Draft Report of the Sub-committee on Economic Development and Service to Iowa

One of the primary expectations of a great public land grant university is a world class education that provides students with the technical, analytical, problem-solving, communications, and social responsibility skills required to succeed in today’s complex and ever-changing world. Additionally, great public land grant universities contribute to society through the creation of science and knowledge from its research and discovery activities. Finally, the third essential role of a great public land grant university is its outreach mission which entails the delivery of science-based services, programs and initiatives that improve the quality of life for all people in Iowa.

Overarching Goal and Overall Performance Measure

It seems intuitive that the university’s priority of economic development and service to Iowa, its outreach mission, is inextricably linked to its research mission. Research and technology transfer are generally acknowledged to be drivers of economic development, and the services and programs provided by the Office of Economic Development and Industry Relations and Iowa State Extension and Outreach are science based. Though perhaps less intuitive, the student learning experience can be enriched by, and can be leveraged to enhance, the outreach mission of the university. That is, students benefit greatly from engagement with businesses, communities, social organizations, and government agencies where they have the opportunity to apply and further develop the knowledge and skills they learn in the classroom. These external stakeholders realize immediate benefits (e.g., solution of problems, investigation of opportunities) and long term benefits (e.g., opportunity to evaluate, attract and retain talent) from student experiential learning activities. Students are a vast and valuable resource that can be employed to an even greater extent than is currently done, and in a manner that contributes significantly to their learning.

Based on the foregoing discussion, we offer the following overarching goal and overall performance measure for your consideration:

Overarching Goal: Iowa State University will improve the quality of life for all Iowans through services and programs dedicated to economic development and the promotion of healthy communities, people and environments.

Overall Performance Measure: The student experience, research, and outreach missions of the university will be better integrated and leveraged to help businesses, communities, social organizations, and government agencies meet their talent, knowledge, and innovation needs.

Further, we recommend a single metric reflecting our engagement with these key external stakeholders:

The number of Iowa businesses, communities, social organizations, and government agencies that receive direct assistance or benefit from engaging with the university’s student experiential learning, research, and outreach programs, services, and initiatives.
We recognize that this is purely an activity measure and not necessarily a measure of impact. However, assessing or quantifying impact is often very difficult if not impossible (e.g., it is difficult to isolate the impact of our assistance, clients do not want to share proprietary information, impacts are long term in nature). Regardless, we encourage assessing and reporting impact when reasonable and practical. We have provided several examples of impact metrics later in this report. The university’s annual economic development report to the Board of Regents and annual report to the state legislature’s Joint Economic Development Appropriations Subcommittee include both activity metrics and impact metrics.

Measurable Actions and Metrics

We also recommend three specific measurable actions and corresponding performance metrics related to the overall performance measure. These are the specific actions that the university will take to move the needle on the overall performance measures.

1. **Increase on- and off-campus experiential learning opportunities for students with businesses, communities, social organizations, and government agencies.**

   Workforce/talent is often identified as the single most important need by organizations across the state. There are two dimensions of this need: quantity and quality. As noted earlier, student experiential learning opportunities can help address both of these.

   We suggest the following metric for this action:

   **The number of ISU students who participate in an experiential learning activity.**

   Student experiential learning activities include but are not limited to: internships, co-ops, capstone class projects, practicums, and student projects outside the classroom (e.g., CyBIZ, PLACE – Partnering in Landscape and Community Enhancements, Agricultural Entrepreneurship Initiative, Pappajohn Center for Entrepreneurship).

