Memo

November 13, 2004

TO: Scott Cowen
    Yvette Jones
    John McLachlan

FROM: Brian Rosborough

RE: Environmental Summit Report

Thank you for the invitation to facilitate yesterday’s discussion between faculty, students and senior members of the administration. Here are my reflections:

1. On November 12, President Cowen convened a group of sixty Tulane faculty, students, and staff to discuss the prospect of enhancing Tulane’s standing and success rate in attracting major Federal Research Awards to the institution. Professor McLachlan and CBR staff hosted the discussion in Alcee Fortier.

2. The President challenged the group to recommend major interdisciplinary proposals, involving clusters of faculty from different schools and departments, that might be refined for submission to different Federal Agencies and private funders in 2005.

3. The meeting signaled a shift in Tulane’s Federal Strategic Plan, away from its traditional dependence on individual PI competitive grant submissions, toward a well-coordinated, cross-departmental encouragement of major ($5mil – 50 mil) institutional proposals. The area of environmental sciences was selected to initiate faculty engagement because of the interdisciplinary nature of environmental systems and civic issues.

4. The President asked the group to consider the following criteria in making their proposals:
   
   (a) Projects that earn Tulane competitive Federal Grants of $65 mil to $100 mil/year.

   (b) Projects (3-5) that differentiate Tulane as the dominant regional center of excellence in this R & D area. (Pillars of Differentiation).

   (c) Projects (1-3) that will rank Tulane as one of the top five national centers of excellence in a critical research area (University defining Research Foci).

   (d) Projects that can be leveraged to significantly benefit the educational and public outreach missions of the University.

   (e) Projects designed to become financially self-sufficient within 5-7 years.

5. As an incentive, the President indicated that Tulane would provide ‘seed capital’ to expedite proposal development and clear institutional barriers to proposal formulation.
6. The faculty and students responded to the President’s challenge with the following policy recommendations:

(a) Capitalize on our location. Use New Orleans (city, river, delta, coast) as vital laboratories for addressing national and international research problems. Capitalize on Tulane’s unique convening power to host multi-disciplinary and trans-disciplinary research consortia in the physical, behavioral, biological, and social sciences. Bring leaders from business, law and medicine to the Tulane table.

(b) Develop ‘tenure friendly’ support mechanisms that reward faculty for engaging in multi-disciplinary, inter-disciplinary, and trans-disciplinary research and scholarship. Distinguish Tulane from other academic institutions in this regard.

(c) Create University venues to host and engage CEOs and leaders from regional industry and government agencies who will become partners and sponsors of major trans-disciplinary proposals to Federal R & D competitions in the future.

(d) Develop a Tulane Faculty Finder or online resource that better profiles the research, academic and scholarly interests of faculty and research staff on campus so students might connect their interests to those of the faculty, or more easily volunteer time as research assistants when needed.

(e) Engage Tulane’s Board, faculty and administration more prominently in local civic planning and regional issues so the University and its host city will be identified as closely allied in all future Federal award competitions. Become a dominant civic player commensurate with Tulane’s standing as largest employer in New Orleans.

(f) While in pursuit of multi-disciplinary R & D initiatives, the University should enhance the civic orientation of a Tulane education to reflect student and faculty aspirations for their University’s ethical and academic commitment to environmental excellence. Tulane could easily offer more student-faculty research experiences, more field-based studies, more service-learning, more civic engagement, more interdisciplinary majors, more cross-departmental events, and more trans-disciplinary collaboration on and off campus. These modifications should be designed by faculty to fully achieve both educational and civic leverage from the University’s R & D initiatives. The objective should be an integrated research, teaching and learning environment. When made, these innovations would distinguish a Tulane education as civic-serving, environmentally responsible, value-centered, and focused on sustainable patterns of living. As resources permit, the university should also adopt best environmental practices on campus, e.g. LEED criteria for new architecture, comprehensive recycling, environmental purchasing policies, renewable energy options, waste reduction -- all to help Tulane achieve competitive advantage among nationally ranked universities, harvest greater Federal awards, and achieve national prominence in chosen fields.

