Huntsville Rotary Club
January 24, 2012

- As I had mentioned to the Huntsville Times recently, I was somewhat familiar with UA Huntsville because at my previous institutions it was used as a benchmark for comparison and accreditation purposes.
- It's always good to keep track of the competition, know where you stand, and where you want to go.
- Last year was a good year for UAH in meeting some milestones in efforts to secure our place as a well-respected, research university, to whom the scientific, engineering, and public policy communities look for leadership. The Carnegie Foundation for the Advancement of Teaching classified us in research as "Very High," its top classification, and one of only 73 public universities classified as such. And 4 research areas were ranked in the Top 10 according to the most recent NSF rankings from 2009 research expenditure data:

    o #2 — NASA-funded R&D in computer sciences
    o #4 — DOD-funded R&D in social sciences
    o #8 — DOD-funded R&D in computer sciences
    o #9 — Federally-funded R&D in aeronautical/astronautical engineering

- There are some areas to work on.
- About 25% of our research funding comes from NASA and 40% from the Department of Defense
- In the first quarter of the current fiscal year, research expenditures were up over the first quarter of last fiscal year by over 12%. This increase translates to a projected expenditure for FY12 of over $95 million.
- 54% of the awards in the first quarter were in engineering fields, 21% in mathematics and computer science, and 18% in the physical sciences, the areas that support DoD and NASA related research.
- We are very close to a 1/3 split on direct expenditures on education, research, and infrastructure. On the revenue side, research accounts for about 38%, above the 1/3, with the indirect cost showing up on the expenditure side in infrastructure support for the research efforts.
- A good portion of the research funding is expended through the infrastructure of research centers, focused research groups with a good proportion of the financial support derived from grants and contracts. The centers provide a good return on investment, with, for example, the Information Technology and Systems Center providing a 30 to 1 return on state investment, and it isn't the only one that provides that level of return.
- Some of the challenges we face include better integrating work done by faculty, those holding academic rank, and research staff and colleges and research centers, increasing student involvement in research, at both the undergraduate and graduate level, and broadening our research portfolio across more funding agencies.
- The three challenges mentioned are not unrelated. The research centers are generally focused on projects that have deliverables on relatively short time frames, short compared to the time frame on which many basic research efforts are carried out, the time frame on

which faculty are more focused. Agencies that support a lot of basic research work include NSF, NIH, etc. Only about 3% of our portfolio comes from NSF. The challenge is to expand funding from agencies like NSF while maintaining our DoD and NASA portfolio. The basic work can complement the applied work and assist in integrating the academic and research center enterprises more closely and leverage our assets to advantage.

- I mentioned involving students more in research. Our PhD production per million spent in research is about 0.6. An institution that is listed as one of our peers has a ratio of 2.6. You might conclude that we have a long ways to go. I think that is not quite right. About 45% of that institutions PhD's are in Economics, Education, Psychology, and Public Policy. When you look at Georgia Tech, their ratio is about 0.9. The reason is that Georgia Tech has an infrastructure set up not completely different from ours in that they employ a research staff through the Georgia Tech Research Institute and expend a good portion of their research funds through those institutes. While we could improve in our ratio, we probably should shoot for around one, rather than something over 2. Virginia Tech is at 1.1, and Clemson is at 0.9

- So, we'll be working on the academic and research integration, portfolio broadening, and student involvement in research.

- On the academic side, over the past 5 years, we have added 12 academic programs, 9 of which, 75%, are technical in nature, complementing research efforts and the community we serve.

- And, our atmospheric sciences department has been ranked in the Top 10 in the US by the Chronicle on Higher Education.

- About 30% of the undergraduate enrollment is engineering with the other 4 colleges, Liberal Arts, Nursing, Science, Business split about evenly. On the graduate side, Engineering moves up to around 40%, Science is next at over 20% and Liberal Arts drops to less than 10% due to programmatic offerings.

- Total enrollment has steadily increased from 2001 to 2009 by about 15% but leveled off in 2009. Undergraduate enrollment increased about 20% from 2001 to 2009, but then declined about from 2009 by about a couple of percent. From 2007 to 2011 freshman enrollment declined over 20% while other classes increased as previous enrollment increases moved through the system. Graduate enrollment from 2007 to 2011 increased by about 12%. So, recent trends in freshman enrollment are of some concern.

- Enrollment is important from a financial perspective. We receive only 22% of our revenue from the State. If you subtract the research funding, it goes up to 35%. It has been declining rather rapidly over the recent past, and there is not much to say that that trend won't continue. Almost all state universities are in the same situation.