2. **Increase research, technical, entrepreneurial, and professional development services for businesses, communities, and government agencies.**

   The university currently provides an extensive array of these services, but the potential and need exist to expand our offerings. For example, as federal research funding has plateaued and become more difficult to obtain, collaborations with businesses and communities could both help support research efforts on campus as well as stimulate economic development. Additionally, the most recent Battelle report (2014) titled “Iowa’s Re-Envisioned Economic Development Roadmap” identified the need and potential for more commercialization of university developed technologies, which requires a stronger and more comprehensive entrepreneurial and innovation ecosystem on campus. Finally, we believe that the university has the ability and capacity to increase its contribution to the state’s talent challenge through increased professional development services. We view professional development as including training and education at all levels of the workforce across all types of organizations. Furthermore, university programs serving youth such as the 4H STEM program delivered by ISU Extension and Outreach and the College of Engineering’s K-12 programs have a significant impact on the future talent pool.
We propose the following metric for this action:

**The number of external organizations and individuals utilizing university research, technical, entrepreneurial and professional development services.**

3. **Increase the university’s community, youth, family, and economic development programs and initiatives targeted at diverse and under-represented populations.**

More programs and initiatives targeted at diverse and under-represented populations also represent both a need and an economic development opportunity. A report by the Iowa House of Representatives notes that all parts of the state are becoming more diverse, and population growth among children of color and/or of Hispanic descent is the sole driver of population growth in that age group in Iowa. The State Data Center of Iowa reports that people of Latino origin are the state’s largest race or ethnic minority today, and the Latino population is projected to comprise 13.0% of the state’s total population in 2050. Research by the Kauffman Foundation shows that immigrants represent more than 25% of new entrepreneurs nationally, and they are almost twice as likely to start businesses as native-born Americans.

We recommend the following metric for this action:

**The number of individuals from diverse and under-represented populations and the number of organizations owned by individuals from diverse and under-represented populations participating in university community, youth, family, and economic development programs and initiatives.**

**Additional Metrics**

The types of services provided by the university and the clients served are quite diverse. Thus, there are a number of additional metrics that support or supplement the overarching goal, but will not be in the body of the strategic plan itself. These metrics are important, however, because they indicate the extent and magnitude of the university’s impact on the quality of life for Iowans. Some examples of these metrics include:

- Business and technical assistance
  - Jobs created
  - Jobs retained
  - Capital generation
  - New start-ups
  - Increased sales
  - Cost reduction or avoidance
- Technology transfer
  - Licenses (to Iowa companies; worldwide)
  - Sales revenue from licensed technologies
- Entrepreneurship
  - Number of entrepreneurs served
  - New start-ups created
• Training and education for workers  
  o Number of programs, workshops, seminars  
  o Number of external organizations participating  
  o Number of attendees  
• Student experiential learning  
  o Number of student internships with Iowa companies  
  o Number of Iowa companies employing ISU student interns  
  o Number of projects for Iowa companies (through capstone courses, student labs, etc.)  
  o Number of students working on projects for Iowa companies  
• Community development  
  o Organizations or communities strengthen  
  o Officials trained in community and economic development  
  o Minority business assisted or started  
  o Community plans developed  
• Youth and family programs  
  o Number of k-12 youth in ISU programs  
  o Assessment of academic performance of these participating youth relative to non-participants  
  o Number of adult direct contacts

Potential Challenges

The university currently engages in the proposed measurable actions and collects data for some of the corresponding performance metrics. However, not all required data for the proposed metrics are currently being captured, and doing so will require more time and effort by the colleges and departments. Also, more effort and resources will likely need to be directed to some of the actions mentioned above (e.g., entrepreneurial and innovation ecosystem, programs and initiatives targeted at diverse and under-represented populations).

It is possible, too, that some departments and programs on campus may perceive that they do not have as much opportunity to participate and perform well on the proposed metrics. We believe that there is considerable opportunity to expand participation across campus in the economic development and related services that we have described above. Achieving this may require some education, encouragement and collaboration led by the university offices with primary responsibility for economic development and outreach services.

Finally, though the title of our subcommittee suggests that we are focused only on Iowa, many of the proposed actions and impacts extend well beyond the state’s borders. The university should collect and report performance and participation data for entities outside the state, too.