Board of Regents Work Session

February 2016

February 11, 2016

10:15 a.m. - 11:45 a.m.

West Committee Room, McNamara Alumni Center
1. A Vision to Guide Long Term Development & Change in Key Areas of UMTC Campus

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AGENDA ITEM: A Vision to Guide Long-Term Development and Change in Key Areas of the Twin Cities Campus

☐ Review  ☐ Review + Action  ☐ Action  ☒ Discussion

☐ This is a report required by Board policy.

PRESENTERS: Pamela Wheelock, Vice President, University Services
Richard Pfutzenreuter, Vice President and CFO
Suzanne Smith, Assistant Vice President
Monique MacKenzie, Director of Planning

PURPOSE & KEY POINTS

The purpose of this work session is to review the proposed campus development framework and how it will inform planning decisions, and engage the Board in a conversation to inform the Twin Cities campus development strategy to support a 30-year vision. The discussion will provide direction to the administration in crafting a resolution for Board consideration.

The presentation will:

- Briefly review key areas of campus development relative to defined institutional needs.
- Address the extent of deferred maintenance need across the East Bank.
- Reference planning and development activity in the areas immediately adjacent to campus.

Development of land in the Southeast and East Gateways has been anticipated for roughly a decade and has been incorporated into both the 2009 campus master plan and East Gateway District Plan. The development concepts are general, however, and reflect the limited ability to anticipate programmatic needs. This work session is a one step in the planning process and should be considered to be conceptual.

Development Framework

This item introduces a framework for future development of the physical aspects of the Twin Cities campus. It is informed by existing and emerging needs related to the core mission of the University: education, research, and outreach. It addresses changing conditions in surrounding neighborhoods, infrastructure, and land acquisitions. The framework supports the needs of the campus community, defines future goals, and identifies strategic initiatives that build on strengths or correct deficiencies that need attention.
The campus core is where academic and student activity is concentrated, in the form of teaching and learning environments as well as research spaces. On both the East and West Banks, that core is supported by housing, recreational, and social destinations. For more than 60 years, the campus core has served academic efforts and student life, even with a changing student body.

Over time, public venues such as sports arenas were developed on the northern edge of the East Bank. This area gained definition as buildings like Memorial Stadium and Williams Arena were constructed, drawing crowds from throughout the region. Recent developments such as academic research facilities and newer sports venues have transformed the land. In an area that was once used exclusively for railroad transport and operations, the University built additional infrastructure, creating value and productive use in a historically underutilized part of the city.

More change is anticipated in areas of the East Bank to provide building sites and infrastructure that support future activity and growth. One area known as the Southeast Gateway District is located south of Washington, along the Huron and Fulton Street corridors. The second area, known as the East Gateway District, is near the Green Line station east of TCF Bank Stadium, including the biomedical discovery district.

Overall Campus Planning

Campus plans have detailed the evolution of the University since its first buildings were erected in the Old Campus District. The Twin Cities campus was been shaped by its surrounding environment, and trend that continues today. Planning has guided decisions about land use and intensity as well as transportation, and responds primarily to the activities on campus. Major drivers include the daily habits of students, activities of staff and faculty, and the ability of transportation networks to support the campus population. The Minneapolis campus has more than 50,000 students, 17,000 employees, hundreds of clinic patients, and countless other public visitors. It is a hive of activity.

The institution’s approach to land acquisition has remained steady. Guided by the master plan, the University capitalizes on strategic opportunities to acquire or improve adjacent parcels when available. The University avoids the use of eminent domain whenever possible.

Recent plans defining the future of the Twin Cities campus demonstrate the strength of the academic core of campus, prioritize pedestrian and bicycle traffic, and call for reinvestment in the eastern edge of the East bank. Examples are the 2009 Campus Master Plan and the East Gateway District Plan (2009), which supported development of the Biomedical Discovery District and the opening of TCF Bank Stadium.

The Six-Year Plan (2016-2021) includes state-funded projects across the University, including:

- Reinvestment in several buildings in the academic health center “core” area.
- A clinical research facility near the Clinics and Surgery Center.
- Major renovations with limited new construction in the Old Campus District.
- Renovations to Wilson Library to support learning experiences on the Twin Cities campus.

The commitment to reducing poor quality space on campus is an important strategy to ensure that space is allocated and used efficiently, makes efficient use of available resources, and is based on alignment with the University’s mission. It is also included as a maroon measure on the University Progress Card.
Area-Specific Planning Concerns

St. Paul

The St. Paul campus is widely recognized for its unique conditions, such as land and buildings, and for several different disciplines across various colleges, including veterinary medicine. The Continuing Education Center offers opportunities for outreach, community engagement, and collaboration. Despite its unique qualities, there are also challenges with campus infrastructure. The physical condition of research facilities is no longer supportive of contemporary research methods and techniques. St. Paul undergraduate residence halls are the last choice for most students who choose campus housing.

Southeast Gateway District

The Southeast Gateway District is a continuously evolving area of campus located on the eastern edge of the East bank. Established campus planning tools provide guidance for land use and development in this area.

The recently completed Academic Health Center Strategic Facilities Plan defines programmatic needs and describes the envisioned future for the core area south of Washington as well as the clinical area west of Huron Boulevard. This plan proposes a gradual evolution of the academic health center and essential undergraduate housing. These two land uses can coexist successfully, based on the available University-owned land and potential development sites that would be available following the demolition of large-scale buildings such as Mayo, Diehl, Children’s Rehab, Boynton, and Variety Club Research Center.

The opening and successful operation of the Clinics and Surgery Center is the start of a new clinical neighborhood for the academic health sciences. As this facility establishes itself as a destination for patients, it will define opportunities and challenges for future clinical projects in the area surrounding the Center.

Improvements to the Huron Boulevard corridor are needed to improve the Southeast entrance to campus. Prior plans have emphasized the importance of Huron Boulevard; however, recent development on the east side of the corridor has limited the ability to create adequate space for vehicular and pedestrian traffic. A short-term strategic initiative is to engage with public and private landowners to improve the primary entrance to campus on Huron Boulevard.

East Gateway District

In the early 1990s, the University began building a research facility near the intersection of Oak and Fifth Streets. Within 15 years, the University purchased an additional 75 acres from a small group of landowners. Most of this land was sold by railroads as their operations shifted away from this formerly industrial location. This land acquisition allowed the campus to expand significantly and create a district that serves University research, support, and athletic facilities, and that provides public retail, commercial and transit uses. This district developed a distinct identity while remaining closely integrated with the existing campus.

Current and planned land acquisitions have presented the University with new opportunities. The joint venture development project, which includes the Days Inn hotel site and surrounding University-owned parcels (see the February 2016 Facilities, Planning & Operations docket for an update), is an opportunity to capitalize on market interest and serve University capital investment needs. The proposal for a mixed-use, high-intensity development near the Green
Line Platform links emerging activity to the east with the established campus to the west. It also creates a place of interest located between the existing Biomedical Discovery District and the emerging clinical campus along Fulton Avenue.

Campus and district plans have called for private-sector research support for the Biomedical Discovery District near the 25th Avenue corridor. In the longer term, the area could be considered for a campus cogeneration plant once the Southeast Steam Plant facility has outlived its use. (The facility is anticipated to last through 2020.) Recent land acquisitions east of 25th Avenue at the Electric Steel Elevators site are being considered for immediate use as track facilities; however, additional acquisitions are required to achieve the minimum standard for a competition facility.

The University's short- and long-term plans for academic and research activities along its eastern edge are generally aligned with planning by adjacent landowners and developers in the area near the 29th Avenue Station; athletics facilities are considered less compatible. A potential energy plant may be compatible for landowners if an integrated infrastructure/utility investment can be achieved. No such plans have been made given the nature of the long-term investment.

BACKGROUND INFORMATION

The Board has discussed campus planning at several recent meetings:

- December 2015 – Long-Range Campus Planning I, Academic Health Sciences Strategic Facilities Plan; Facilities, Planning & Operations Committee
- September and October 2015 – 2016 State Capital Request; Facilities, Planning & Operations Committee, Finance Committee, and Board of Regents
- July 2015 – Long-term Campus Planning for the Academic Health Center and University Housing; Board of Regents
- June 2015 – History of AHC Planning and Findings from Phase I of the Strategic Facility Plan; Facilities, Planning & Operations Committee
- February 2015 – Overview of the Governor's Blue Ribbon Committee on the University of Minnesota Medical School and Resolution Related to the FY 2016-2017 Biennial Budget Request; Board of Regents
Areas of Focus: Board of Regents Worksession

Campus Growth: Regents Boundary

Source: 2009 Twin Cities Campus Master Plan, page 26
RESOLUTION RELATED TO THE CAMPUS MASTER PLAN FOR THE UNIVERSITY OF MINNESOTA TWIN CITIES

WHEREAS, in 1993, the Board of Regents adopted the following four campus master planning principles to direct the development of campus master plans on each of the University of Minnesota campuses:

- The principle of creating and maintaining a distinctive and aspiring vision for the physical development of each campus
- The principle of enriching the experience of all who come to the campus
- The principle of maximizing the value of existing physical assets while responding to emerging/ changing physical needs
- The principle of an inclusive, accountable, and timely process for creating and implementing the master plan vision; and

WHEREAS, in February 2006, President Bruininks charged a faculty, staff and student steering committee to update the 1996 Master Plan; and

WHEREAS, using internal resources and expertise to update the Twin Cities Campus Master Plan has resulted in the development of a plan that reflects the University community and supports the academic plan of the University; and

WHEREAS, the steering committee engaged in broad consultation with the University community, adjacent jurisdictions, community partners and adjoining neighborhoods, throughout the master planning process; and

WHEREAS, there is agreement on the vision for the campus as a sustainable community of discovery; and

WHEREAS, the administration from the University of Minnesota has recommended the adoption of this Master Plan;

NOW, THEREFORE, BE IT RESOLVED that the Board of Regents directs that the University of Minnesota Twin Cities Campus Master Plan be used to support the University’s academic mission and guide future land use and capital project decisions in accordance with the four planning principles.

ADOPTED MARCH 2009
**Charge to the Steering Committee**

In 2006, University of Minnesota President Robert H. Bruininks appointed a Master Plan Steering Committee and charged it with the task of updating the 1996 Master Plan. The charge included the following directives:

- Align and integrate the Master Plan with University core processes such as strategic positioning, academic planning, and funding expectations;

- Take full advantage of the major initiatives scheduled for the next decade;

- Focus on “growing a campus” rather than building individual buildings;

- Instill the principles of sustainability, so that the new plan leaves the campus better for future students, staff, and faculty;

- Optimize the distinction of being the largest research University that bridges the Mississippi River;

- Increase ownership of the Master Plan by the University community and ensure broad and meaningful consultation with key constituencies.

**Steering Committee**

- Judith Martin, Professor, Geography & Urban Studies, College of Liberal Arts, Co-Chair
- Kathleen O’Brien, Vice President, University Services, Co-Chair
- Sheila Ards, Associate Vice President, Community Partnerships & Development
- Terry Bock, Associate Vice President, Academic Health Center
- Beverly Dugan, Dean, & Director, Extension Service
- Art Erdman, Professor, Mechanical Engineering, Institute of Technology
- Missy Gettel, Minnesota Student Association Representative
- Denise Guerin, Professor, Design, Housing and Apparel, College of Design
- Bob Johns, Director, Center for Transportation Studies
- Kristi Kremers, GAPSA representative
- Bob Kvavik, Associate Vice President, Academic Planning
- David Levinson, Associate Professor, Civil Engineering, Institute of Technology
- Orlyn Miller, Director, Planning & Architecture
- Lance Neckar, Professor & Associate Dean, College of Design
- Jerry Rinehart, Vice Provost, Student Affairs
- Becky Yust, Professor & Department Head, Design, Housing & Apparel
- Leslie Krueger, Chief of Staff, University Services, Staff to Steering Committee
- Sara Greening, Assistant Dean, Extension Service

**Staff Team**

- Craig Armundsen, Weisman Art Museum
- Tony Brown, Recreational Sports
- Tim Busse, University Services
- Chris Frazier, Institutional Research
- Loretta Hanson, Parking and Transportation Services
- Leslie Krueger, Co-Chair, University Services
- Jim Litsheim, Architecture and Planning- CPPM
- Monique MacKenzie, Architecture and Planning- CPPM
- Orlyn Miller, Co-Chair, Architecture and Planning-CPPM
- Jan Morlock, University Relations
- Andy Phalen, Environmental Health & Safety
- Michael Ramolae, Parking & Transportation Services
- Lorelee Wederstrom, Academic Health Center
- Sally Westby, University Services
- Mapping and Graphics Consultant: CLOSE Landscape Architecture +
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CHAPTER 1

Introduction

ACADEMIC VISION
The University's ten year vision, approved by the Board of Regents in 2007, is as follows:

- An expanding University, with state-of-the-art research facilities and infrastructure that enable us to proactively recruit from peer institutions and even the private sector.

- A distinctive University that emphasizes its own strengths and those of the state of Minnesota to attract the best-prepared and brightest students, faculty, and staff from around the world.

- An agile University, with flexible structures, systems, and processes that enable rapid response to new opportunities and changing problems.

- An engaged University, fostering strong collaborative relationships with the state, federal funding organizations, industry, and donors, all of whom view the University first and foremost as a resource worth protecting.

From Strategic Positioning Report, 2007
Provost's Office, University of Minnesota

Introduction
The Twin Cities Campus Master Plan 2009 establishes a framework for guiding the evolution of the campus environment to support the academic mission. It sets the vision for the future, building upon the existing physical attributes, including natural features, open spaces, existing buildings and infrastructure, land use relationships, and the network for movement to, from, and around the campus.

Role of the Master Plan
The master plan will serve multiple functions for its various audiences.

- It will inform the University community and public of the University's aspirations and development goals.

- It will guide decisions of the University Administration and the Board of Regents regarding capital investments, physical improvements, and operational activities on the campus, affecting buildings, landscapes and infrastructure.

- It will be a tool for planners and designers to evaluate all future development proposals to ensure that each capital project contributes to the achievement of the broader campus vision.

Organizing Structure of the Plan
This Master Plan is organized in sections, starting with statements of values and aspirations and moving through progressively more detailed planning and design directives. It is comprised of the following components:

- Overview: Existing conditions that establish the current campus structure and the anticipated forces and trends that will influence its change.

- Guiding Principles: Eleven key ideas that express the aspirations of the University and provide the foundation for all plan recommendations.

- Plan Elements: Application of the guiding principles to key physical systems of the campus -- campus districts, natural resources, transportation and circulation, and public spaces and buildings -- with strategies and guidelines for achieving those principles.

- Implementation: Specific practices and tools have been identified as examples illustrating how the plan will be operationalized on a daily basis.
Drafting the Master Plan

To increase ownership of the Master Plan by the University community, this master plan was developed using the expertise of the faculty, staff and students on campus. The Master Plan Steering Committee, which represented academic, student life, environmental, and operational perspectives, developed a framework for campus evolution that:

- Established the vision for the future campus.
- Defined the programmatic drivers that will create the essence of the campus.
- Defined the quality of space and facilities needed to support the research, instructional, and outreach activities.
- Identified the infrastructure required to efficiently support academic facilities.
- Established design standards for creating a distinctive place where people want to be.

- The Steering Committee developed an inclusive process for updating the plan that engaged over 75 additional faculty, staff, students, professional practitioners on five work groups. These five work groups focused on enhancing the campus; natural features and open spaces; design and preservation; community connections, collaborative ventures and safety; and movement and access.

The groups worked for a year to produce recommendations for confirming, revising and enhancing the directives of the 1996 plan to reflect the University’s aspirations for the future. In addition to these work groups, the broader University community was engaged at key points in the process through: periodic public forums held on the East Bank, West Bank, and in St. Paul; conversations with key stakeholder groups; consultation with the University Senate Committee on Finance and Planning; and updates to the Board of Regents. During these sessions, input was received and incorporated into the plan.

STRATEGIC PLAN

The 2007 strategic plan for the University of Minnesota is based on four action strategies. They are: fostering exceptional students; exceptional faculty and staff; exceptional organization and exceptional innovation.

Decisions about the buildings, lands, infrastructure, operations and resource consumption associated with the campus will be driven by the primary academic goals articulated in the University’s strategic planning documents. The Master Plan provides guidance on the character and role the various physical components of the campus should have relative to the University’s academic goals and its physical context.
Executive Summary

The Twin Cities Campus Master Plan will support the University’s academic mission and guide future land use and development decisions over the next decade, ensuring that:

* Unique qualities of the campus will be preserved and enhanced.
* Targeted areas will evolve to enhance the long term vision of the campus.
* Individual buildings and landscape improvements will contribute to the order, unity, and image of the campus as a whole.

