AGENDA

1. Annual Report on the Status of University Research - T. Mulcahy (pp. 2-3)

2. East Gateway District Plan/Bioscience Discovery District/Medical Biosciences Facility Update - K. O'Brien/F. Cerra/O. Miller/R. Johnson (pp. 4-13)
Board of Regents

December 10, 2009

Agenda Item: Annual Report on the Status of University Research

☐ review    ☐ review/action    ☐ action    ☒ discussion

Presenters: Vice President Timothy Mulcahy

Purpose:

☐ policy    ☒ background/context    ☐ oversight    ☐ strategic positioning

To fulfill an annual obligation of accountability and an opportunity for the Vice President for Research to brief members of the Board of Regents about the health of the University of Minnesota’s research programs.

Outline of Key Points/Policy Issues:

The FY09 annual research report includes the following major sections:

• Research Statistics for Fiscal Year 2009
• Trend Analysis for the University of Minnesota
• Comparative Analyses with other Public Research Institutions
• The impact of ARRA (Federal Stimulus Bill) on University Research
• The far reaching impact of faculty research and scholarly work

Background Information:

Executive Summary

The latest data released by the National Science Foundation (NSF), covering research performance for 2008, shows that the University of Minnesota posted the largest percentage increase (9.5%) in R&D expenditures among all institutions listed in the NSF’s top 20 ranking list. Research expenditures have increased nearly 30% since 2004, giving the University the third-largest growth in research volume among the 12 public universities included in the top 20, and the fourth-largest among the top 20 private and public institutions.

The University maintains its rank as the nation’s ninth leading public research university based on the NSF R&D expenditure data. Although there is considerable variation in relative rankings among fields of study based on citations of scholarly works of the faculty, in virtually all categories the University also ranks among the top 10 public universities. Based on these common, recognized metrics, the University has
established a record of performance that unquestionably identifies it as one of the leading research universities in the country.

Gross revenues from patent and licensing activity also posted excellent results in FY2009, increasing to $95 million — nearly 10% higher than the previous year. This is an exceptional achievement given the dismal economic conditions that prevailed during this period.

While the University’s record of performance has been strong and positive in the past 4 years, the FY2009 award data mark the first change in that trajectory since 2003: sponsored research awards totaled $607 million, a decrease of nearly 10% from the previous year. However, early reporting results indicate a rebound in the first quarter of FY2010, perhaps signaling that the slide in FY2009 is temporary.

The American Recovery and Reinvestment Act (ARRA) played a very large role in the University’s research efforts in calendar 2009. To date University researchers have received 233 ARRA awards totaling $123.5 million, recognition of the high caliber of research taking place in colleges and departments across this institution.

While numbers are important for assessing performance, they cannot fully portray the impact of a great research university. Due to that shortcoming, this report also includes brief descriptions of a representative set of high “impact” research projects or scholarship, including awards received from ARRA funds, which illustrate the value that the University offers to the people of this state and nation, and to the global community.

The report will be provided under separate cover and is available in the Board Office.
Board of Regents

December 10, 2009

Agenda Item: East Gateway District Plan / Biomedical Discovery District / Medical Biosciences Facility Update

☐ review  ☐ review/action  ☐ action  ☒ discussion

Presenters: Vice President Kathleen O'Brien
            Senior Vice President Frank Cerra
            Orlyn Miller, Director, Planning and Programming
            Richard Johnson, Program Director, Biomedical Discovery District

Purpose:

☐ policy  ☒ background/context  ☐ oversight  ☐ strategic positioning

To present the East Gateway District Plan and an update on the development of the Biomedical Discovery District and the Minnesota Biomedical Research Program.

Outline of Key Points/Policy Issues:

East Gateway District Plan

Background
The East Gateway District is the 75 acre area located northeast of the East Bank campus, bounded by Oak Street on the west, proposed Granary Road on the north, 27th Avenue on the East and University Avenue on the South. The District represents the largest expansion of the Twin Cities Campus since the establishment of the West Bank campus in the 1960's. Historic use of the area as railyards and industrial plants began to change in the 1980's as the University started to acquire land and build research buildings and surface parking lots. The construction of TCF Bank Stadium signaled a more dramatic change in the district.

Approval of the Minnesota Biomedical Sciences Research Facilities Program by the Legislature provided the incentive to develop a master plan to guide land use and capital development decisions for the district. The plan complies with the Twin Cities Campus Master Plan, which provides for the preparation of district plans to elaborate upon and refine its guiding principles and development objectives.
Vision for the East Gateway District
The vision for the East Gateway District is to develop the area as a cohesive complex of research, support, and athletic facilities that has its own identity, but is integrated with the existing campus.

That vision is supported by three goals:
• Support the University’s goal to be one of the top three public universities in the country.
• Sustain the vitality and excellence of Minnesota’s health research.
• Provide world class facilities and an environment that will attract and retain the top researchers, faculty, and staff in the biomedical sciences and health fields.