7. Five breakout sessions produced these valuable recommendations for Tulane to refine as Research Foci and Pillars of Differentiation:

(a) RiverSphere –
Create an academic village on the Mississippi for research, teaching, and public education about rivers and cities, deltas and coasts. A Tulane River Campus would provide the university with a nexus to the City of New Orleans; the coastal communities along the Mississippi; and river cities around the world. A rich and varied program of inter-disciplinary and trans-disciplinary research would integrate faculties of graduate and undergraduate schools, offering the public and commercial leadership frequent and continual access to innovative and entrepreneurial scholarship in support of local and national research needs. Master planning is underway with the promise of inclusion in the University’s March, 2005 capital campaign launch.
(b) **Environmental Health and Conservation Medicine** –

The University’s centers of excellence in biomedical research, public health and tropical medicine, clinical health, environmental science, environmental law and policy could be clustered in major regional, national and international R & D initiatives well beyond its current sponsorship by NIH. Tulane’s regional prominence as one of a few American institutions embedded in a diverse cultural demographic, with significant pockets of urban and rural poverty and the juxtaposition of underserved populations supporting waves of U.S. and foreign tourists, was believed to offer fertile ground for major multi-disciplinary health initiatives for basic and applied research and clinical trials. The competitive differential available to Tulane can be found both in the variety of habitat and field laboratories within easy traveling distance from the University and in the chronic health, social and economic disparities found in the region.

(c) **Disaster Preparedness and Homeland Security** –

Tulane could build multi-disciplinary capacities to address both national and man-made disasters benefiting all major American port cities. Faculties of law, environmental science, public health, medicine, engineering, communications and business could approach DOD, FEMA, EPA and a dozen security agencies involved in disaster relief for funds to design integrated responses to security concerns and catastrophic events. The program might engage schools of architecture and civil engineering to refashion urban environments into a ‘Resilient Society’, able to endure bioterrorism attacks, more frequent hurricanes, climatic events imposed by global warming, sea level rise, floods, infestations, plagues that are water-borne or airborne. Transportation, energy, public health and communications awards would address modalities of civil defense and Homeland Security. New Orleans would be a natural test bed moving from least prepared to safest American port city.

(d) **Climate Change in the Neotropics** -

The social, economic, environmental, and health consequences of global warming will destabilize governments worldwide, but especially U.S. neighbors in the Caribbean and Latin States and the tropical regions of the Southern Hemisphere. The projected impacts of climate change on economic and political affairs might be Tulane’s niche. The University could convene research consortia to assess the socioeconomic impacts of climatic change in our region of the world. This initiative would produce R & D proposals combining the graduate schools with those of engineering, architecture, Latin Studies, and international development. The Inter-American Development Bank, World Bank, and Association of Independent Island States should support this regional proposal.

(e) **Renewable Energy Lab for the Gulf States** –

Given the move of U.S. petroleum headquarters to Houston, Tulane should respond filling the Louisiana vacuum with a concentration on renewable energy and R&D leading any future move to a hydrogen economy. Off shore wind farms, solar, biomass, geothermal technologies are spawning new business enterprise across the states. Tulane should focus its intellectual resources on renewable energy technologies and the socio-economic costs of energy conversion. Underserved regions of the Delta states, gulf coast and Caribbean would be our laboratories. River turbines might be a specialty.

(f) **Water Quality, Water Management, and Water Access** –

A Tulane Water Institute would focus faculty resources on the protection of coastal wetlands to the productive capacities of rivers and watersheds. It would have convening power to address regional water concerns, including flooding, hydropower, storm water management, water storage and access for arid agriculture, water safety, and the health implications of chemical and trace metals in river and groundwater systems. From its base, Tulane could develop wastewater management programs for small farmers in the Southern States and Latin America. Improved irrigation and water conservation devices could produce better results for smallholder farmers.
Aquaculture and fisheries research might be included. Urban water safety would draw heavily on the New Orleans and Mississippi flood control expertise. Hygiene, public health, and sanitation innovations might follow.

(g) **Urban Youth Initiative**
Tulane should use its student and faculty resources to build and operate nationally prominent programs for urban youth, especially underserved children. This might engage schools of education, architecture, communications, and engineering to design safe urban parks and playgrounds, water features, children’s fountains, recreational facilities, walking trails, bike paths, river taxis, civic transportation, after school programs that complement the unique urban environments in New Orleans. Work-study programs for underemployed teenage youth might be designed with and for local industry to relieve street crime and ensure safe neighborhoods. If Tulane took the lead, others would surely follow.

(g) **Cuban National Strategy**
Looking ahead, Tulane and New Orleans should formulate joint strategies to build bridges to Cuban institutions, writers, artists, scientists, and commercial interests, with the full knowledge and support of the US Government. Academic and commercial exchanges could be designed with dozens of institutions that enjoy State Department approval for academic alliances with the Cuban Republic. Free of the political associations with Cuban nationals found in Houston and Miami, New Orleans would offer a safe port for the trade that will ensue when the leadership changes. Tulane should have delegates on the City Leaders delegation that leaves New Orleans for Havana this week.

Thank you for the privilege of sitting in on this discussion. I look forward to your perspective on how to move forward.

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