### Guiding Principles

The Master Plan is driven by the belief that an integrated, beautiful, well-maintained university campus will advance the institution’s academic mission. A sustainable attractive environment that fosters discovery and connections is integral to the University’s reputation and competitiveness in the nation and the world.

The foundational principles that describe the Master Plan’s core values are listed below:

1. Cultivate a genuine sense of community.
2. Strengthen connections to adjacent communities.
3. Create a cohesive, memorable system of public spaces.
4. Provide a compatible and distinctive built environment.
5. Steward historic buildings and landscapes.
6. Foster a safe, secure and accessible campus environment.
7. Preserve and enhance natural systems and features.
8. Integrate transportation systems to emphasize pedestrians, bicycles and transit.
9. Optimize the use of campus land and facilities and apply best practices.
10. Utilize the campus as a living laboratory to advance the university’s mission.
11. Make the campus environmentally and operationally sustainable.

### Plan Elements and Guidelines

A selection of key guidelines is included below. For a complete list of guidelines, see Chapter 4.

### Community Connections

Physical, academic and social relationships are the foundation of improved connections within the University and between the University and the adjacent community.

1. Apply the published Regent’s Boundary to guide future expansion of campus and to convey to the broader community the University’s long term plans.
2. Strategically site new development in locations where it will contribute to defining, consolidating and adding to the vibrancy of campus and the surrounding community.
3. Participate in initiatives that improve the visual image of the campus along pedestrian access routes.
4. Support shared interests between the University of Minnesota Twin Cities Campus and adjacent neighborhoods.
5. Collaborate with other partners to reinvest in near-campus housing initiatives that meet the needs of members of the university community.
6. Support the continued enlivening of the St. Paul campus.
7. Coordinate academic and physical resources to establish learning communities that extend beyond traditional teaching/learning spaces and classrooms.
8. Design flexible learning, living, working and gathering spaces to support community.
Natural Features and Systems
An increasingly sustainable use of resources is an underlying priority of the Master Plan. Strategic decisions about changes to the campus’ natural features will be informed by environmental, economic and social considerations.

9. Optimize physical and visual connections to the river corridor.
10. Support the intent of the Critical Area Act and MNRRRA Guidelines.
11. Avoid disturbing topography and natural features, and restore to natural conditions in the Mississippi River Corridor wherever possible.
12. Protect the Mississippi River water quality from negative impacts of campus development and activities.
13. Use best hydrological practices to protect and restore critical natural areas and other watershed resources.
14. Manage compliance with state and federal standards, and apply surface water performance standards to guide management, future planning and design.
15. Use an integrative, multipurpose and conservation approach to resource consumption decisions related to development, infrastructure and operations practices on campus.
16. Respect and respond to existing natural systems and green infrastructure elements.

17. Manage campus landscapes to achieve energy conservation, emissions mitigation and reduction of other negative environmental impacts.
18. Promote the use of campus lands and open spaces as research, teaching and demonstration lab for outreach and scientific endeavors.
19. Identify critical areas to be held open in perpetuity based on their environmental significance.

Vision Statement: Discover, Connect, Sustain
The Master Plan describes a future of the University of Minnesota Twin Cities Campus that is driven by the University’s strategic vision and academic plan. The Twin Cities Campus is a historic physical place that supports a ‘sustainable community of discovery’ — a community directed toward excellence in the teaching, research and outreach activities that define the University of Minnesota — and that inspires pride in the people who study, work, reside in and visit the campus.

The University of MN Twin Cities campus will foster connections as a supportive place for people to do their best academic work and collaborate on issues of mutual interest. The Twin Cities Campus is an environment where faculty and students are inspired to excel academically, and feel confident in their process of discovery. Design, management, operations and maintenance practices will sustain the long term environmental, economic and social viability of the institution. Staff are supported in their use of best available practices and research to make wise decisions about significant aspects of the campus’ physical features, such as its lands and buildings, energy resources, waste management and environmental remediation.
The campus is well served by a variety of transportation choices. Priority will be allocated to pedestrians, bicycles and transit in design, operations and construction.

20. Prioritize pedestrian movement over other modes whenever feasible.

21. Provide a barrier-free, safe and accessible experience of moving around on campus.

22. Design and build signature streets that reinforce campus identity and identify welcoming routes to and from campus for all modes of travel.

23. Enhance wayfinding and orientation for all modes of travel.


25. Design other streets and paths so that bicycles share space and circulate safely alongside pedestrians or vehicles.

26. Maintain high frequency, easily accessible transit service to link all campus districts and connect the St. Paul and Minneapolis campus.

27. Limit vehicular access in the core of campus to service, loading or short-term access to buildings.

28. Build or retrofit centralized building service and loading facilities whenever possible.

29. Make the campus a safe, coherent, comfortable, convenient place.

Public Spaces and Buildings

The distinct character of the Twin Cities campus will be enriched as new open spaces and buildings are developed. Public spaces between buildings will be well-connected, designed with an understanding of the role of visible, easily recognizable paths, axes and human scale open spaces.

30. Enhance the unique character of the campus through preservation of key unifying visual patterns.

31. Encourage use of campus public spaces with high quality design and maintenance.

32. Ensure that paths between public spaces and buildings support pedestrian circulation as the primary transportation mode on campus.

33. Preserve historic resources through adaptation of new facility needs to existing buildings.

34. Remove obsolete buildings when necessary to meet academic goals or to improve relationships between buildings, public spaces and natural features.

35. Design buildings to be flexible and adaptable in accommodating the university’s academic mission.

36. Plan and build new buildings located on the edges of campus to be sensitive to their impacts on adjacent neighborhoods.

37. Increase recognition of the river’s presence on campus through public space and building design.

38. Utilize renewable materials and sustainable methods in campus buildings and landscapes.
Implementation
To effectively guide future campus development decisions and operationalize its directives, the Master Plan will be consulted throughout every planning and design effort to ensure its influence on project formulation, site selection, and design development. It will also inform the University’s capital planning process and guide daily operational decisions.

Key Guidelines:

39. The University will apply extensive research and best practices in the implementation capital projects and the management of operations

40. All initiatives that affect the land use, buildings, open spaces, landscape and infrastructure of the campus shall be subject to a formal review and approval process to ensure conformance with the Master Plan.

41. Guiding principles of the Master Plan shall be applied to specific and unique conditions of the campus through the development of more detailed district plans.
Overview

Evolution of the Campus
The Twin Cities Campus consists of three distinct locations: East Bank, West Bank and St. Paul. In Minneapolis, the East and West Bank span one of the few true gorges the Mississippi River forms in its entire 2,200-mile length. About 4 miles east of the Minneapolis campus, the former agricultural experiment station was established on the edge of the city in the late 1880s and became the St. Paul Campus. The 22 million square feet and 392 acres of land that comprise the Twin Cities campus have evolved significantly since the first buildings were erected in the 1880’s. Taken as a whole, the campus in its three parts can be understood as a learning environment in which all resources, specifically the physical ones, are considered part of a web of sustaining cultural practices and systems comprising a public research University.

Minneapolis
The Knoll and the Mall are the traditional heart of the Twin Cities campus, defining an iconic academic landscape for generations of students and offering the university community remarkable architectural symbols that link present-day campus life to the University’s origins. The Knoll contains some of the campus’ oldest buildings, constructed on the foundation of H. W. S. Cleveland’s 1890s era landscape plan. In the first decade of the 20th century, the plan for the Northrop Mall, a formal north-south open space flanked by symmetrically arranged neo-classical buildings, was prepared and executed by Cass Gilbert and Clarence Johnson respectively. These places constitute the historic core of the Minneapolis campus. Their role in creating an enduring image, a sense of place and a sense of history defined the Twin Cities campus for decades.

The East Bank has traditionally housed the liberal and design arts, humanities, technology and engineering as well as the medical school. The Academic Health Center is one of the most intensely developed areas on campus, supporting teaching, research, clinical practice and in-patient/out-patient hospital activity. Since the Medical School was established, growth in the teaching and research functions has fueled expansion and infill development, moving to the east as resources and demand evolves.

A cluster of residence hall neighborhoods surround the East Bank locations, along University Avenue, the River Road and on the residential ‘superblock’ east of the Academic Health Center.

Athletics facilities have defined the northwestern edge of the Minneapolis campus for many decades. The original Memorial Stadium, demolished in 1992, has been replaced as of 2009 by the new TCF football stadium immediately east of the original location. Other facilities for University athletics and recreational and intramural sports cluster together on what had been the edge of the campus until the late 1990s.
Plans for a campus expansion across the Mississippi River to its western banks were first drafted in the late 1930’s. In the 1960’s, a number of West Bank buildings (Blegen Hall, Anderson Hall, Social Science tower) as well as the Washington Avenue bridge were constructed. Today the West Bank campus houses Liberal Arts programs (arts and humanities, social sciences), and professional schools. A smaller campus residential neighborhood clustered around Middlebrook Hall sits on top of the river bluff. The 1960s and 70s West Bank’s physical characteristics reflect the architectural concepts of the time. It consists of a handful of buildings built on landscaped and hard-surfaced podiums with little vehicular access. Grade separation of the Washington Avenue roadway from the campus protects pedestrians and bicyclists from vehicles as they cross the bridge, but also make it difficult to access transit from the ‘upper deck’ of West Bank paths and skyways.

The Twin Cities campus consists of approximately 1,100 acres located in the heart of the metropolitan Twin Cities region. The Minneapolis districts flank the Mississippi River just down river of downtown and historic St. Anthony. Four miles away, the St Paul districts are clustered around the original site of the University Farm and the first agricultural station, adjacent to the State Fair Grounds.
**St. Paul**

The St. Paul campus was established several decades after the Minneapolis East Bank location as a farm campus and agricultural experiment station. The oldest buildings on the St Paul campus date from the late 1880’s. The rolling moraine topography heavily influenced the first arrangement of buildings, which were located on a ridge oriented towards the ‘south bowl’, eventually known as the Lawn. Later 19th century buildings were sited on remaining ridge tops circling the north bowl. Today that bowl is occupied by recreational fields, to the south of the St. Paul gym.

The St. Paul campus is noted for its vast areas of open spaces and naturally occurring features, such as the edge of existing bluffs, like trails along the east river road, wooded ravines or the restored Sarita wetland. Other spaces that support recreation and gathering, such as the Lawn and Bowl, smaller quadrangles and plazas bring a distinctive identity to St. Paul.

Between the 1930’s and 1950’s, the St. Paul Campus was planned as a landscape with formal, linear and rectangular open spaces and perimeter buildings located to reinforce the effect of primary public open spaces. At the same time, a new generation of buildings were built in St. Paul, including academic and residential buildings such as Bailey Hall, the Agriculture Library and the Poultry Building.

A large acreage was built as Commonwealth Terrace Student and Family Housing in 1958, following the platting of University Grove as an architect-designed neighborhood in the 1920’s. Land purchases made between the 1930’s and 1950’s expanded the campus to the north and the lands acquired were primarily used for agricultural research and to support livestock.

Today the St. Paul campus houses the agriculture and natural resources, biological sciences, extension services,
veterinary medicine, and design in a leafy academic setting that was once an arboretum. It continues in its role as an agricultural experiment station, with research conducted in the fields, greenhouses and laboratories of the area.

**Physical Changes on Campus since the 1996 Master Plan**

Beginning in the early 1990’s, the University acquired underutilized land from the railroads, built roads and installed utilities, and demolished unused grain elevators and storage silos.

The University has re-urbanized former railroad areas by building a regular street grid and additional utility infrastructure concluded in 2007. Construction began on new football stadium in 2007, that will open in late 2009 to host major athletic and social events on campus.

This area of the campus, known as the East Gateway, began to develop as a flagship biomedical research corridor in the mid 1990s. By 2000 two buildings devoted to this work were located here. A new wave of development between 2005 and 2013 will add three more biomedical buildings in the district.

On the West Bank, an emerging Arts District reaching to Riverside Avenue created a home for performance and studio arts in the early 2000s. The Carlson School of Management has located along Riverside Avenue over the last 10 years.

Renovation of key historic buildings on the East Bank has resulted in upgrades to Jones Hall, Nicholson Hall, Education Sciences Building, Walter Library, Murphy Hall, Ford Hall and Coffman Union.

On the St Paul campus, the new Cargill Plant Genomics Building and the Equine Center have been developed. Historic renovations of Haacke Hall, Peters Hall, and Snyder Hall have renewed these buildings’ academic purpose while preserving the established physical character of the campus.

**Master Plan Assumptions**

**Stable Student Population**

The current undergraduate population of approximately 28,000 has remained constant over the last five years, after an earlier period of growth. Looking forward to the next 10 years, within the Master Plan’s horizon, state demographers project that the number of high school graduates will decrease due to declining numbers within the school-age population. Consequently, Minnesota’s universities will have a smaller pool of Minnesota high school graduates from which to recruit members of new freshman classes.

The University intends to maintain a stable student population. In order to maintain the equivalent population of undergraduate students on campus, the University of Minnesota will compete for college-bound high school graduates who currently reside in other states and countries while keeping Minnesota students a priority. In this way, the University will be able to recruit and import talent for Minnesota workforce needs. While this could lead to greater diversity within the student population, it will not significantly affect the physical use of campus facilities.

**Growth in Faculty and Staff based on Academic Plan**

The graduate and professional student population comprises approximately 35% of the full and part time student population on the Twin Cities campus. Growth in the graduate student population is anticipated as a tool to support advanced research and create succession plans for retiring faculty, and improve the talent pool for workforce needs in the state. About 40% of the approximately 3,500 faculty members will reach retirement age between 2005 and 2015.

In response to this potential for change in the faculty ranks, the University’s strategic planning effort identified a goal of hiring 1,000 new faculty by 2012. By 2008, two years into the effort, close to 460 new faculty had been hired across multiple disciplines and colleges.

**Wise Use of Resources in Facilities and Operational Practices**

Resources and design, operations and management practices used daily to support and service University buildings and operations are being studied to achieve sustainability goals.

These initiatives to conserve, reduce and change practices are critical due to the significant annual investment in the buildings, lands and infrastructure of the academic enterprise that is the University of Minnesota.

In future years, aging buildings and infrastructure will require strategically timed investment. A careful weighing of positives and disadvantages associated with each potential change in the campus’ supportive utilities will be needed so that these changes achieve the highest level of reliability, sustainability and cost-effectiveness. The Utility Master Plan, approved by the Board in 2009, suggests that a new power generation plant will be required to replace existing equipment by approximately 2020. In planning for this need, a range of alternatives will be considered including continued use of the existing southeast plant as well as creation of a new northeast campus plant. Evaluation will balance economic, environmental and social criteria prior to any University decision about that investment.
Summary of Master Plan Update Assumptions:

- Stable undergraduate student population
- Increase in graduate and research population
- Minor increase in faculty population
- Stable on-campus housing neighborhoods
- On campus housing occupied by undergraduate or transfer students
- Physical expansion of biomedical research facilities: new construction and occupancy
- Continued demand for physical upgrades and investment in University facilities based on code requirements, sustainability objectives and programmatic needs
- Engage adjacent communities in new University development projects
- Physical expansion of clinical services: new construction and occupancy
CHAPTER 3

Guiding Principles

A VISION FOR THE FUTURE

The Master Plan sets out a vision that will sustain the Twin Cities campus through the next stage of its evolution. This vision is directly tied to the University’s academic goals.

The Twin Cities Campus is an historic physical place that supports a ‘sustainable community of discovery’ – a community directed toward excellence in the teaching, research and outreach activities that comprise the University of Minnesota – and that inspires pride in the people who study, work, reside in and visit the campus.

The University of Minnesota Twin Cities campus will foster connections as a supportive place for people to do their best academic work and collaborate on issues of mutual interest. The Twin Cities Campus is an environment where faculty and students are inspired to excel academically, and feel confident in their process of discovery. Design, management, operations and maintenance practices will sustain the long term environmental, economic and social viability of the institution. Staff are supported in their use of best available practices and research to make wise decisions about important aspects of the campus’ physical features, such as its lands and buildings, energy resources, waste management and environmental remediation.

Guiding Principles

The Campus Master Plan Guiding Principles interpret and amplify the Board of Regents Master Planning Principles established in 1993. They direct future planning and design decisions to reinforce the vision of a sustainable community of discovery set forth in this Campus Master Plan.