Guiding Principles
The Twin Cities Master Plan is driven by the belief that an integrated, beautiful, and sustainable campus will advance the institution’s academic mission, foster discovery, and increase the University’s competitiveness and reputation in the nation and the world. To that end, several foundational principles were established to guide the East Gateway District Plan.
• Provide a supportive academic and research environment.
• Create an image of architectural distinction, integrity, and brand.
• Optimize the use of scarce land resource.
• Maximize flexibility for future development.
• Strengthen the multi-modal transportation system in the area.
• Create an attractive, functional, and safe environment for pedestrian and cyclist.
• Integrate into the existing campus and surrounding community
• Build a real sense of community and place for the District.
• Create a cohesive, memorable system of public spaces.
• Develop a District that is environmentally and operationally sustainable.

Plan Summary
The East Gateway District Master Plan proposes development of a mix of research and academic facilities, core research support functions, and new office and service uses, grouped into walkable neighborhoods. The physical development pattern will create a relatively dense urban district with buildings in the 4- to 7-story range oriented to streets and public open space. The area will be developed to encourage safe and convenient travel on foot, bicycle, and public transit.

Background Information:
July 2008: Presentation regarding implementation strategies for the Biomedical Research Facilities Program which was authorized by the 2008 legislative session. On the same date the Regents discussed the specific requirements and broad strategies regarding debt financing the Program.

March 2009: Presentation on the Twin Cities Master Plan which provides overall principles to guide development of the East Gateway District of the campus and the biomedical research facilities to be developed within it.

March 2009: Regents approved the Schematic Plans for the Center for Magnetic Resonance Research Renovation and Expansion Project, which is the first building in the Biomedical Research Facilities Program approved by the 2008 Legislature.

Attached is the Executive Summary for the East Gateway District Master Plan, University of Minnesota, Twin Cities, May 15, 2009.
EXECUTIVE SUMMARY

INTRODUCTION
The East Gateway District of the Twin Cities campus is an area in significant transition. Historically an industrial railyard serving the vast grain storage and transport needs of the upper Midwest, the District has more recently been utilized by the University of Minnesota as a remote surface parking reservoir. Within the last decade, two new research facilities, the Lions Research Building/McGuire Translational Research Facility (Lions/McGuire Research Facility) and the Center for Magnetic Resonance Research (CMRR), were constructed in the District, with a third research building, the Medical Bioscience Building (MBB), under construction at the time of this report. In addition to research functions in the East Gateway District, the new TCF Bank Stadium is under construction and will open in the fall of 2009. With this pace of new development, the District has become the most rapidly developing area of campus.

In 2008, authorization by the Minnesota State Legislature of bonding for the Biomedical Science Research Facilities Program has committed the University of Minnesota to the construction of four additional research buildings over the next five years. In addition, the Metropolitan Council has committed to the design and construction of the Central Corridor Light Rail Transit (LRT) line to be completed in 2014, with a transit stop planned for the District.

Given this commitment and amount of construction, the East Gateway District will undergo an accelerated pace in its transformation. In short, it is the expectation of the UM East Gateway Project Executive Committee that “the whole fulcrum of the campus will change as a result of this development.”

The University of Minnesota and its Capital Planning and Project Management (CPPM) office decided that it was time to undertake a District Master Plan and design guidelines for the district to guide its future development in accordance with the mission, objectives, and principles of the university. This report is the end result of a seven-month planning effort that commenced in July of 2008 to achieve this goal.
PLANNING PROCESS
The CPPM chose a planning team to prepare this District Master Plan and to work collaboratively with the University of Minnesota (University), CPPM staff, and University stakeholders to establish the vision for the East Gateway District. The planning team worked with the CPPM and two committees set up for this planning effort: the Project Executive Committee, responsible for the project oversight, major recommendations, and final recommendation to the University president and Board of Regents; and the Project Steering Committee, responsible for review and comment on the technical content and coordination among University departments to support the plan. The planning team also met with several staff members of various University departments and City of Minneapolis staff to understand the wider planning parameters and objectives for the District.

PLANNING CHALLENGES
The academic, and particularly research needs of the University will continue to grow, yet the University is out of land for expansion. The East Gateway District adjacent to the east bank of the Twin Cities campus represents one of the last non-developed areas available for future campus growth. Therefore, future development of this area should promote a level of density that will use limited land resources wisely.

Along with density, the University should establish a campus type of environment, one in which it can share valuable resources and core technical functions, rather than prepare individual building sites. Developed in this model, the East Gateway District will build an identity as a complete environment with a high level of amenities to attract and recruit top researchers and adjacent private partners.

The East Gateway District is not immediately adjacent to the Academic Health Center, clinical uses, or other core science programs on the main campus. Functional proximity to these related uses will be critical to the District’s and program’s success. Development of the District must utilize multiple and creative ways to link its users to the main campus, and vice versa, including future transit, campus bus, pedestrian, and bicycle connections. This will also reduce reliance on driving, parking demand, and traffic on local roads.

