (capping international enrollment at 500), the College will have 5,000 undergraduate students by 2017! Additionally, the College has an enrollment of 600 graduate students, also growing each year.
3. I have asked the Provost for additional faculty and staff positions to support the extraordinary enrollment growth and research. Seven new faculty positions were approved for Fall 2012. Approval of the total request would result in a student to faculty ratio of less than 20:1 (the AAU average is about 16:1). This will require the hiring of 7 to 10 new faculty per year for the foreseeable future.

Points 1 – 3 give rise to both short term and long term space needs. The following major proposal regarding space for the College addresses these points and, I believe, is consistent with the discussion Marty and I had with you and Jackie on August 24, 2011.

Due to the large enrollment growth, expanding research, and the long delay time which we all have endured to obtain state funding for Lafferre Hall renovations, I propose the following:

1. Instead of major renovations to Lafferre Hall, construct a new building on the current site of the Academic Support Building to contain engineering programs, MU classrooms, MU Core facilities (such as electron microscopes), current occupants of Academic Support, and Extension Business

Development. The building size will be determined and limited to funding available. It is important to keep the Engineering state funding request as the #1 MU and UM priority. This request is currently at about \$67M. This request will be increased and added to funds to be obtained from private donations, corporate donations, other education partnerships, sale of bonds, etc. Building completion could be by Fall 2017.

Between now and Fall 2017, the College enrollment will grow from the current 3,600 to possibly as much as 5,000. The faculty could grow from the current 113 to possibly as many as 170 (or more) with corresponding increases in support staff and research activity.

2. Therefore, between now and Fall 2017, Engineering will need to occupy Lafferre Hall (LH) and Engineering Building West (EBW) more inclusively. It will be necessary to reconfigure and move components of most engineering departments within EBW and LH, including ECE, CS, MAE, ChE, CEE, Engineering shops, and interdisciplinary undergraduate laboratories. Additionally, space which is not controlled by Engineering will, over time, be required to be removed from EBW and LH. This includes Nuclear Engineering and MU classrooms. Additionally, plans will be developed to move DoIT from EBW to LH and to integrate the DoIT facilities into the LH undergraduate experiential teaching laboratories. Similarly, ideas and plans will be developed to integrate the College Library into the experiential teaching environment in LH.

These moves will require exterior changes to LH, that we have discussed, including structural strengthening of the east walls and some roof work in that area. Also, some power distribution and AC work in the old area is probably necessary. Otherwise, I propose "minor" renovations to LH with you and Marty working together. These would consist of interior wall changes, ceilings, paint, etc.

Engineering Building North (EBN) would continue to be a space buffer until the new building is complete. Currently, EBN is used by MAE, ECE, CS, and Extension Business Development. This space is also housing Steve Wyatt and Annie Sobel, since they are working with Engineering on numerous proposals and programs.

The Department Chairs and I do have a preliminary plan for the above. The unknown is how many positions will be approved by campus to accommodate the enrollment and research growth which is occurring. I have also shared these plans with my 120 member Dean's Advisory group, who will work with me and the faculty. Additionally, the College's next campaign plan, submitted to Campus, includes major fundraising components for the LH "minor" renovations. A substantial fundraising effort will also exist to build upon LH's #1 priority state funding request status (currently a \$67M state request). The state request strategy does, however, need to be modified to be a larger request to reflect a new building.

These are the topics for our discussion next week. As you can see, our space issue is large (and growing) due to Engineering's substantial growth. As we discussed previously, I believe we agreed that a change in approach is required, not only due to the long delay in obtaining LH funding, but also due to the change in the state funding climate. Now, add the fact that over the last ten years, Engineering has grown from less than 2,000 students to 3,500, and is now growing to possibly 5,000, all while conducting research at AAU levels. This is a critical time and we need your help and the help of the campus!

Jim

**James E. Thompson, PhD, PE**  
Dean and Ketcham Professor  
IEEE Fellow  
W1025 Thomas and Nell Lafferre Hall  
College of Engineering

University of Missouri  
Columbia, MO 65211  
(573) 882-4378 Phone  
(573) 882-2490 FAX  
[ThompsonJE@missouri.edu](mailto:ThompsonJE@missouri.edu)  
<http://engineering.missouri.edu>