Eleven guiding principles are presented as four themes: Building Community; Creating a Model Campus; Integrating Local and Regional systems; and Using Resources Wisely. These themes summarize the core values underpinning the Master Plan principles.
Building Community

Guiding Principle One

Cultivate a genuine sense of community

The University aims to provide a welcoming experience, accessible to all. On our campus, human connections which are the essence of a sense of community are nurtured by the physical environment. The physical campus is comfortable, yet stimulating, and evokes a sense of openness and belonging. Campus spaces provide venues for academic and artistic expression.

Guiding Principle Two

Strengthen connections to adjacent communities

The University of Minnesota Twin Cities campus is situated within the vibrant urban core of the metropolitan region. The entwining of the surrounding cities with the campus creates opportunities and connections for the campus community and adjacent communities. The goal of strengthening these ties will guide future efforts and development. As the campus and surrounding communities change, these connections will ensure that both flourish.

Creating a Model Campus

Guiding Principle Three

Create a cohesive, memorable system of public spaces

Public spaces permeate the Twin Cities Campus, providing diverse, attractive areas for all aspects of academic and community life. These public spaces contribute to the campus character and create a comfortable welcoming experience. From grand civic gathering spaces, to green and vibrant streets, to intimate courtyards, and indoor atria, these public spaces support and enrich this community of interactive human activity. These and other public spaces should be flexible, sustainable, and supportive of the academic mission of the University.
Guiding Principle Four

Provide a compatible and distinctive built environment

Our campus is an ensemble of buildings and landscapes that work in concert to create a collective experience of place. Individual buildings are understood as important elements within comprehensive building, landscape, and transportation systems. Every building plays multiple roles, balancing the needs of interior function with the need for appropriate character and relationships. High quality architecture defines the campus. New buildings are flexibly designed to respond to the functional requirements of current programs, as well as future academic programming.

Guiding Principle Five

Steward historic buildings and landscapes

The University’s historic resources provide the residents of the State with a sense of history and identity. Adaptive reuse of these buildings and landscapes contributes to the image of the campus as an enduring institution and its sense of place. The promotion of a broad understanding, awareness, enjoyment and continued use of its historic resources is important to the stewardship of the University, and to the University’s commitment to sustainability.

Guiding Principle Six

Foster a safe, secure and accessible campus environment

The Twin Cities campus ensures equal opportunities for access through the design and retrofit of its facilities. The real and perceived sense of safety is enhanced through a diversity of design and construction actions including the inclusion of a mix of land uses, landscaping, wayfinding, and the configuration and detailed design of individual buildings and open spaces. Nighttime use is supported with well designed lighting in the open spaces and along pathways. Corridors accommodating various modes of travel are preferred because they are safer and more vibrant. Pedestrian movement is given the highest priority.
Integrating Local and Regional Systems

Guiding Principle Seven

Preserve and enhance natural systems and features

The Twin Cities Campus has a number of important and in some cases spectacular natural features. The Mississippi River, native plant communities, and topographic features contribute to the quality of life on campus and in the surrounding communities. Stewardship of these natural features requires balancing conflicting needs and desires for recreation, research, and contemplation. Such balance can be achieved through development that preserves, enhances and respects the value of these features within the broader regional ecosystem.

Guiding Principle Eight

Integrate transportation systems to emphasize pedestrians, bicycles and transit

Integrated transportation systems that ensure pleasant and safe access and movement give priority to pedestrians and bicyclists, followed by mass transit and then automobiles. These systems facilitate human interactions to promote a sense of community within the campus and between the campus and adjacent neighborhoods. These systems are integrated into the campus design and land use system to enhance movement as well as the overall campus design.

Guiding Principle Nine

Optimize the use of campus land and facilities and apply best practices

Campus facilities must be used efficiently and effectively in support of the academic mission. Assignment of space should encourage interdisciplinary use. Space needs are met first in ways other than building new facilities. Space is flexible and adaptable to ensure buildings can meet academic needs. The development and utilization of University facilities is guided by best practices.
Using Resources Wisely

Guiding Principle Ten

Develop a campus that is environmentally and operationally sustainable

A sustainable campus integrates ecological conservation, economic viability, and social equity through design, planning, and operational organization to meet current needs without compromising the ability of future generations to meet their own needs. The University strives to become a local, regional, and national leader in the application of sustainability practices, bringing appropriate methods and measures into all areas of our teaching, research, and outreach, and making sustainability a key component of our Master Planning efforts. Sustainability goals must inform campus decisions on energy, development and maintenance of buildings, protection of indoor and outdoor environments, and relationships with adjoining communities. Special attention is given to the University's sensitive location on the Mississippi River.

Guiding Principle Eleven

Utilize the campus as a living laboratory to advance the university's mission

The academic mission of the University is demonstrated by using the campus as a living laboratory. Open spaces and natural features become opportunities for research and discovery. Teaching uses on-campus examples where appropriate. Operating units partner with academic leadership to bring the best research of the University to guide changes made to the campus environment.

discover connect sustain
Plan Elements and Guidelines

Community Connections

The University of Minnesota Twin Cities Campus is recognized state-wide as an educational, research and economic center in the metro area and the state. As the campus evolves over the next 10-15 years, a primary planning goal is to advance the University as a regional hub of activity, research, teaching and outreach, while enhancing the sense of community within the Twin Cities Campus and with our neighbors. This physical campus provides a space for people to work, create, learn, and gather together. Cultivating a genuine sense of community in planning our physical spaces and in our campus operations will evoke a sense of openness and belonging within Campus and with the broader University community.

A Welcoming Campus Environment
The University of Minnesota Twin Cities Campus is a special place for those who live, work, learn and visit here. Serendipitous encounters with colleagues or friends are supported in attractive, pleasant indoor and outdoor spaces. Historic architecture and contemporary buildings contribute to the physical identity of the campus. A sense of place is defined by daily experience of teaching, learning, research and outreach activities that occur across the campus and brings us together as a community. To better cultivate this sense of community, the University must continue to provide a well-maintained, attractive, welcoming campus environment. Such an environment can be achieved through focused effort and planning and is enriched by the implementation of the guidelines found throughout the master plan.

Guidelines
1. Give priority to comfortable, safe, and accessible environments that dignify and show respect for all members of the university community and that encourage ongoing, frequent involvement with programs and services.
2. Continue to support teaching, applied research and service learning connections between the Twin Cities campus and surrounding communities.
3. Design flexible learning, living, working, and gathering spaces to support community.
4. Promote the use of certain campus areas as a 24/7 learning environment.
5. Coordinate academic and physical resources to establish learning communities that extend beyond learning spaces and classrooms.
6. Leverage use of technology-enabled learning spaces for both use by the University and its community partners.
7. Promote and enliven special spaces that define the University and enhance community.
8. Support the continued enlivening of the St. Paul campus following recommendations of the report, Defining the St. Paul Campus. (Feb 2008).

Guiding Principles
The guidelines laid out in this section address key community connections challenges, consistent with the following Guiding Principles:

- Cultivate a genuine sense of community.
- Strengthen connections to adjacent communities.
- Create a cohesive, memorable system of public spaces.
- Foster a safe, secure and accessible campus environment.
Boundaries & Integration with Surroundings

This Master Plan projects the University’s growth over the next 10 years to promote an understanding of the University’s plans for the future growth and to reduce the potential for distortion in land values and unanticipated demands on street and utility infrastructure. Neighbors and private property owners near campus desire more predictability about where the boundaries will be in the foreseeable future.

The figure below, Campus Growth, provides a guide to the University’s future expansion plans. It indicates (a) land that the University currently owns, including land occupied by other entities, (b) land in which the University of Minnesota Foundation has ownership interests, and (c) land that the University may consider owning within the ten-year time horizon of the master plan. Anticipated and potential acquisitions are concentrated in the area between Oak Street and Huron Boulevard north of Fulton Street. Additional acquisitions within the plan’s time horizon for which specific parcels have not been identified include:

- A site for a new energy plant northeast of the East Bank campus.
- Land for potential replacement of University service facilities currently located west of 25th Avenue SE and south of Como Avenue in the Como Service Area if this land is transferred to the Minneapolis Park and Recreation Board for park purposes.

Campus Growth: Regents Boundary
Within the plan’s horizon there may be additional acquisitions that are unforeseen at this time. Such activity would take advantage of specific opportunities for strategic purposes. These scenarios may include:

- Land adjacent to the transitway that could be used to expand the University’s research activities or to provide support services for the campus.
- Properties that can be adapted to accommodate expanding University programs.
- Properties for which short or long term holding by the University would advance the objectives of the University Alliance.
- Land and facilities located within a joint planning area that have strategic value to the University and would stimulate redevelopment of the district.

Guidelines

9. Apply the published Regent's Boundary to guide future planning and expansion of campus activities and to convey to the broader community the University's long term plans.

10. Strategically site new University and University-affiliated development in locations where they will contribute to defining, consolidating and adding to the vibrancy of campus and the surrounding community.
University Alliance

In the 2006 MN legislative session, approval of funding for the construction of an on-campus football stadium spurred a comprehensive partnership between stakeholders including the University, immediately adjacent neighborhoods, the City of Minneapolis and Hennepin County. Out of this partnership, a series of shared values and objectives for evolution of the area in and around the campus emerged.

“The destiny of the University is inextricably linked to the destiny of the adjacent neighborhoods. If the University of Minnesota is to achieve its mission, with maximum positive impact on the state, the City of Minneapolis, and the neighborhoods surrounding its campus, there is a need to create a new relationship that focuses on mutually beneficial and collaborative action.”

Source: Moving Forward Together: U of M Minneapolis Area Neighbvhood Impact Report 2006, p. 4

Shared Geography and Areas of Influence

The Areas of Influence - Twin Cities Campus map on page 27 illustrates the University’s area of influence on adjacent neighborhoods. It shows the University’s landholdings, sensitive edges between the campus and adjacent neighborhoods, and proposed joint planning areas.

Areas of Influence are described as locations where the land and housing markets are affected by university-affiliated populations (students, faculty and staff), and where transit service or high volume streets make neighborhoods as conveniently accessible to the campus. Most of the land within the ‘area of influence’ is not owned or controlled by the University. Partnerships and project collaboration are needed to foster a mutually beneficial, positive environment.

Sensitive edges are mapped to indicate real estate, environmental, research or activity impacts experienced by neighborhoods and the campus itself.

Joint planning areas are districts immediately adjacent to the campus that are in transition and may accommodate future redevelopment. Many of these areas have been identified as strategic locations by neighborhoods or municipalities. By identifying these locations, the University is communicating its desire to work with landowners, neighborhoods and respective municipalities to plan for the mutual benefit of University and the community. Additional land acquisition by the University within these boundaries may occur at some future time. Whenever possible, these activities will be informed by a collaborative planning process with area stakeholders.

One of the key objectives of the 2009 Master Plan is to better define and present the University’s physical image to the broader community. The peripheral areas of the campus which may traditionally have been viewed as a back door actually function as a front door to adjacent property owners and neighborhoods. The types of uses and activities that locate on these edges influence the nature of the University’s relationship with its neighbors. Building architecture and interaction along public streets is another key component of compatibility and integration.

Guidelines

11. Ensure that new development located at the campus’ edge conveys the institution’s image and physical identity, while acknowledging and respecting the adjacent urban environment.

12. Participate in initiatives that improve the visual image perceived along student and visitor pedestrian access routes.

13. Support efforts to promote local businesses and community services to students, staff and faculty as potential patrons of these enterprises.

Support for Diverse, Vibrant Neighborhoods

People are drawn to communities with a strong mix of learning, culture, employment, and living options. Neighborhoods surrounding the University of Minnesota need to be vital and attractive, so that staff, faculty and students find many reasons to choose to live close to campus. Long-term residents and students deserve safe, affordable, quality housing. Commercial areas in Dinkytown, Stadium Village, and Cedar-Riverside can be enhanced by customer traffic originating from the University community. The neighborhoods adjacent to the University campus expect well-cared for public assets such as schools, libraries, and parks. These qualities are closely linked to the University’s attractiveness.
14. Support the mutually reinforcing relationships as well as shared interests between activities on the Twin Cities Campus and in adjacent neighborhoods.

15. Collaborate with other partners to reinvest in near-campus housing initiatives that meet the needs of members of the university community.

**Attention to Essential Livability Issues**

In an urban setting, basic livability issues are core to how students, staff, faculty, and visitors experience campus, as well as to how the campus impacts its neighbors. Safety and security are critical to the livability of both the campus and the surrounding community. The University recognizes its impact on the surrounding communities. It is working to better mitigate potential negative campus related impacts and to leverage opportunities to present the University as a welcoming environment for all.

**Guidelines**

16. Promote community building and awareness among multiple stakeholders who live, work, visit, or own property in key neighborhoods adjacent to the University and ensure strong communications linkages with the University.

17. Expand community policing strategies and collaboration with other jurisdictions to provide crime prevention and enforcement resources that address issues such as property crime, nuisance noise infractions and other critical livability issues.

18. Incorporate crime prevention through environmental design (CPTED) principles in planning for new buildings, campus paths, entrances and gateways.
Natural Features and Systems

Natural features that exist within an urban setting can physically and conceptually build links between people’s experience of the built environment, such as lookout points on the river bluff paths and larger regional ecosystems, such as the regional Mississippi River watershed. The Twin Cities Campus is unique is its abundance of natural features in such an urban setting. As such, its sustainability is critical to daily activities occurring on campus - teaching, research, civic engagement, and operations - and requires a multi-layered planning process to steward its interconnected resources. This planning process underpins the Regents’ policy on sustainability.

The University is committed to positively impacting natural resources. The opportunities from such a commitment can result in environmental benefits that can generate positive results on the campus. A philosophy of restorative investments in ecosystem and hydrological features that transcend the boundaries of the campus reflects the Master Plan’s priorities on sustainable design, planning and operations.

This section of the master plan addresses the natural setting and unbuilt spaces of the campus. These outdoor spaces provide both literal and metaphorical grounding for all of the principal purposes of the University. The Twin Cities campus’ natural setting, overlaid by an open and welcoming civic realm and fitted with a resilient and sustainable infrastructural system, is alternately backdrop and systemic foundation for the University’s work.

Guiding Principles

The guidelines laid out in this section address key natural systems and features challenges, consistent with the following Guiding Principles:

- Preserve and enhance natural systems and features.
- Make the campus environmentally and operationally sustainable.
- Create a cohesive, memorable system of public spaces.
- Utilize the campus as a living laboratory to advance the University’s mission.
**Mississippi River Corridor**

The Mississippi River is a powerful natural feature, and as the river has been transformed from an industrial waterway to ecologically restored corridor, it offers opportunities for recreation and experiential learning. The Knoll shaped the identity of the campus for 19th century campus users, and the Northrop Mall and the West Bank elaborated on that character in the 20th century. The Mississippi River corridor will become known as the open space that integrates the East and West Bank locations in the 21st century.

The campus comprises the largest contiguous block of single-owner publicly held developed space in the Mississippi National River and Recreation Area. As such, it provides a unique opportunity to serve as a “best practices” laboratory for sustainable physical development, based on the assumption that all development on the bluff will have a direct impact on one of the most important and fragile developed river systems in the world.

**Guidelines**

19. Optimize physical and visual connections to the river corridor through:
   - feasible extension of access corridors (e.g. Scholars Walk, Washington Ave Bridge, West Bank 4th Street to the riverfront recreational area).
   - creation of new views from existing bridges, over looks and buildings.
   - orienting new buildings and building ensembles to respond to unique riverside locations.

20. Support the intent and spirit of the Critical Area Act and MNRRRA guidelines by:
   - protecting and preserving the River as a unique and valuable state and regional resource for the benefit of the health, safety, and welfare of the citizens for the state, region, and nation.
   - preventing and mitigating irreversible damage to this resource.
   - preserving and enhancing its natural, aesthetic, cultural, and historical value for public use.
   - protecting and preserving the River as an essential element in the national, state, and regional transportation, sewer and water, and recreational systems.
   - protecting and preserving the biological and ecological functions of the corridor.

21. Avoid disturbing topography and natural features or restore to natural conditions in the Mississippi River corridor wherever possible.

22. Protect river water quality from negative impacts of development and campus activities through stormwater management, energy development and use, or other ecologically significant development initiatives.

**Wetlands and Other Water Resources**

Other wetlands and surface water bodies that traverse the St. Paul and Minneapolis campuses contribute to the overall health of the environment. Restoration of these natural features and conservation of existing resources will improve the quality of the local and regional environment.