PLANNING PRINCIPLES
Planning principles were established early in the planning process to guide the creation of the plan. The planning principles for the District are intended to:

1. Provide a supportive academic and research environment.
2. Create an image of architectural distinction, integrity, and brand.
3. Optimize the use of scarce land resources.
4. Maximize flexibility for future development.
5. Strengthen the multi-modal transportation system in the area.
6. Create an attractive, functional, and safe environment for pedestrians and cyclists.
7. Integrate into the existing campus and surrounding community.
8. Build a real sense of community and place for the District.
9. Create a cohesive, memorable system of public spaces.
10. Develop a District that is environmentally and operationally sustainable.

VISION FOR EAST GATEWAY DISTRICT
Develop the East Gateway District as a cohesive complex of research, support, and athletic facilities that has its own identity, but is integrated with the existing campus.

The vision for the East Gateway District is supported by three goals:
• Support the University’s goal to be one of the top three public research universities in the country.
• Sustain the vitality and excellence of Minnesota’s health research.
• Provide world class facilities and an environment that will attract and retain the top researchers, faculty, and staff in the biomedical sciences and health fields.

The realm of bioscience and biomedical research is constantly evolving. New areas of science and new technologies will emerge that will drive translational research. The structure of bio-research teams will become more interdisciplinary. These trends in turn will have an impact on the physical facilities and districts developed to support these activities—research, clinical, and teaching environments will become more integrated.

To support this research-intensive and collaborative environment, the vision for the East Gateway District is of a vibrant, dynamic, urban research campus, where teams can have access not only to the best facilities and equipment, but also to other researchers in the District, in the University, and in the larger research community.

Future buildings will be grouped into walkable neighborhoods or clusters supported by shared technology and common amenities, seminar spaces, and areas for both formal and informal interaction. The District will include a mix of support, retail, commercial, entertainment, and recreational uses. Light rail transit will conveniently link the District to the main campus and the Academic Health Center, along with a high quality, outdoor pedestrian environment.

DISTRICT MASTER PLAN RECOMMENDATIONS
Recommendations of the East Gateway District Master Plan address urban design and program themes, including:
• Gateways and identity.
• Land use and activity patterns.
• Development framework.
• Development density.
• Building massing.
• Architectural guidelines.
• Landscape and open space elements.
• Circulation, transit, and parking.
• Infrastructure concerns.

SUMMARY OF THE EAST GATEWAY DISTRICT MASTER PLAN

The District Master Plan proposes a mix of new research and academic facilities, core technical support functions, and new office and retail uses within the 54-acre District. Activity in the District will be supported with the development of the Central Corridor LRT line on 23rd Avenue, combining its transit stop with a new multi-modal parking garage and bus transit/transfer facility. A buildout calculation of future development estimated that the District would accommodate approximately 3 to 4 million gross square feet (gsf) of total new development, including 1.9 to 3.0 million gsf in new academic and research facilities. Additional parking garages and smaller surface lots will maintain 4,200 parking spaces in the area as parking support for new development and as shared parking reserve for game days at the football stadium and athletic venues.

The physical development pattern creates a dense, walkable urban research district, with buildings in the 4- to 7-story range. Development is proposed on both sides of 6th Street, taking advantage of the undeveloped land immediately north of the football stadium, bringing research facilities into the pedestrian environment surrounding the stadium and helping to activate the area on non-game days.

Two gateways are proposed for the District: one at the most visible corner of University Avenue and Huron Boulevard/23rd Avenue, and the second at the intersection of Oak and 6th Streets. The first is a prominent corner that will create a foreground to the stadium. The first phase research cluster at the intersection of 23rd Avenue and 6th Street will be visible and accessible from this gateway. The cluster of buildings will be served by a new bio-commons with shared retail, food service, support amenities, and seminar space to create a common area of interaction for the next three buildings developed in the District. As this area builds out, it will be served by the construction of the Stadium Village transit stop of the Central Corridor LRT, scheduled to be completed in the same time frame as the next three buildings funded by state legislation.

The gateway proposed at 6th and Oak Streets is the nucleus of a second research cluster and bio-commons, visible from University Avenue with a realignment of Oak Street at 6th Street. It is easily linked to the core campus and Academic Health Center by a proposed pedestrian walkway, the Science Walk, that will connect directly to the Scholars Walk at McNamara Alumni Center.

USE OF THE DISTRICT MASTER PLAN

The following District Master Plan report describes in more detail the existing conditions of the District, the organizational concept for the East Gateway District, and its District and architectural guidelines. It is the intent of this report to guide development of the East Gateway District according to the principles established for the plan. It is a flexible guide, describing a framework for development, general massing, building envelopes, open space relationships, and key pedestrian connections, but it does not address specific building footprints or architectural design. It can therefore be adaptable to future program changes and needs within its framework as the District builds out.

DEVELOPMENT SUMMARY

• 54-acre District total
• Approximately 3-4 million gsf of new development
• Total includes 1.9-3 million gsf of new academic and research uses
• Uses future Stadium Village transit stop of the Central Corridor LRT on 23rd and University Avenues
• 300 employees currently within existing development; up to 700 new employees with Phase I development