- For every 100 students we don't have, using a 10% tuition discount figure for estimation purposes, we don't receive over $750,000 in revenue. The freshman drop from 2007 to 2011 is equivalent to almost $3 million lost revenue. That drop was mitigated by increases at other levels, but due in part to previous enrollment growths. Declines in freshmen that propagate through the system result in overall revenue declines. The largest enrollment loss was in Liberal Arts, our least expensive programs.

- As part of an overall Strategic Planning process, we are looking at potential enrollment growth that makes sense with respect to our academic offerings, our strengths, and the customer base for that growth. Since we charge the same tuition for all undergraduate

programs, it is important to have strong enrollments in the less expensive programs to supplement the more expensive ones. The trick is the right balance from an education and research perspective as well as a financial perspective. It's quite possible to have healthy enrollments outside of traditionally thought of strengths if you have something to "sell." That sell has to be the environment of being in a technically rich environment, being exposed to it, and that providing a competitive advantage to the graduate in the corporate, business, and government sector world. On the graduate side, we should be able to grow enrollments in our strengths and in serving the local community.

- Retention is an important element in enrollment management as well. Our 6-year graduation rate is 44% while our predicted rate using the academic credentials of the incoming class is 63%. Retaining students through graduation impacts revenues because recruiting new students who replace ones who leave is expensive, more expensive than retaining them. There have been improvements in retention and graduation rates over the years, a 10% improvement in the 1990's, but it has been relatively flat in the 2000's, so we need to do more through students services, advising, offering the curriculum in a timely manner, among other things. Campus life has a huge impact on retention.

- Another area of revenue enhancement is in Advancement, comprising Communications, Branding and Marketing, Alumni Relations, encompassing interactions with friends of the university as well, and Development. We need to rebuild a Communications effort within Advancement and fill in some missing slots in the various components as well as recruit a Vice President to lead the Advancement effort. The approach to Advancement has been discussed with the Executive Committee of the Foundation and we are moving forward on the VP recruitment and building up the Advancement area. Alumni giving participation is at 3%. By building long-term relationships through Advancement, which requires a consistent effort, we should be able to improve on that. A good benchmark would be 15%.

- Facility wise we are continuing implementation of an information technology infrastructure upgrade, including wireless networking across the campus. The position of Chief Information Officer has been filed by an Interim, and we are beginning the recruitment process there for a permanent CIO.

- Construction projects are guided by the Campus Master Plan, recently completed. The vision is a pedestrian accessible central core surrounded by academic and research facilities and residential villages. The first step in implementation includes development of a greenway between Holmes and Lakeside running north and south. At the Holmes end of the greenway is the new Student Life Center, a $25 million facility to serve as a campus gathering place. The greenway is supported by federal funding with a university match while the Student Life Center is supported solely by student fees.

- Let me say that athletics is having a good year overall, both in competition and in the classroom. The women's basketball team has their best start in history at 14 and 3, 4 and 1 in the conference and the men are 14 and 3 as well, 5 and 1 in the conference coming off an important win over the weekend. Last rankings had the men number 11 in Division II in the country.

- For the spring we are looking toward successful baseball and softball seasons as well as track and field, after coming off strong cross country seasons. Baseball and softball are getting a new facility housing locker rooms, restrooms and a concession stand as well as lights.

- While hockey may not be enjoying a good won-loss record overall, they finished twice within 1 goal of the defending national Division I champions, Minnesota-Duluth, over the weekend, and earlier beat the number 10 team in the rankings. As you know, we made the decision to keep the program at the Division I level, but it requires some additional support from the community.
- Previously, the NCAA allowed a D III or D II program to elevate one sport, other than basketball, of each gender to the D I level. They no longer allow that because experience showed that the D I programs embedded in a D III or D II program drew resources from the base program. That happened over time in our situation. So, some funds in athletics are going to be reallocated to the D II teams, then we will add some funds to hockey and stabilize it at a level substantially above any of the D II teams, and then count on fundraising and, corporate support and ticket sales. The proposed budget is modeled after programs in one of the conferences we are looking at making an application to join. So, it is not out of the ordinary for the community in locations where hockey is important to step up and support the program.
- Those schools with a D I team in a D III or D II program, were grandfathered. As long as we play in Division I, we can remain there, but if we drop down to a lower level, which can only be club, then it would not be possible to move back. So, it's important that we are successful in this endeavor not only for longevity of the program but also for being attractive to a conference. We need to have something to offer. We have the academic profile president's like to see, and it is the conference presidents who decide if you are in or out, but we need to be seen as a program that will be around a long time.
- Let me close by saying that we have strong research programs that will continue to serve DoD and NASA with the opportunity to broaden the funding portfolio, opportunities to increase enrollments, enhance advancement efforts part of which is enhancing campus life.