**Guidelines**

23. Use best hydrological practices to protect and restore critical natural areas and other watershed resources when planning, designing and building new or replacement infrastructure and buildings.

24. Manage compliance with state and federal standards and develop surface water performance standards to guide management and future planning and design. This should include surface and ground water interactions, stormwater hydrological capacity, infrastructure connections and capacity, and wetland and surface water conservation among other issues.
Sustainable Use of Resources

Stewards of a livable campus need to focus on both the present and enduring livability of the campus. Sustainability is a continuous effort, integrating ecological conservation, economic viability, and social equity through design, planning, and operational organization to meet current needs without compromising the ability of future generations to meet their own needs. Sustainability research and teaching must inform campus decisions on energy, development and maintenance of buildings, protection of indoor and outdoor environments, and relationships with adjoining communities. The Campus embraces use of local and low impact materials; waste avoidance and recycling; greenhouse gas reductions through energy efficiency and use of renewable energy; water managed as a resource rather than a waste product; and meeting space needs through re-use of existing buildings and design of new buildings that reflect best practices in sustainable building development.

The open space of the St. Paul campus presents an opportunity to establish a 21st century campus community laboratory on sustainable practices. Its form and uses suggest that it could be the model of sustainable multifunctional community environments for this region. The St. Paul campus is structured around open spaces that integrate hydrological, agricultural and ecological systems. It is particularly suited to the use of the campus as a living laboratory in support of the academic focus on water, ecology, natural resource conservation, horticulture and agriculture.

Guidelines

25. Use an integrative, multipurpose and conservation approach to resource consumption for all development, infrastructure and operations practices on campus.

26. Respect and respond to existing natural systems and multifunctional green infrastructure elements by:
- siting buildings and control of building footprint and other impervious surfaces.
- linking infrastructure upgrade projects (e.g. additions to heating and cooling capacity) with green infrastructure projects such as planting, vegetation restoration, and stormwater projects.
- preserving or restoring and managing existing and project-associated vegetation, including use of native species.
- preserving or restoring wetland areas and linked green infrastructure.
- enhancing livability, public accessibility and visual and experiential qualities of campus open spaces.
- utilizing the University's subsurface database of geological and hydrological features in planning and development.

27. Identify areas that should be held as open spaces in perpetuity based on their environmental significance.

28. Manage campus landscapes with standards that achieve energy conservation, emission mitigation and reduction of other negative environmental impacts.

29. Promote the use of campus lands and open spaces as research, teaching and demonstration spaces for outreach and scientific activities.
Movement and Circulation

On a typical day, 80,000 people travel to the Minneapolis and St Paul campus districts. While nearly sixty percent commute from distances less than 5 miles away, approximately 32,000 of these people live more than 5 miles away from the campus. The transportation choices each of these people make for their daily trip to their office, class or laboratory has a direct effect on the physical and environmental conditions found on the Twin Cities campus.

Some areas of each district are well-served by the transportation network. Other areas are negatively affected by inconvenient, uncomfortable and unsafe streets and paths. The primary challenges found on the urban Twin Cities campus are:

- vehicle congestion stemming from competition for street space and movement.
- managing conflicts between different modes of travel, such as pedestrians and cyclists.
- construction and maintenance of important connecting segments in all circulation networks.

Guiding Principles

The guidelines laid out in this section address key movement and circulation challenges consistent with the following Guiding Principles:

- Develop integrated transportation systems emphasizing pedestrians and transit.
- Ensure that campus is environmentally and operationally sustainable.
- Provide a compatible and distinctive built environment.

A majority of students, faculty, staff and visitors live less than 5 miles away from campus. More than half walk, bike or take transit to get to the Twin Cities Campus. Source: Transportation Fundamental Facts, University of MN Parking and Transportation Services, 2008.
Wayfinding Recognizable Routes Into the Campus

A clear, logical system of wayfinding and directional signage to reach campus from outside campus boundaries and to direct vehicle, pedestrian, and cyclist movement within campus will continue to be expanded. Public campus destinations draw citizens from all over the region, to cultural, academic and sports venues on campus. Signage placed within existing and new public open spaces will link public destinations to major campus entry points, transit stations, and large public parking facilities. A balance will be maintained between general public access and the need to limit access to certain areas of the campus. Gateway locations are areas where route choices must be made, and are usually found on signature streets. Entry points are often identified with monument signs and indicate University land ownership as well as points of access and egress to the campus. More detail is found on the Vehicle Wayfinding Map on page 39.

Guidelines

30. Develop unified signage and orientation tools designed for each mode of travel so that campus users can better navigate between the two campus areas and within districts.

31. Deploy digital and wireless technology when practical to meet wayfinding goals.

32. Require legible, safe and welcoming pedestrian connections from public parking sites to canters of campus.

33. Designate gateway locations and make them readily identifiable by a) using signs and orientation devices to guide users and visitors between destinations such as parking and reception/welcome sites; b) introducing or expanding landscape features such as fences, planting, sidewalk treatments, lighting.

Use of the University's wordmark at key route choices locations will support branding of the campus and convenient wayfinding for travelers using a variety of transportation modes.
While most of the Twin Cities Campus is dominated by pedestrian and bike traffic in vehicle free zones, route finding to parking structures will continue to be an important component of campus accessibility. Additional guidelines on parking are provided on page 49.

Vehicle Wayfinding - Campus Parking Locations
Pedestrian Priority

Most of the 80,000 people moving around campus daily do so on foot. This situation is due to the historic origins of the campus, a place designed and built to accommodate large numbers of people before vehicles dominated communities and campuses. Investments that support the campus as a pedestrian-dominated place include tree planting and pedestrian scale lighting along streets, the location and treatment of bike trails and sidewalks, preservation of open space in high-traffic pedestrian areas and pedestrian-oriented wayfinding and directional signage. Healthy, active living is reinforced on campus due to the dominance of pedestrian traffic and the variety of uses found within reasonable distances. Year round comfort, convenience and safety for the walking population is a goal of continued investments in pedestrian facilities on campus.

Guidelines

34. Establish vehicle-free zones where pedestrian volumes, iconic open spaces, and adjacent land use patterns preclude use except by pedestrians or cyclists.

35. Develop pedestrian connections that will:
   • Continue to share corridors with other modes of movement along streets or paths;
   • Enable pedestrians to take the most direct route between major destinations;
   • Prioritize pedestrian movement over other modes of travel whenever possible.

36. Extend the existing network of weather protected environments (tunnels or skyways) in appropriate locations.
Safe and Accessible Movement on Campus
Pedestrian places will be designed or retrofitted to comply with provision of the Americans with Disabilities Act (ADA). Personal safety through improved design will also be emphasized. Continued retrofitting of historic areas of campus to provide a barrier-free experience to all visitors, students, staff and faculty is a component of the Master Plan.

Guidelines
37. Meet ADA requirements for pedestrian facility improvements to make all areas and facilities fully accessible.

38. Apply the following principles for safe, accessible design of the pedestrian environment:
   • Avoid the creation of isolated dead end spaces, sunken or elevated plazas out of direct view of passers by.
   • Increase the number of centrally monitored security cameras in highly traveled places on campus.
   • Ensure ground floor visibility from buildings that allows for a casual means of surveillance of outdoor activity.
   • Locate mixed uses such as retail or support services in buildings to extend the hours of activity next to public areas where market demand can support such uses.
   • Use multipurpose lighting scaled for pedestrians and vehicles.
   • Create unobstructed views, without landscape plantings in a zone between 2’ and 6’ above grade.
   • Provide diverse and abundant places to sit.
   • Create a clearly designated system of well-lit and secure after-dark walking routes.

Conflict Zones:
1. West Bank Transit
2. West Bank Bridgehead
3. Mondale Law Library
4. East Bank Bridgehead
5. Roundabout @ Pillsbury
6. 15th Avenue Entry
7. Between Scholar’s Walk + Cooke Hall
8. Ramp + Alumni Center Crossing
9. Oak and University Crossing
10. Multi-modal Station Stadium Village
11. Cleveland Avenue
12. Gortner Ramp Entry

Pedestrian Framework - St Paul Campus
Conflict zones indicate locations where pedestrian traffic conditions should be improved, either through physical redesign or operational practices.
Bike Network
Biking is a heavily used mode of travel to, from, and within the campus, and is considered compatible with pedestrian priority travel. Generally, bikes share sidewalks along streets and paths through public open spaces with pedestrians, and share streets with vehicles.

Bicycle Movement on Campus
Bicycle movement on campus is supported in two primary ways. The first is dedicated on-street bike lanes that provide a through-route from regional facilities on both campuses. The second form of bike movement on paths and vehicle free zones, occurs where bikes are expected to co-exist with pedestrians who have first priority. This includes unique dismount locations such as Scholars' Walk, Northrop Mall and the WB Plaza.

Guidelines
39. Subordinate bicycle travel to accommodate pedestrians within the campus.
40. Encourage cyclists to respect dismount zones and limit speeds (maximum 10 m.p.h) to reduce conflicts where there is high pedestrian traffic.
41. Separate bike and pedestrian traffic when possible by integrating the bicycle network into the street network with on-street lanes.
42. Expand routes for bicyclists to get around within the campus districts.
Bicycle Travel to Campus
Bicycle movement to and from the Twin Cities campus is expected to be a significant component of commuter travel into the future. The large undergraduate student population living in residence halls or close to campus will ensure that the bicycling population on campus will continue to be present and visible in future years. The number of regional facilities that bring people to the Minneapolis or St Paul locations, including on-street bike lanes and regional trails, is growing steadily and is expected to expand as new projects are funded and implemented.

Guidelines
43. Collaborate with other governmental units to develop regional bike routes that provide access to campus.

44. Provide safe, convenient accommodation for cyclists on paths that are clearly delineated from other modes of traffic.

45. Ensure the safety of bicyclists sharing movement space with vehicles by providing signage that recognizes the presence and priority of bicycles in the roadway, especially on campus local streets.

Bicycle Support Facilities
The ability to safely store or park a bicycle and related gear will directly affect the bike commuting population. Co-locating bike storage and service facilities with transit stations and parking facilities saves resources and offers campus commuters improved transportation alternatives. The supply of bike lockers and bike racks should reflect overall campus travel patterns and demand. Location decisions will be based on available space and the extent that these environments are safe, visible, well-lit and weather protected. The University’s Construction Standards (see Implementation Chapter) should be consulted for additional detail.

Guidelines
46. Accommodate bike parking facilities at appropriate locations with guidance from the University’s Construction Standards. Bike parking will not interfere with primary pedestrian paths and public open spaces, and where possible parking should be located proximate to building entrances in well-lit visible locations.

47. Build bike centers that provide storage lockers, showers, and repair kiosks on each campus – East Bank, West Bank, and St. Paul.

Regional Trail Network

The Twin Cities Campus is centrally served by off-street paths and trails that provides important bicycle connections to more distant communities.
Light Rail Transit

Planned light rail transit (LRT) service on Washington Avenue will usher in a new era for transit on the Minneapolis campus. Convenient, reliable, and frequent rail service to high volume destinations along the corridor will offer transportation choices previously unavailable to the University community. LRT service will pass through the East and West Bank campuses, closing a five block portion of Washington Avenue to accommodate traffic. Elimination of through traffic on one of the two minor arterials on the Minneapolis campus will force traffic on to other campus streets. Improvements are planned to mitigate the adverse effects of rerouted vehicular traffic on and around the campus.

The volume of pedestrian and bicycle traffic on Washington Avenue will increase substantially due to the absence of automobiles. The University will capitalize on the benefits provided by the Central Corridor LRT by creating an attractive pedestrian-focused environment on the five block portion of Washington Avenue that will be closed to vehicular traffic. Pedestrian-focused environments will also be developed adjacent to the two LRT stations located on the West Bank and in Stadium Village.

Transit Network

In the last decade, significant progress has been made to expand employee and student use of transit to get to and from campus. As travel time and the cost to drive alone increase, transit will be favored by a larger share of the university community. Strong transit alternatives allow for economical trips to the campus from all over the metropolitan area, and efficient movement between campuses. Good transit service is essential to future campus development.

Design of the station areas and LRT operations at three planned campus locations will reinforce the experience of a pedestrian-focused place that accommodates transit and bicycle movement.

Guidelines

48. Pursue traffic mitigation on campus streets to minimize negative impacts on campus buildings

49. Design streetscapes on LRT corridors to prioritize pedestrian comfort and convenience, wayfinding and visual recognition of the University campus

Future Transportation Changes

Campus circulator and inter-campus service is planned to be re-routed once LRT operations begin in approximately 2013.
Regional Service
Regional bus transit serves the campus directly from the central cities of Minneapolis and St Paul as well as outlying suburbs. This includes local and express service from the regional transit provider (Metro Transit) as well as suburban routes operated from distant suburbs from all over the metro area.

Guidelines
50. Coordinate route and schedule synchronization of intra-campus service with regional transit service providers.
51. Promote use of regional transit services by offering incentives and low-cost fares.

Synchronized Transit Stop
Left: Synchronized transit stops provide links between regional bus service and campus transit. In future years, the two types of service will include LRT service as well.

Conflict Zones:
1. West Bank Transit
2. West Bank Bridgehead
3. Mondale Law Library
4. East Bank Bridgehead
5. Roundabout @ Pillsbury
6. 15th Avenue Entry
7. Between Scholar's Walk + Cooke Hall
8. Ramp + Alumni Center Crossing
9. Oak and University Crossing
10. Multi-modal Station Stadium Village
11. Cleveland Avenue
12. Gortner Ramp Entry

Transit Framework - Twin Cities Campus
Conflict zones indicate locations where traffic conditions should be improved, either through physical redesign or operational practices.
On Campus Service

The regional transit system interfaces with the University transit services at transit stops along major arterials that pass through the campus. The University’s on-campus transit system consists of two components: the campus shuttle and the campus connector.

The campus shuttle provides internal circulation loop trips within all districts of campus. The campus connector, which operates on Washington Avenue and the intercampus transitway, serves as the primary connector between all three campuses – West Bank, East Bank, and St. Paul.

Transit service operated by the University is designed to meet intra-campus travel needs on a regular reliable schedule, and to transport people to and from satellite parking lots to the core of campus districts. As the campus grows, service routes within localized areas, especially the East Bank, will realize increases in demand and level of service frequency.

Guidelines

52. Continue to operate the intercampus Transitway to accommodate a variety of bus types, and support use of the facility by bicyclists and pedestrians in appropriate locations.
Transit Rider Experience

All components of the transit rider’s experience, from shelters to safety to real time information downloads, are the subject of the University’s efforts to reinforce the benefits offered by transit found on a high-density urban campus. Improving the transit rider’s experience is a high priority and will encourage greater transit use.

Looking forward, the Central Corridor will bring Light Rail Transit service between Minneapolis and St. Paul. Design of the station areas and LRT operations at three planned campus locations will reinforce the idea of a pedestrian environment that accommodates transit and bicycles movement.

Guidelines

53. Adapt the use of innovative technologies to improve transit facilities and service for members of the university community.

54. Develop transit shelters/ waiting areas to accommodate rider volume while maintaining appropriate pedestrian thoroughfares in varied sidewalk conditions.

55. Use signage and shared design elements, including lighting, to identify primary pedestrian routes to and from major transit waiting areas.

56. Design streetscapes on LRT corridors to prioritize pedestrian comfort and convenience, wayfinding and visual recognition of the University campus.

Automobile/Vehicle Network

Even with the addition of Light Rail Transit and increases in the use of traditional transit service, automobile traffic to and from the Twin Cities campus will continue to stress the capacity of the street system. The street network within and adjacent to the campus must support multiple modes of travel, including transit and bikes, while allowing for reasonable vehicular movement to the campus. Once on campus, vehicles are expected to operate at reduced speeds and with limited access to campus buildings.

The street networks of the Minneapolis and St. Paul campus districts are important organizing elements for the University’s lands and buildings. Arterial streets serve regional trips and carry high volumes of rapidly-moving traffic which create conflicts with pedestrians and bicyclists. Smaller, less busy streets distribute traffic from arterials to areas of the campus.
**Campus Signature Streets**

One of the key objectives of the master plan is to create a transportation network that is responsive to different modes of travel depending on location. Some places on campus are dominated by transit or vehicle traffic. They convey many thousands of daily visitors to campus, creating a lasting impression of entry or exit from the campus. Conversely, in other areas such as Northrop Mall or the Knoll, pedestrians dominate. The core areas of each campus will be primarily pedestrian, cyclist and transit-oriented. The streets that people travel to reach the campus are shared between modes of travel, but the dominant mode on campus is pedestrian and bicycle traffic.

Signature streets must allow vehicle movement while maintaining a safe and comfortable environment for pedestrian and bike travel, Signature streets signal a sense of arrival and campus identity. Design and use of these streets should recognize the functional nature of these routes while providing features and facilities that prioritize pedestrian and bicycle traffic at key locations and within established safety parameters. Gateways and entries that mark the transition between the campus and its surroundings are typically encountered on signature streets. Wayfinding and orientation relies on these streets to provide direction and access to primary campus destinations.

**Guidelines**

57. Design signature streets to accommodate all modes of travel, with walking as the highest priority followed by bicycling, transit, and private vehicles.

58. Invest in streetscapes on signature streets that create meeting places, with spacious sidewalks, trees where feasible and attractive street furniture to foster interaction between people.

59. Work in partnership with key agencies to advance safe and convenient movement of all modes of traffic.

**Street Function**

Throughout the Twin Cities Campus, streets are used by a broad range of modes of travel — automobiles, delivery and service vehicles, emergency vehicles, buses, pedestrians and cyclists. The competition for limited space has created congestion in areas of high demand. New and reconstructed streets on campus must continue to accommodate multiple modes of travel at low-to-medium volumes and speeds, with minimal conflicts. Streets must also provide visibility and security needed on the campus.

**Guidelines**

60. Create a network that is easily understood and well connected for daily users and occasional visitors.

61. Design local campus streets for safe and comfortable use by multiple modes of transportation.

62. Discourage through traffic on local campus streets using techniques that limit speed.
Traffic Management
Reducing congestion on campus streets is dependent on having attractive alternative route and mode choices for campus workers, students, faculty and visitors. Encouraging faculty and staff to live in attractive adjacent neighborhoods manages conditions by reducing vehicle congestion as well as campus parking supply. By furthering the priority for pedestrian, cyclist or transit movement within the campus, the number of vehicles attempting to reach destinations in the heart of campus is expected to remain steady or decline.

Guidelines
63. Encourage appropriate agencies to construct bypass routes to reduce congestion resulting from non-university destined trips.
64. Promote and support the regional transit system as a tool to manage vehicular demand on the street network.
65. Manage daily and event traffic operations by providing up-to-date traffic and parking condition information to travelers.

Service Access and Loading
Service functions, such as loading docks, trash pick-up, and maintenance access, are essential, but are often unattractive elements of the campus environment. Service traffic creates congestion problems in some high traffic areas. Consolidating service facilities and sharing access routes is encouraged to better utilize land resources, improve operational efficiency, and reduce visual disruption.

Guidelines
66. Create centralized building service and loading facilities that support a pedestrian focused campus environment.
67. Consolidate loading and service facilities to serve multiple buildings.
68. Accommodate limited short-term delivery functions in areas where traffic and pedestrian movements will not be compromised.

Parking
Major parking facilities are generally located at the periphery of campus adjacent to arterials, with some exceptions at areas of high visitor demand. Frequent circulator bus service brings motorists from the peripheral parking locations to their destinations in the heart of the campus.

As land becomes scarce and existing surface parking lots are used as sites for new academic buildings, there will be fewer surface parking spaces located at the periphery of the campus. The parking demand will be accommodated in limited structured parking at the periphery, serving both the daily and event parking demand as well as providing convenient parking for adjacent academic buildings.

Guidelines
69. Promote existing park-and-ride lots and expand park-and-ride service to primary campus destinations.
70. Locate parking structures in proximity to arterial streets to minimize conflicts with pedestrian or bicyclist travel.
71. Maintain a limited supply of conveniently located short-term parking within a 10 minute walking distance of academic and administrative buildings.
Public Spaces and Buildings

This master plan establishes a vision for a physical campus that supports a vital community of research and higher learning. Buildings and open spaces comprise a learning environment that is both physical and cultural. The public realm on campus needs to be inviting to promote and encourage interaction.

The campus covers a large geographic area is divided by the Mississippi River valley and a former industrial area. Campus districts are visually distinguished by architectural styles prevalent when they were developed and by their function. While there is a visual character that unifies the Twin Cities campus, integration of these districts would benefit the campus’ identity.

A vital, integrated campus is coherent, connected, comfortable and convenient. It has a clear character. These elements of identity will improve the quality of the campus experience.

- Convenience is established with a broad range of land uses within close proximity or easy reach. Public spaces are designed to encourage interaction and private contemplation.
- Character denotes campus with a distinctive visual image displaying continuity and variety. Unity is provided by common materials that recur throughout the campus. Variety emerges through compatible districts that present distinctive styles. Variety is further reinforced with special features of artistic expression.

Guiding Principles

The guidelines laid out in this section address key public spaces and buildings challenges, consistent with the following Guiding Principles:

- Cultivate a genuine sense of community.
- Provide a compatible and distinctive built environment.
- Optimize the use of campus land and facilities.
- Foster a safe, secure and accessible campus environment.
- Steward historic buildings and landscapes.
- Create a cohesive, memorable system of public spaces.

Hasselmo Hall and Coffman Union, 2004
Campus Organization

The campus is composed of coherent development patterns that reflect evolution over a long period of time. Patterns vary from one district to the next, affecting the size and shape and use of the public spaces between buildings. Each district’s architectural styles have clear form and character following the trends that were prevalent during the period in which each district was built and these architectural styles also set the context for the public spaces between buildings. Brick unifies the campus. It is the primary material for buildings at all three locations (East Bank, West Bank and St. Paul) and gives strong direction to overall campus visual character. As new buildings have been added, care has been taken to relate them visually to nearby buildings, using similar scale, style, window patterns and proportions, and entryway placements. Exceptions to this continuity are a few special use or landmark buildings specifically designed to contrast or attract attention.

Axes and Paths

An overarching order provides a sense of orientation. For example, on the East Bank campus, the Mall heavily influences a person’s sense of orientation. It is a formal axis on which major buildings were placed forming a dominant public space. Many pathways connect the Mall to other areas of campus, organized in less formal patterns.

Washington Avenue will become a new axis of significance when it is converted to a pedestrian/transit mall. When light rail begins operations on Washington Avenue, it will become a more dominant arrival space on campus, symbolically making the pedestrian/transit mall a more prominent axis. Paths leading to and from Washington Avenue will become even more active.

The Lawn, Buford Avenue and Gortner Avenue are the primary orientation features on the Saint Paul campus.

The buildings along the eastern edge of Eckles Avenue have a distinct architectural style defining the character of the Lawn and providing orientation on the campus. Other paths on campus make easy movement between uses possible and should be well designed and furnished to further encourage pedestrian circulation.

Guidelines

72. Preserve iconic public spaces that provide orientation and order.

73. Give special design attention to pedestrian amenities on dedicated pedestrian pathways.

74. Design vertical connections between grade and existing skyways and tunnels to be visible, understandable, and accessible.

75. Enhance access and orientation to the below grade network by providing natural light openings (skylights, clerestory windows) and highly visible signage.

76. Design building entrances with common paths to be used by people with and without disabilities.
Identity and Symbolism
Key unifying visual patterns should be maintained. Visual linkages to existing buildings are critical in the design of new public spaces and buildings. Abrupt scale changes should be avoided. Masonry and brick should be a dominant material in new buildings. Other materials should be similar to those in nearby buildings and landscapes. To preserve the overall impression of unity, contrast should be used sparingly. Pressure to be new and different should be resisted. Existing buildings should not be imitated, but should be respected. A good example is the design of Hasselmo Hall.

Guidelines
77. Preserve the existing overarching visual order on campus by maintaining design continuity.

78. Create visual linkages between new buildings and existing buildings through similar scale, materials, style, window patterns and proportions.

Continuity and Variety
Public spaces should use common materials to create a definable whole with an overarching visual character. Limited examples of landmark buildings should, whenever possible, stand apart from other campus buildings, like the McNamara Gateway Center. Such unique buildings cannot be overly dominant and should relate to other campus buildings. New buildings must limit using the ‘landmark building’ approach. The cumulative effect of campus building fabric creates a highly desirable and recognizable character and should not be compromised. The same is true of public space design. Continuity should be the primary concern.

Guidelines
79. Preserve iconic public spaces and the buildings that border and define them. Allow only minor changes to the exterior of existing buildings. Design replacement buildings to recall the scale, architectural articulation and massing of their predecessors.

80. Provide public space furnishings that are compatible in style, materials and scale within each campus district.

81. Locate public art to provide focal points and variety within each district.
Definition and Borders
Spaces formed by construction of new building can improve the experience and use of the campus public realm in the way they are shaped, designed, landscaped and furnished. Many existing spaces are exceptional icons of campus design, such as the Mall, the Knoll and the Lawn. The buildings and mature landscape framing these spaces form outdoor rooms. To avoid compromising the character and established patterns of these spaces, new buildings should neither block sunlight nor vary significantly in height from existing buildings. Pedestrian pathways along streetscapes should be supported with active ground floor uses, visible from these pedestrian paths. Taller buildings along pedestrian paths should have terraced profiles to mitigate adverse wind conditions. Natural features, such as the river corridor, should be celebrated in building designs that orient interior public spaces to generous views, as in the new Science Teaching and Student Services building. Building placement, massing, form and architectural articulation all affect the character of spaces between the buildings.

Guidelines
82. Form new outdoor public spaces to take maximum advantage of natural features, particularly the Mississippi River.
83. Evaluate new buildings designs for their effect on existing and new public spaces.
84. Preserve mature trees to continue to provide continuity, shade and a sense of enclosure.

Views of Mississippi from Outdoor Spaces
Public Space Qualities

Visibility
Public spaces bordered by vehicular circulation are more visible. Pedestrian circulation through campus public spaces makes them active and safe throughout the day and evening. Visibility is enhanced when public spaces engage both adjacent buildings and circulation paths. The campus has a variety of public spaces attracting differing types of activities and enjoying varying levels of use. Location, size, flexibility of design and landscape treatment each affect these uses. It is highly desirable that visibility of public spaces be maintained and enhanced.

Guidelines
85. Border public spaces with vehicular and pedestrian circulation paths to enhance visibility and security.

86. Furnish pedestrian circulation paths to be comfortable and safe.

87. Landscape and furnish public spaces to avoid interfering with views of the spaces from adjacent buildings and paths.

88. Celebrate natural features by designing interior and exterior spaces to take maximum advantage of their views.

Unity
Campus public spaces present opportunities to enhance unified character while reinforcing district identity. Paving materials and groundcover afford the greatest opportunity for visual continuity in the spaces between buildings. Currently sidewalks are predominantly paved in concrete, with granite as accent features or borders in some districts. A highly manicured lawn is the primary groundcover. Pedestrian-scale light fixtures and other furnishings vary by district, as do landscape materials. Key locations incorporate feature plantings as focal points and to enhance primary gateways, such as on Pleasant Street between University Avenue and Pillsbury Drive and along Cleveland Avenue on the Lawn. Mature shade trees tie much of the Twin Cities campus together with a continuous canopy.

There is potential to use way-finding and directional signs to create visual unity and coherence throughout campus and to highlight uniqueness between districts. A growing collection of campus public art is scattered outside and inside buildings. These, together with several fountains and other historic monuments, provide special features with symbolic and meaningful messages about academic community values.

Guidelines
89. Design campus public spaces to enhance the unified character of the campus while reinforcing individual district identity.

90. Provide consistent pedestrian-scale light fixtures throughout each campus district.
**Flexibility**

To encourage maximum use of public spaces, flexibility is necessary. Adaptability to varied active and passive uses will generate more activity in both outdoor and indoor public spaces. While size affects how a space is used, the way it is furnished may have a larger impact. Consideration should be given to varying the types of spaces within a district.

**Guidelines**

91. Provide a wide variety of flexible public space types within each district.

**Durability**

Design of campus public spaces requires careful consideration of their maintenance, management, and specific design elements. Tradeoffs between short-term construction costs and long-term maintenance should favor use of materials and construction techniques that create easily maintained and long lasting public spaces. Maintenance personnel should be consulted during design. Perceptions of tidiness and care help prevent misuse and vandalism. With proper management, public spaces on campus will become more comfortable and more activity will attract additional use. Proper design will create a vital, integrated campus.

**Guidelines**

92. Design public spaces for durability and ease of maintenance.

*Flexible spaces perform multiple functions inviting interactions.*

*Public spaces should use high quality durable materials.*

*Northrop Mall is one of the campus’ most widely used public spaces.*

*Public art provides symbolic messages to animate the campus.*
Building Qualities
Integration
A vital, integrated campus is an ensemble of buildings and landscapes working together to create a collective experience of place. Individual buildings are understood as important elements within these ensembles. Every campus building plays multiple roles, balancing interior function with appropriate design character and exterior relationships to neighboring buildings. Groups of buildings form and support a continuous network of campus public spaces. The Twin Cities campus already has an abundance of high quality architecture, encompassing a broad range of styles. Campus design integrity has been maintained through the use of brick as a primary building material, and through adhering to predominant architectural styles within each district. New buildings should be designed and evaluated based on their contribution to campus character and to their district.

Guidelines
93. Design new buildings to contribute to a unified overall campus character, while reinforcing the identity of the particular district in which it is located.

94. Use brick and stone as the primary building materials in buildings throughout campus.

95. Limit the number of landmark buildings. Such buildings can vary from the norm, but should be the exception. Whenever possible, landmark buildings should be isolated from other campus buildings.

Optimization
Full utilization of existing buildings should be considered before new buildings are constructed. This applies whether or not the buildings are considered historic in their design or significance. Opportunities to adapt emerging needs to existing building spaces should be the first priority. Renovation and reuse of existing buildings, requiring limited redesign and construction should be higher priority than new construction. New buildings should be designed flexibly to accommodate current needs as well as anticipated future needs.

Guidelines
96. Design new buildings to be flexible and adaptable to changing uses.

Collaboration
Building design decisions on campus are not within the purview of a single architect or architectural firm. Architects must work closely with campus staff to assure that the University’s broad, long term interests are properly stewarded. Individual buildings are less important than the overall campus character. At the same time, integrity of this character is maintained through high quality and appropriate individual building designs. Review of building designs should neither be overly directive nor inhibit high quality; rather it should focus on compliance with these guidelines.

Guidelines
97. Design new buildings as a team collaborative process.

Right: The Science Teaching and Student Services building under construction in 2009 was designed to serve complementary needs in teaching, learning and provision of student services at a critical location on the East Bank campus.
Cultural Resources - Minneapolis Campus

Notes
- Regents Historic Designation includes Mall and buildings facing Mall. The Mall District may qualify for National Landmark Status.
- Washington Avenue Bridge may be eligible for NHRP listing. Documentation is not complete.
- See the University of Minnesota Preservation Plan, Board of Regents, 1998 for further information.
Preservation and Adaptive Reuse

Integrity in design also requires preservation of historic buildings and landscapes. Historic buildings and landscapes are a form of living history. They establish a sense of continuity and promote a feeling of pride in the University’s past. Productive reuse of these buildings and landscapes aligns with the University’s commitment to sustainability, as the greenest building is often already built. Preservation of historic buildings also contributes to the design integrity of each district. Opportunities for reuse and preservation should be sought. There will be the occasional need for judicious removal of obsolete buildings to meet functional academic goals, enhance public spaces or create access to natural features. New buildings developed on the edges of campus should be sensitive to their impacts on adjacent and sometimes historic neighborhoods.

Guidelines

98. Preserve historic buildings whenever possible by adapting buildings to new programmatic needs.
99. Remove obsolete buildings judiciously when required to meet academic goals, to improve space relationships between buildings, or to enhance appreciation of natural features.

Sustainable Design and Construction

On a vital, integrated campus, building and landscape design decisions should consider potential impacts on the broader community and world, not just on the campus itself. Buildings should be designed to fit the environmental conditions present in our northern climate. Campus buildings and landscapes must be environmentally sustainable. Renewable materials and sustainable methods should be used in all campus building construction. Energy efficiency should be maximized. Minimizing campus building environmental impacts is imperative.

Potential demolition of facilities in order to meet academic goals or improve space relationships between buildings, such as at Williamson Hall, will improve other campus spaces.

Cultural resources, including historic buildings and landscapes, have been listed on the National Register of Historic places. Additional sites may be designated based on the recommendations included with the University Preservation Plan.

Guidelines

100. Design new buildings to be environmentally sustainable and responsive to site-specific environmental conditions.
101. Maximize energy efficiency in all campus building and landscape design.

Right: The proposed new Bell Museum on the St Paul Campus fully adopted the principles of sustainability in site and building design with a focus on LEED principles and silver level certification.
Development Framework Map

Near Term Development references changes that may occur within the 10 year horizon of the 2009 Master Plan. Specific uses and intensities are intended to be defined as an outgrowth of district master planning to be undertaken by the University.

Long Term Development indicates potential change in a 20 year future. Current activity patterns in these areas are expected to continue as interim uses. Specific uses and intensities will be defined as an outgrowth of district master planning.

Adaptive Reuse designations reflect priorities for capital investment and renovation of important buildings to support the university’s academic mission.

Potential Demolition designations indicate buildings that are candidates for removal. Analysis of physical, environmental and adaptive re-use capability as well as campus-wide benefits will be conducted prior to making final decisions about removing campus buildings.

Change Areas are lands that the University will consider acquiring within the 20 year horizon of the plan. Current uses and activity patterns in these areas are not expected to change. Change areas are strategically important to the University’s mission and are designated to inform the broader community of the University’s intentions. Growth areas will be defined through district master planning and in joint planning efforts undertaken with other stakeholders.

Selective Replacement Areas are locations where coordinated planning is needed to address reinvestment through a combination of methods. Demolition, new construction and renovation of existing buildings are all likely tools to be used in renewing these areas.
CHAPTER 5

District Planning Profiles

The University is composed of a series of academic neighborhoods, called campus districts for the purpose of the Campus Master Plan. These districts are defined primarily by similar uses and activity.

Campus Districts Defined

Each of the districts named in this chapter is defined by their buildings and landscape (historical and other); academic activities; physical geography (river’s edge vs core of campus) and circulation patterns. The character and activity pattern in each of the campus districts demonstrates the variety of daily life found throughout the Twin Cities campus.

Previous page: A view of the evolution of the St Paul Campus. Note new development flanking the Lawn (foreground).
Minneapolis

The Knoll and the Mall
These districts are the heart of the Minneapolis campus, defining the traditional campus landscape for generations of students and offering the university community remarkable architectural buildings that link present-day campus life to the original days of the institution. The Knoll contains some of the campus’ oldest buildings. Thirteen of the buildings in the area are listed on the national Register of Historic Places as unique resources. The park-like Knoll lawn, with its mature tree canopy and undulating topography, is an equally important part of the historic resource. Around the turn of the 20th century the campus expanded to the Northrop Mall. In the Mall area, the spaces between buildings and the architecture of the buildings themselves have been planned as an orderly and regular landscape, containing open-air plazas that are ideal for dialogue, contemplation or active enjoyment of the unique outdoor room.

Recommendations

- Many buildings in the Knoll and the Mall will be the subject of significant reinvestment and adaptive re-use.
- The iconic spaces of the Northrop Mall, the lawn in the Knoll and the Scholars’ Walk will be preserved in perpetuity.
- Purposeful building removals will result in new open spaces to reinforce the historic character of the district. A new public space at the site of Norris Hall and Gymnasium will allow views of the River. A new public space at Westbrook will allow for an expanded plaza and improved access to Northrop Auditorium. A new public space at Williamson will reduce paved areas, support pedestrian movement and remove a non-contributing building to support a traditional quadrangle pattern of open spaces to buildings.
- In the 10 year horizon, two new academic buildings will be built on the sites of existing buildings.
- Investments in pedestrian and bicycle travel will reinforce critical thoroughfares on the Mall, Washington Avenue, Scholars Walk and the River Road.
- Future extensions of streets will be considered in this district, to improve access from the north and west of the campus.
- LRT service on Washington Avenue will increase automobile traffic on streets such as the East River Road, Arlington Street, Pleasant Street and Union Street.
Residence Halls
Starting in the 1930’s the university began constructing residential buildings on campus. Construction of other residential neighborhoods continued through the 2000’s on the East and West Banks of the Minneapolis campus and in St Paul. Family housing was constructed at Commonwealth Terrace in the mid 20th century. Most of those locations remain intact with investment and renovations made as needed to support their ongoing use as student housing. No significant additions to residence halls are anticipated in the near term, provided the undergraduate population remains stable. The University recognizes the need for graduate/professional student housing and transfer student housing on or near campus.

Academic Health Center
The scale and diversity of the physical environment of the Health Sciences district reflect the size and complexity of the Health Sciences program. It’s origins as a teaching center were advanced by the development of new surgical techniques, such as the nation’s first open heart surgery in 1952, and development of life-changing medical devices, such as artificial valves and cardiac pacemakers. The vast majority of the state’s health care providers, including pharmacists, dentists, public health professionals, physical, respiratory and occupational therapists, are educated at the Academic Health Center. Approximately 500,000 patient and visitors associated with the hospital pass through the district annually. Plans to develop land east of Oak Street and north of Fulton Street as an outpatient clinic were initiated in 2008. Expanded clinics will increase activity in this district in the next five to ten years.

Recommendations

- Growth in the research and clinical functions of the Academic Health Center will result in renovation of existing buildings or construction of new buildings on established sites. Where possible, existing impervious surfaces will be modified to provide infiltration and landscaped spaces.

- New clinic facilities planned to be constructed east of Oak Street and north of Fulton Street will extend the University’s presence to Huron Boulevard.

- Potential acquisition of land east of Oak Street, north of Fulton and west of Huron may be considered by the University to support long term academic or strategic goals.

- LRT service on Washington Avenue will increase automobile traffic on streets such as the East River Road, Harvard Street and Fulton Street.

- New public space will be established north of East River Parkway at Oak Street.
East Gateway
This edge of the campus has long been a traffic and activity crossroads and an area of transition from industrial to campus use. Sports venues, including the new football stadium and the McNamara Alumni Center present a contemporary face of the campus to the surrounding city neighborhoods. Convenient connections to the regional freeway system provided by the Huron Boulevard access to I-94 will accommodate increased campus development with metropolitan and state-level connectivity. This area of campus, referred to as the East Gateway District, will experience the greatest growth within the horizon of this master plan. For example, the emergent biomedical science research facilities and expanded ambulatory care clinics will significantly increase activity in this district within the next five to ten years.

Recommendations
- Near term development will occur along the 23rd Avenue corridor, transforming the area into a vibrant research district.
- Interconnected open spaces will be constructed to support pedestrian and bicycle movement within the district and to other campus destinations. Some of these open spaces will treat stormwater and augment the existing 8th Street raingarden swale.
- A multi-modal transit/automobile parking/ bike center with supportive commercial uses at 23rd Avenue and University Avenue will be constructed in conjunction with the Central Corridor LRT line.
- Conflicts between pedestrians and other modes of travel will be addressed at a number of crossings of University Avenue and 4th Street S.E.
- Granary Road construction is anticipated north of the East Gateway District. This route will provide access to the district while offering an alternative to travel on University Avenue and 4th Street.
- Minneapolis Park Board intends to build a connecting segment of the Grand Rounds parkway and trail system will connect to the University through this area, in the vicinity of 27th Avenue and future Granary Road.
West Bank

Even in the 1930s the University anticipated the need to expand its campus, and looked across the river as a potential location because of the relative availability and affordability of land there compared to the immediate surroundings of the East Bank. Initial land acquisition on the West Bank started in the mid 1950s. The University began building west of the river bluff in the early 1960’s and a new ‘double-decker’ Washington Avenue bridge was constructed in 1965-67.

The plan for the West Bank district was consistent with modernist planning principles of clustered buildings, weather protected walking paths or building connections and limited vehicular access. The original academic occupants remain, and the recent addition of performing and studio art facilities have made the district a culturally richer, more eclectic place, resulting in the development of the Arts Quarter beginning in 1999.

Recommendations

- Purposeful removal of Anderson Hall will be considered subject to analysis of interim space availability, environmental and economic impacts, and the potential views it will give the West Bank campus to the Mississippi River corridor.

- The Social Sciences tower will be upgraded for more efficient use by academic units.

- Other potential long term development sites on the West Bank include the Washington Avenue Corridor east of 19th Avenue, the northern recreational fields, the parking lots north of the Mondale Hall, and on Riverside Avenue east of 20th Avenue.

- The extensive paved plazas of the West Bank will be redesigned to reduce impervious surfaces, improve stormwater treatment, and create a greener pedestrian environment.
Athletics and Recreation District
Planning for reinvestment and redevelopment of some facilities is expected in the near term. This area has served as a transportation crossroads, coexisting with rail transportation corridors and roadway arterials such as the 4th Street/University Avenue pair and the future Granary Road. Pedestrian, bike and vehicular links to the campus are important to the successful integration of the athletics and recreation district with other campus areas. Concerns raised by adjacent neighbors, such as the effect of night-time field lighting, parking, noise and traffic, will continue to pose opportunities and challenges for the University as these facilities are operated to meet program needs and desires defined by the University community.

Recommendations

■ Reconfiguration, intensification and selective replacement of facilities is anticipated to accommodate the needs of athletics, recreational sports and related academic programs.

■ Improvements to the streetscape along minor arterial routes such as University Avenue and 4th Street will be pursued to support the ‘signature streets’ designation.

■ Conflict areas for pedestrian and bicycle crossings will be mitigated at established pedestrian crossings on the minor arterials through changes to signal design or other operational changes.

■ Granary Road will increase the visibility of this district to the public. Crossings of future Granary Road at key locations, such as 17th Avenue, will be pursued to better connect existing athletics facilities north of the rail corridor to the campus.
St Paul Districts

Concentration of The Bowl and the Ridge
The historic roots of the St. Paul campus are found in this district. Neo-classical and contemporary buildings located along a ridge create an academic community composed of agricultural, natural resources, and biological instruction and research facilities. Stable academic programs are anticipated to remain in their physical homes in this district. Some interdisciplinary growth in academic population is expected. The topographical form and open spaces of the Ridge and the Bowl combine to provide key structuring elements that define a sense of place for this area of campus. The ridgetop cluster of buildings, when viewed across agricultural fields, presents the prominent image of the St. Paul campus.

Recommendations

- A new Bell Museum and associated landscape for teaching and research are will be constructed at the southwest corner of Cleveland Avenue and Larpenteur Avenue.

- Long term development on the site fronting the north side of Buford Avenue west of the Student Center will support the enlivening of the campus as described in the St Paul Campus Strategic Plan (February 2009).

- The Bowl, a designated iconic open space, will be preserved in perpetuity.

- The natural resource areas of Mullins Woods and the wooded slope west of McNeal Hall will be enhanced as part of the campus’ natural systems.

- Transportation conflicts along Cleveland Avenue, between transit, pedestrians, bikes and parked cars, will be managed at key crossing locations between Larpenteur Avenue and Folwell Avenue.

- A future north-south bicycle route will be considered on several candidate locations, including Cleveland, Raymond and Gortner Avenue.
The Lawn
In the first decades of the 20th Century, a collection of three classical buildings was constructed along an expansive lawn, creating a formal edge to the campus that remains a signature space and primary entry from the west. The student center, transit hub, and a student residence hall borders the north edge of the Lawn and remains the heart of student life and pedestrian traffic on campus. Surface parking at the south border of the Lawn offers opportunities for future development that will further define the historic space.

Recommendations

- The Food Science and Nutrition building is an adaptive reuse priority.
- Selective replacement of buildings nearing the end of their useful life will occur in the area east of the Veterinary Hospital.
- The parking lot on the south edge of the lawn is designated as a long term development site.
- The Lawn, designated as an iconic open space, will be preserved in perpetuity.
- Transportation conflicts along Cleveland, between transit, pedestrians, bikes and parked cars, will be managed at key crossing locations at Buford Street, Doswell Avenue and Commonwealth Avenue.
- A future north-south bicycle route will be considered on several candidate locations, including Cleveland, Raymond and Gortner Avenue.
Experimental Fields
The fields that wrap around the ridge, south of Larpenteur and east of Cleveland, have a long history of accommodating primary research activities for agricultural sciences. The fields have both historical and scientific significance central to the agricultural mission of the University. The area east of the Ridge has historically been dedicated to animal housing and support facilities. Over time, greenhouses and other facilities that support the agricultural sciences were added. Recently, new uses such as the Equine Center and the Cargill Genomics Building have been constructed, and the area is considered as a location for additional research laboratory expansion.

Recommendations
- Selective replacement of buildings that are nearing the end of their useful life will occur in the area east of Gortner and north of Buford.
- Lands on the south side of Larpenteur Avenue will continue to be used to support agricultural research and teaching. They are identified as iconic for their research and aesthetic importance.
- The ponding area adjacent to the Fairgrounds on the eastern edge of the campus will be preserved as a natural resource area and will be integrated into the campus wide system of surface water treatment.
Housing: Grove and Commonwealth Terrace

Two residential neighborhoods exist on the St. Paul campus: Commonwealth Terrace and the University Grove. Commonwealth Terrace provides housing for families and has become a diverse, international neighborhood. Reinvestment and renewal over time is expected in the long term without changing the use or land tenure in these neighborhoods. The University Grove, consisting of privately-owned residences for University employees on University-owned land, will remain as a unique single-family neighborhood.

Recommendations

- The interconnected system of wetland features and surface water swales extending from the University Grove to the Sarita Wetland will be preserved and improved as an important natural resource area.

- A future north-south bicycle route will be considered on several candidate locations, including Cleveland, Raymond and Gortner Avenue.

- Transportation conflicts along Cleveland Avenue, between transit, pedestrians, bikes and parked cars, will be managed at key crossing locations at Commonwealth Avenue.
Recreational Edges and Support Agricultural Fields: North of Larpenteur

Currently, the recreational facilities north of Larpenteur, such as the Golf Course, the Soccer Stadium, intramural playing fields and other venues, support a well-rounded campus life for students, staff and faculty. The aesthetic and functional value of these green or recreational places for adjacent neighbors and land owners is another significant factor to be considered in planning for change in the future. Other fields north of Larpenteur, east of Fairview, have a research role that, while important, is not as critical as the fields south of Larpenteur.

The Campus Master Plan anticipates that on the St. Paul campus, decisions about use of lands that are not essential to the academic or outreach mission of the University will balance pertinent recreational, social, economic and environmental factors associated with a potential change in the land use pattern. Potential land use changes may be considered only for the area north of Larpenteur, if other factors can be addressed to the satisfaction of the University.

Recommendations

- University lands north of Larpenteur Avenue will be considered for potential long term development. Decisions about the nature and intensity of future use will balance community, economic and environmental factors.

- The agricultural research and recreational lands north of Larpenteur Avenue will continue to support campus activities in the near term future.

- Pedestrian, transit and bicycle facilities along Larpenteur Avenue will be improved through coordinated streetscape projects undertaken with adjacent municipalities in Falcon Heights and Lauderdale.
Implementing the Master Plan

This Master Plan will be reviewed and updated in ten to fifteen years, to refocus efforts and priorities. To effectively guide future campus development decisions and operationalize its directives, the Master Plan will be consulted throughout every planning and design effort to ensure its influence on project formulation, site selection, and design development.

In implementing the Master Plan, the University will make use of the broadest range of research available and will apply best practices to advance the eleven guiding principles.

Guidelines:

a. The University will apply extensive research and best practices in the implementation of the Master Plan.

Administrating the Plan

Accountability for implementing the master plan on behalf of the Board of Regents lies with the President and Senior Officers. Responsibility for the day to day administration of the master plan is delegated to the Vice President for University Services who will establish the process and structure for implementing the Master Plan.

The implementation process should be simple and efficient. Current procedures for the formulation, development, review and approval of projects will be supplemented by a more formal and transparent Master Plan review process that establishes specific objectives and strategies for each project. Consultation with the University community will be included in this process.

Capital projects that have a significant effect on the external appearance, function, and operation of the campus will be formally measured against the principles and guidelines of Master Plan. This includes all proposals regarding changes to the land use, buildings, open spaces, landscape and infrastructure of the campus. The Master Plan review and assessment will occur at two critical points in project planning and development:

1. Predesign is the initial stage of planning for a capital project during which the programmatic objectives, space and site requirements, infrastructure needs, and other factors affecting the scope and cost are analyzed and defined. Predesign studies should include an assessment of pertinent Master Plan directives and recommended responses of the project, establishing a set of requirements that the project must address in its design.

2. Schematic design is the initial stage in the architectural/engineering design of a project, translating written program requirements into site plans, floor plans and three-dimensional images. It is also the point at which the Board of Regents review and approve the site plan and architectural design of a project. The schematic design package should include a direct response to all the Master Plan requirements established by the predesign.

Guidelines:

b. All initiatives that affect the land use, buildings, open spaces, landscape and infrastructure of the campus shall be subject to a formal review and approval process to ensure conformance with the Master Plan.

c. Project review and assessment for consistency with the Master Plan shall occur during both the predesign and the schematic design stages of each capital project.

d. Define the formal Master Plan Review process for development projects, including specific steps for consultation with the University community.

e. Projects located at the interface of campus and community will include consultation with community members.
Refining and Amending the Plan

The Master Plan provides the broad principles and the basic framework for directing future campus development. Although it provides an understanding of the present and near-term future, the Master Plan does not account for all eventualities, nor is it explicit about the application of its principles and guidelines to each unique condition of the campus. Thus it is essential for the University of Minnesota to have a process by which the Master Plan can be elaborated and amended.

The plan will be elaborated upon and refined through the preparation of district plans that will provide detailed recommendations for future building and infrastructure improvements. Several district plans have already been completed, such as the West Bank Arts Quarter, or are in the final stages of preparation, such as East Gateway District. Plans for other districts will be prepared in anticipation of development activity. A master plan for public art on campus will also be prepared. The process of district plan preparation and refinement will ensure that the Master Plan is a continually evolving, living document.

As campus districts are studied in greater detail, as unanticipated changes occur, and as specific building proposals are considered, there may be a need to amend the Master Plan. Such amendments will require thorough analysis by planning staff, participation by key stakeholders, review by the President and Senior Officers, and ultimately approval by the Board of Regents.

Guidelines:

f. Guiding principles of the Master Plan shall be applied to specific and unique conditions of the campus through the development of more detailed district plans.

g. Detailed district plans will be used to:
   • Inform the six-year capital plan of needed investments in campus improvements
   • Guide daily actions related to campus development and construction
   • Guide daily operational activities
Board of Regents
Campus Master Planning Principles
In 1993, the Board of Regents determined that all campuses of the University of Minnesota should have master plans, and adopted four principles to guide the preparation and implementation of those plans. The principles and an explanation of how each is to be applied are:

1. Create and maintain a distinctive and aspiring vision for the physical development of each campus.

2. Enrich the experience of all who come to campus.

3. Maximize the value of existing physical assets while responding to emerging and changing physical needs.

The campus master plan should:
2.1 Accommodate the specific needs, experiences and requirements of the various user groups, giving highest priority to students, faculty and staff, while extending hospitality to visitors, surrounding communities, and the people of Minnesota.

2.2 Provide coherence to the campus entrances, movement systems, landscape spaces and architectural vocabulary in order to create a sense of welcome, orientation and presence for a special community which celebrates learning.

2.3 Create a positive system of campus circulation. This necessitates minimizing conflict between pedestrians and the needs of other vehicular circulation including bicycles, cars, service vehicles, parking and other transit modes, especially buses and LRT. The pedestrian environment should be given special priority and be made comfortable, secure, pleasant, and acceptable so as to dignify and show respect for all participants in campus life.

2.4 In creating a positive pedestrian environment, integrate all supporting amenities including information, signage, lighting, phones, outdoor furnishings, landscape into the overall master plan concept.

2.5 Organize campus activities into functional and or organizational affinities while supporting the overall aesthetic character and intent of the campus plan.

2.6 Devote special attention to non-scheduled campus use by providing informal spaces (interior and exterior) for study, meeting, and participation in campus life. The purpose is to create a campus community where people “want to be” rather than one where they “have to be”.

The campus master plan should:
3.1 Be based on a realistic assessment of all the physical and financial constraints and opportunities on each campus – the assets and liabilities. The assessment should include: a determination of the unique physical assets and enduring features of each campus; a determination of the most significant physical liabilities; an evaluation of the quality and level of maintenance of buildings, landscapes and infrastructure; a determination of which buildings and landscapes are historically significant and worth maintaining and enhancing, and which structures are obsolete and not capable of or worth the investment in adaptive reuse; a determination of priorities for the maintenance of existing buildings, landscapes and infrastructure; and evaluation of the most significant opportunities for physical enhancement of lasting value.
3.2 Measure and determine the need for new construction against the following criteria: the need for deferred maintenance; the demand of changing student enrollments; the need for appropriate teaching and research facilities; the opportunities for adaptive reuse and renovation; the opportunities for attracting new capital resources; the need of the pedestrian environment, landscape or vistas.

3.3 Anticipate and allow for rapidly evolving development in instructional technology.

3.4 Require that each capital improvement project demonstrate how it contributes to enhancing the specific goals of its campus master plan and adds long-term value to the University. One of the measures of long-term value should be a careful analysis of life cycle costs for any capital project.

3.5 Pay attention to the special role and value of the natural landscape in creating and enhancing the quality of experience on each campus. The natural landscape is one physical asset which, with appropriate maintenance, grows in value.

4. Ensure an inclusive, accountable and timely process for creating and implementing the master plan vision.

The campus master plan should:

4.1 Be developed by an open and inclusive process representing each constituency of campus community. Such representation requires ample time for input and feedback during the entire process.

4.2 Be guided by a Campus Planning Committee representing those important constituents, appointed by the Senior Officers for the Twin Cities Campus or the Chancellors for Duluth, Morris, Crookston and Rochester Campuses, and prepared by professional consultants with staff support.

4.3 Be prepared in conformance with these principles and recommended procedures.

4.4 Be approved by the Senior Office for the Twin Cities Campus or the Chancellors for the Duluth, Morris, Crookston and Rochester Campuses, by a separate Master Plan Oversight Committee and the Board of Regents.

Once the master plan has been completed and approved:

4.5 Each campus must continue to be involved in the implementation of the master plan. Therefore a procedure must be established whereby the plan can be continuously applied to the dynamics of change; subjecting such change to an open and inclusive forum for campus and community participation.

4.6 Each capital project must be in conformance with the master plan. A process for uniformly determining conformance must be established by the Senior Officers, the Chancellors and the President.

4.7 The President, the Senior Officers, and the Chancellors must be held accountable to the Board of Regents for progress in implementing the master plan. For this purpose the Board of Regents needs to be provided an Annual Report which assesses implementation of the campus plan, recommends adoption of minor amendments, cyclical revisions to the plans, and advises on the criteria for designer selection.
Planning Process Summary

An important element of preparing the University of Minnesota Twin Cities Campus Master Plan was to open the process to input from various sources in the University community and to partners and neighbors in the broader community. The following events were convened to maximize opportunities for public audiences to participate in the evolution of the document.

1. In April-May 2007, Open Forums were held at three campus locations to kick off the planning process. The objective of these meetings was to solicit input from the University community on the primary issues and questions that should inform the structure and content of the Master Plan.

2. Listening Session meetings were convened by the Community Connections Work Group to solicit interests and identify issues as defined by community partners.

3. In May-June 2008, a second round of Open Forums were held at three campus locations to affirm planning principles and ‘themed’ guidelines, based on the reports that had been submitted by the Steering Committee’s assigned Work Groups.

4. In December 2008 and January 2009, staff and members of the Steering Committee reviewed preliminary guidelines and recommendations included as part of the Master Plan process with the following standing committees and groups.

5. A review session with City of Minneapolis planning staff was held in response to their request. The meeting was attended by Capital Planning and Project Management staff as well as University Relations staff.

6. Components of the Master Plan recommendations were presented at workshops and committee meetings hosted by the Alliance District Partnership in September and December 2008.

7. In February 2009, a third round of Open Forums were held at three campus locations to preview the recommendations of the Master Plan.

8. A public meeting was held to present plan recommendations to the broader community. Notice of this meeting was published in the Bridge, a community newspaper. Email correspondence between University Relations and neighborhood associations also publicized this meeting date and the public comment period established to accompany the Regent’s Process.

9. An open comment period and posting of the document online on the University’s webpage supported public review and action by the Board of Regents. Printed copies of the draft plan were placed on reference at community and university libraries. Comments received were summarized for the Board of Regents as part of their review materials for consideration prior to Board action and posted on-line for review.
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- Members: Sheila Ards, John Carlson, Katie Fournier, Susan Gehrz, Sarah Greening, Greg Hestness, Laurel Hirt, Justin Miller, Jan Morlock, Kris Nelson, Laurie Scheich

**Design and Preservation Work Team**
- Co-chairs: Terry Bock, Judith Martin
- Members: Craig Amundsen, Nicholas Baker, Meagan Beeckman, James Litsheim, Thomas Meyer, Mark Pharis, Kate Solomonson, Madelon Sorengnether, Dewey Thorbeck

**Enhancing the Campus Work Team**
- Co-chairs: Denise Guerin, Gerald Rinehart
- Members: Scott Ellison, Steve Fitzgerald, Chris Frazier, John Koepe, Robert Kvavik, Peggy Mann Rinehart, Laurie McLaughlin, Katy Olson, Tim Quigley, Jim Turman, Jenna Strain, Ray Voelker, Lorelee Wederstrom

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- Co-chairs: David Levinson, Robert Johns
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We recognize the contribution of citizens, residents and officials of partner agencies who participated in the Master Planning process:

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- City of Minneapolis Planning
- City of St. Paul Planning and Economic Development
- City of Falcon Heights City Council and Planning Commission
- University District Alliance Partnership, Vision and Planning Committee
- Marcy Holmes Neighborhood Association
- Southeast Como Improvement Association Livability and Housing Committee
- Prospect Park Livability Committee
- St. Anthony Park Land Use Committee
- West Bank Community Coalition Land Use Committee
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Steering Committee:
- Capital Planning and Project Management
- Parking and Transportation Services
- Finance
- University Relations
- Facilities Management
- Academic Health Center

Executive Committee:
- Kathleen O’Brien, Vice President of University Services
- Dr. Frank Cerra, Senior Vice President, Academic Health Center
- Richard Pfutzenreuter, Vice President of Finance

Master Plan Consultant:
- SmithGroup / J JR

For additional information, contact
- Monique MacKenzie, AICP
- Capital Planning and Project Management, University of Minnesota

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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
EXISTING CONDITIONS

INTRODUCTION

About This Section

This section describes the various influences, past and present, on the 2008 physical context of the East Gateway District. Topics in this section include the following:

- Historical Context
- Regional Context
- 2008-2009 District Inventory
- Buildings
- Vehicular Circulation
- Parking Capacity
- Utility Corridors

EAST GATEWAY DISTRICT

The East Gateway District has been slowly transforming from an industrial area to University-related uses for several decades. Rail lines and a few remaining silos at the edge of the University are evidence of the District’s recent past. The first use of this District by the University was as surface parking. As the last, large-scale, largely undeveloped land area on campus, it has become a primary location for the University’s expanding academic and research programs. The new TCF Bank Stadium and several research and office buildings in the District have begun the transformation of the East Gateway District into a more active academic quadrant of campus.

Located on the eastern edge of campus and facing University Avenue as well as high profile venues like Williams and Mariucci Arenas, the new District has to respond to a variety of surrounding land uses and the needs of a built campus identity.

The site has no major natural features and is relatively flat. Many of the past industrial structures have been removed in recent years to allow for redevelopment. As the site has a fairly intensive industrial past, many recently developed sites have been subject to remediation. This, along with a relatively high water table, likely limits below-grade construction.

Recent construction during the last decade includes Lions/McGuire Translational Research Facility and the Center for Magnetic Resonance Research (CMRR).

A TRANSITIONING DISTRICT

There are still signs of the District’s industrial roots in the midst of massive construction with the new stadium and research buildings.
HISTORICAL CONTEXT

For much of the 20th century, the East Gateway District was a heavy industrial railyard. This past is clearly depicted in the 1930s historic image on the opposite page. The last of the silos that existed in the District were demolished in early 2008. However, just outside of the northeast edge of the District, a steel-framed silo of historic significance remains and will be preserved in one form or another.

Additionally, just west of Williams Arena is a historic fire station not owned by the University. This structure also falls outside of the study area on the west side of Oak Street.

As the campus has grown and the railyards have moved elsewhere, the land in the District has slowly been acquired by the University. Prior to the development of TCF Bank Stadium, the District was primarily used as a satellite parking zone. This can be seen in the aerial from 2006 shown below. The development of the stadium, new circulation system, and research buildings has dramatically transformed the District.

2006 CAMPUS AERIAL

Prior to recent stadium construction, the East Gateway District was the last vestige of inexpensive surface parking on the campus.

AERIAL VIEW OF CAMPUS, ca.1930

This historic image, courtesy of the Minnesota Historical Society, depicts the extent of the railyards in the East Gateway District.
REGIONAL CONTEXT

Research Relationships

As translational research has been identified as the primary focus for future academic buildings in the District, the site's relationship to other health-related resources on and around the campus is extremely important. The specific centers that are of programmatic significance to the District include the Academic Health Center, the planned Ambulatory Care Clinic, and biosciences in the academic core.

The distance from the East Gateway District to each of these centers is a significant challenge for future research collaboration. The plan will need to address pedestrian and transit connections to link the District to the other centers.

To the east of the site, the city has promoted research-focused development. The University hopes that this development will collaborate and partner with research in the East Gateway District, and is therefore a vital physical connection to create.

Connections

University and 23rd Avenues are the two primary vehicular connections to the campus from the larger region. However, in the long term, the planned Granary Road will also connect the site as a regional bypass.

Other vehicular connections to the main campus are limited due to the removal of through roads from the campus over time. Oak Street is the only remaining north/south connection from the campus to the East Gateway District.

In general, the District is dominated by vehicular traffic. Roads and parking lots still populate the site, and new roads have been constructed around the stadium to serve both its needs as well as the growing needs of new academic buildings.

The transitway that connects the Minneapolis and St. Paul campuses ends at the edge of the new District; campus buses then go around the stadium to enter campus. The transitway to St. Paul is a permanent connection and is an asset to the new District and the neighborhood. Buses operated by Metro Transit also run close to the site, with stops along University and Washington Avenues.

The #16 bus, used by a large part of the University community, connects downtown St. Paul to downtown Minneapolis through the University's Minneapolis campus. Use of the Route #16 will be diminished by the planned Central Corridor LRT line, which should open in 2014. The planned closure of part of Washington Avenue to automobile traffic to allow for the future light rail will have a profound effect on the vehicular circulation patterns of the East Bank campus.

Pedestrian connections to campus are challenging from the East Gateway District. There are only minor sidewalks along very busy streets. Walking from the East Gateway District to almost anywhere on campus requires crossing at least one major thoroughfare. The closest major pedestrian corridor is Scholars Walk, which ends to the southwest of the McNamara Alumni Center.

Surrounding Land Uses

The industrial railyards to the north create an impermeable barrier on the edge of the District. The industrial buildings and silos that remain here connect the history of the East Gateway District to its history as an industrial center.

To the east along University Avenue, the urban fabric of Minneapolis picks up where the University leaves off. Small-scale retail shops, apartments, a hotel, a gas station, and many other buildings are mixed together to serve the needs of the University as well as the residents in the neighborhood. University Avenue is also the campus entrance from the east, giving the East Gateway District its name and subsequent responsibility to define the threshold of the Minneapolis campus. To the northeast, there are aging industrial and warehouse buildings, but private development has begun to plan for biomedical research facilities to complement the academic research programs in the East Gateway District.

The District's southern edge is University Avenue and around the edge of the TCF Bank Stadium. This edge is perhaps the least tangible boundary, as both the scale of the stadium and the variety of buildings along Washington
Avenue obscure the transition between districts. University Office Plaza and the Information Technology building, both along University Avenue, help articulate this challenging transition.

To the west, Williams and Mariucci Arenas, along with the new football stadium, connect the District to the adjacent athletic area. The scale of these buildings, unique to their use and capacity, also presents a challenge.

2008-2009 DISTRICT INVENTORY

The following illustrations highlight the existing features of the East Gateway District related to buildings, vehicular circulation, parking, and utilities. These illustrations are intended to provide a baseline for recommendations made later in the report.

1. Medical Biosciences Building Under Construction
2. Lions/McGuire Translational Research Facility from 6th Street
3. Williams Arena
4. View from University and 23rd Avenues
5. TCF Bank Stadium Under Construction
6. Historic Steel Silos
7. Historic Fire Station
Within the defined study area there are a total of six University-related buildings, not including the stadium. Each of these is identified on this diagram with associated use and area.

In addition to these buildings, there are a few other privately-owned buildings in the District. These are primarily located on the eastern edge of the study area and include a residential complex and several small industrial buildings.
This diagram illustrates the function of the road corridors in the District. University Avenue is a major regional connector and defines the southern boundary of the District. Oak Street and 23rd Avenue are the major north/south connectors into the District, and 6th Street is the primary east/west connector within the District.
2008-2009 PARKING SUPPLY

Currently providing the majority of the surface parking for the campus, the East Gateway District’s future parking strategy directly affects the overall campus’s parking capacity. As future development comes on line in the District, structured parking will be a necessity to meet the needs of the District as well as the overall campus.
2008-2009 UTILITY CORRIDORS

A survey of major and medium importance utilities is provided here for reference. Utilities are and will be changing on a regular basis. Therefore, recent survey information should be referenced when planning and designing new facilities.
DISTRICT ORGANIZATION

INTRODUCTION
This section describes the plan’s overall organizational structure. Topics in this section include the following:
- Organizational Concept
- Land Use Zones
- Research/Academic Zone

Overview
Early in the planning process, the organizational concept was developed to help guide the physical organization of the District. It divides the District into two major edges—academic/research and stadium—and designates where major gateways into the District should occur.

Based on this simple diagram, the District is subdivided into six land use zones. Each zone’s intended focus and primary use is described in this section, with most of the attention given to the academic/research zone, which is the focus of this effort.

Within the academic/research zone, there are three research clusters and one lab support cluster planned. Each cluster will include research facilities that share a research commons facility. This common space will function as a social and research hub and will include amenities such as cafes and dining. Additionally, shared research facilities will be located in the commons to reduce duplication and encourage collaboration.

TCF BANK STADIUM
Opening for the 2009 season, the stadium will be the most dominant feature of the East Gateway District.
ORGANIZATIONAL CONCEPT

The organizational concept for the East Gateway District grew from two basic planning challenges. First, the research focus of the District must find a way of working with the new TCF Bank Stadium to create a larger image for the entire University. Second, as the Minneapolis campus builds its eastern edge, the symbolic "gateway" role of the District as a campus threshold can be realized.

As the most dominant and identifiable feature of the East Gateway District, TCF Bank Stadium is the major organizing element of the District. Using the stadium as an anchor, the District is divided diagonally from the intersection of Huron Boulevard and University Avenue to the intersection of 6th and Oak Streets (reference the graphic on the following page). This division designates the southwest edge (in green) as the area "owned" by the stadium. This allows the stadium to continue to have a dominant image befitting its identity and presence.

With prominent stadium frontage on University Avenue, the northeast edge will be the primary research and academic focus of the District, and 6th Street and 23rd Avenue will become the primary vehicular and pedestrian routes for the future academic area.

Where each of the arcs meet are opportunities for gateways—formal entrances to the area. The larger of these, at the intersection of Huron Boulevard, 23rd Avenue, and University Avenue, is a true gateway to the University itself. The development of this intersection is crucial to welcoming traffic to the formal University campus.

The second gateway at the intersection of 6th and Oak Streets is visible from University Avenue and the campus, and has the potential to become the primary gateway for the research and academic functions of the District, both for the campus to the south and Dinkytown to the west. Although the stadium’s presence dominates the southern edge, the gateway at 6th and Oak Streets has the opportunity to create a visual identity for the District and connect it to the existing campus fabric.
LAND USE ZONES

Introduction
The land use diagram on the facing page and accompanying text describes the primary uses of each zone in the District, with the understanding that mixing uses within the District itself is encouraged. Other uses, such as small-scale retail, restaurants, library, or recreation can be considered for each zone if they support the primary focus of the zone itself. Cafes and restaurants in the East Gateway District will provide amenities for students and faculty, as well as the surrounding athletic venues.

Research/Academic
The research/academic zone is the driver and primary focus of this planning effort. In general, this District is intended to focus on biomedical and translational research facilities and will include parking and support facilities for these activities.

Stadium
Driving the organizational concept, the stadium zone is intended to support the stadium building and its users, provide prominent frontage on University Avenue, and allow space for game day functions to occur. The long-range development for this area will be nearly complete when the stadium is finished later in 2009. There will be no future building on this site, and continued development should work in service to the stadium’s prominence and the needs of campus visitors for athletic events.

Intermodal/Mixed Use
With the impending construction of the Central Corridor LRT line through the District, an opportunity exists for both a transit hub to handle the traffic and a way to interface with the existing mixed use along University Avenue. While specific requirements are likely to shift, the current facility is being planned to include a light rail platform, a major parking structure, a bus transfer station for University and Metro Transit buses, and associated rider services like newspaper and coffee stands.

This plan assumes that the platform is located parallel to 23rd Avenue, between University Avenue and the existing transistway to the St. Paul campus. The other elements will be housed in a large, multi-level facility to the northeast of the platform. The mixed use component of the zone is envisioned in a future linear building that parallels the platform and terminates at University Avenue. This facility will help define the intersection and the entrance to the University itself. Specific uses will be determined later, but could include ground floor retail with offices and residential space above.

LIONS/MCGUIRE TRANSLATIONAL RESEARCH FACILITY
There are three existing biomedical research facilities in the District that help to organize future planning concepts.
Future private development adjacent to the District can complement District design principles for a stronger image and identity.

**Non-Research Academic**
Recently acquired by the University, this zone is an ideal location for support services for the stadium, the District, and the overall campus. The only related facility in this zone is the MAST Laboratory, used by the Civil Engineering Department. Currently, plans are underway to locate land care facilities to the eastern edge of this zone. The remainder of the site, just west of the MAST Laboratory, is intended to serve support functions as needs are better defined over time. Structures built here should reflect the urban and industrial nature of the location and the site, as well as the zone’s identity as part of the University.

**Commercial/Mixed Use and Research Related**
These two zones reflect the long-range planning vision of the city as outlined in the Southeast Minneapolis Industrial (SEMI)/Bridal Veil Refined Master Plan (SEMI Master Plan), May 2001. This area falls into the South Redevelopment Area, which is defined by the plan to have a balance of uses, including light industrial, office, research, medium- to high-density residential, and limited retail/service areas. Additionally, the plan calls for “relatively dense” development of 3- to 5-story buildings. While the University does not control either of these zones, they are included here in order to plan for a successful physical transition between University functions and private development.

Consistent with the SEMI Master Plan, the research related zone is expected to develop into research-oriented facilities. The University hopes to build partnerships with private research groups that wish to be adjacent to biomedical and translational research facilities. Alternatively, other campus research functions that would benefit from co-location to the biomedical facilities would be established in this area. Future access to road and regional transit will support job growth and economic development in the region. These partnerships could allow for the sharing of ideas and resources related to the benefit of both the private groups and the University.

Architecturally, this zone should be encouraged to visually complement the University’s research facilities. Also consistent with the SEMI Master Plan, these zones should provide a mix of commercial and residential uses that support both the University and the larger region.
The 2001 SEMI Master Plan laid the foundation for the uses proposed for the private research and commercial/mixed use zones in the East Gateway District.
RESEARCH/ACADEMIC ZONE
Within the East Gateway District, a program-based organizational concept was developed to encourage interaction, provide support, and subdivide the District into three smaller research clusters. All research facilities are organized around a central space, called a research commons. The research commons acts as the nucleus for each cluster, providing elements of public and shared space amid substantial private or semi-private office and laboratory spaces. The existing space suggests that three clusters could exist in the District along with a smaller core lab support cluster.

Research/Academic Clusters
The west research cluster includes the Lions/McGuire Translational Research Facility. This cluster, when complete, will also be the first set of buildings when the District is accessed from the campus gateway at 6th and Oak Streets.

The east research cluster includes the MBB and is currently planned as the first phase of new development in the District. Specific challenges of this cluster will include creating a link to the planned intermodal transit station in the District, establishing a cohesive image of the East Gateway District, and creating a successful connection to the existing facilities in the District as well as the rest of the campus.

The southeast research cluster will likely be the last to develop. Of particular challenge in this cluster is the Thompson Center for Environmental Management. Use of the environmental management/waste facility is critical to activities that occur in the District, but the building’s orientation and functional traits do not contribute to the core-focused concept of building clusters. As the east and west clusters develop, the role of this third cluster and its relationship to the research related zone will become more clear.

Core Lab Support
The core lab support cluster includes the CMRR and the core support functions housed in the MBB, specifically its vivarium space. The design of the CMRR facility’s first expansion is currently being designed and is scheduled to be completed in 2010. The imaging functions in this facility will serve the larger District and University. Contingent on future land holding, the site may support one additional renovation/expansion in the future. The MBB has been designed with vivarium space within the building. While this vivarium space could be expanded, future programmed phases will need to evaluate the optimal locations for such facilities in proximity to future researchers. Vivaria facilities should not be located visible to primary street frontages.

Research Commons
In order to share expensive lab resources and provide non-proprietary space for University staff and researchers, research commons spaces
This diagram illustrates the relationships and connectivity between research clusters planned in the East Gateway District.
are planned for each research cluster. The first commons will be built with the east research cluster. Each commons is planned to be the center of activity for each cluster. Internally and externally, the research commons should be designed to represent the larger identity of the cluster. Architecturally, these are public beacons to the wider research community in a series of buildings that could otherwise appear closed and impenetrable.

Functionally, the research commons can serve two roles. First, they house shared research instrumentation and would typically be spread to each research building in the District. By centrally locating expensive equipment, facilities become more efficient to operate.

Building on the idea of bringing researchers together to a central location, the commons can serve a second function, that of a social hub and gathering space. University staff and students as well as researchers can access cafes and other amenities such as conferencing/seminar spaces.

The specific program for each research commons will be evaluated in the context of the research programs that are planned for adjacent buildings.
PROGRAM VALIDATION

As part of the East Gateway District Study, the planning team considered the initial program for the four facilities funded by the state. These include the following:

- CMRR Expansion: 56,000 sf
- Cancer Biomedical Building: 120,000 sf
- Lillehei Cardiovascular Research: 120,000 sf
- Infectious Disease/Neuroscience: 90,000 sf

The planning team worked with the Project Steering Committee to validate the initial program for the four facilities. The planning team benchmarked the occupancy densities and proposed gsf per occupant against peer facilities and found the program to be within comparable ranges. The planning team also evaluated a range of percentages for net square feet to gsf, establishing a 55% building efficiency target for each facility.

The planning team and the Project Steering Committee then evaluated the percentage of dedicated space to shared space by space type typical for biomedical research buildings. This helped determine parameters for the amount of shared space that might be part of the proposed commons for each research cluster.

The planning team also compared the percentage of open labs, lab support areas, primary investigator offices, staff support space, interaction space, and conferencing space against peer research facilities, and tested a number of different lab footprints as part of the development of the framework plan for the District.
### UNIVERSITY OF MINNESOTA BIOMEDICAL SCIENCES ALLOCATION OF SPACES

#### “Typical” Project - Percent of Area

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<th>Biomedical</th>
<th>Physical Sciences</th>
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<td>Laboratory</td>
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<td>35% to 45%</td>
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<td>Lab Support</td>
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<td>Research Office</td>
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<td>20% to 25%</td>
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<td>Total Dedicated Space</td>
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<td>70% to 90%</td>
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<td>Interaction</td>
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<tr>
<td>Vivarium</td>
<td>4% to 6%</td>
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<tr>
<td>Core Facilities</td>
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<tr>
<td>Non-Scientific Support</td>
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<td>Building Support</td>
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<td>Other</td>
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<tr>
<td>Total Shared Space</td>
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<td>10% to 30%</td>
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#### UM East Gateway District Potential Program

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<tr>
<td>Lab Support</td>
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<tr>
<td>Research Office</td>
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<td>Total Dedicated Space</td>
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<tr>
<td>Interaction</td>
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<td>Vivarium</td>
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<td>Core Facilities</td>
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<td>Non-Scientific Support</td>
<td>2% to 7%</td>
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<tr>
<td>Building Support</td>
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<tr>
<td>Other</td>
<td>1%</td>
</tr>
<tr>
<td>Total Shared Space</td>
<td>25% to 30%</td>
</tr>
</tbody>
</table>

- Electron Microscopy Facility
- Central Dining/Conference
DISTRICT DESIGN GUIDELINES

INTRODUCTION

About This Section
This section describes the district level urban design framework that will guide future development. Topics in this section include:

- Development Area
- Development Framework
- Height and Density
- Transit Connections
- Vehicular Circulation and Service
- Pedestrian Connections
- Parking
- Landscape and Open Space
- Art Opportunities
- Utilities and Infrastructure

PLANNING PRINCIPLES

Development 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.

It is the intent of this section to guide development of the East Gateway District according to the principles established for the plan. This section describes a framework for development, general massing, building envelopes, open space relationships, key pedestrian connections, circulation, parking, infrastructure, and public art recommendations.

The urban framework provides a long-term view of the District at build out. In the short term, there are a select number of existing facilities that must be accommodated in the District Master Plan, that in the long term are re-envisioned in another location or configuration. They include the University Office Plaza office building on University Avenue at 23rd Avenue, and the Fay Thompson Center for Environmental Management on 23rd Avenue at 4th Street.

The landscape and pedestrian spine of Scholar’s Walk on campus mitigates the variety of scale and massing behind it.
The Development Area Plan (shown on the facing page) is a physical framework that establishes the desired character and relationship of built areas to open space and the public realm of the District. It defines the build-to lines along streets and right-of-ways in order to create a consistent street wall for future buildings. The framework also establishes key open space zones and pedestrian malls that subdivide the larger blocks into a more human scale pattern, and delineates the developable areas within the District.

This plan offers maximum flexibility for future building decisions, yet preserves the absolutely necessary components of the plan. The light green areas of the plan represent all of the land that is developable in the District.

The table on the left describes each non-buildable zone in terms of its flexibility to be modified, specific location, and recommended size. Because the District is within the larger urban street network, some of the descriptions defer to city-defined right-of-ways and setbacks. Most of the open space descriptions are flexible except for malls, which should be consistent throughout.

<p>| RIGHT-OF-WAY AND OPEN SPACE CORRIDOR DESCRIPTIONS |</p>
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<tr>
<td>R1</td>
<td>Oak, 6th to Granary</td>
<td>100’ Right-of-Way, No Setbacks</td>
</tr>
<tr>
<td>R2</td>
<td>21st, 6th to Granary</td>
<td>80’ Right-of-Way, No Setbacks</td>
</tr>
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<td>R3</td>
<td>23rd, University to Granary</td>
<td>90’ Right-of-Way, 10’ Setback on East Side of Road Only</td>
</tr>
<tr>
<td>R4</td>
<td>25th, University to Granary</td>
<td>100’ Right-of-Way, No Setbacks</td>
</tr>
<tr>
<td>R5</td>
<td>6th, Oak to 25th</td>
<td>80’ Right-of-Way, 40’ Setback on North for Swale</td>
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<tr>
<td>R6</td>
<td>Transitway</td>
<td>100’ Right-of-Way, Verify with Central Corridor Plan</td>
</tr>
<tr>
<td>R7</td>
<td>4th, 25th to 27th</td>
<td>Use City-Defined Right-of-Way, Approximately 80’</td>
</tr>
<tr>
<td>R8</td>
<td>University</td>
<td>Use City-Defined Right-of-Way and Setback</td>
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<tr>
<td>R9</td>
<td>27th, University to Granary</td>
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<td>Granary</td>
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<td><strong>Open Spaces</strong></td>
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<td>Oak and 6th Plaza</td>
<td>Flexible Open Space to Define Plaza</td>
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<td>C1</td>
<td>Courtyard West of Lions</td>
<td>Approximately 100’ x 200’</td>
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<td>Courtyard North of Stadium</td>
<td>Approximately 130’ x 300’</td>
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<td>C3</td>
<td>Courtyard North of MBB</td>
<td>Approximately 100’ x 420’</td>
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<td>C4</td>
<td>Courtyard on Thompson Site</td>
<td>Approximately 120’ x 240’ (South of 6th)</td>
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<td>Mall Between Lions &amp; CMRR</td>
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<td>M2</td>
<td>Mall East of MBB</td>
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<td>Mall North of Thompson</td>
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<td>S1</td>
<td>Setback North of Intermodal</td>
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## DEVELOPMENT POTENTIAL

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<td>C1</td>
<td>16,300</td>
<td>4</td>
<td>65,200</td>
<td>7</td>
<td>114,100</td>
</tr>
<tr>
<td>C2</td>
<td>13,250</td>
<td>4</td>
<td>53,000</td>
<td>4</td>
<td>53,000</td>
</tr>
<tr>
<td>C3</td>
<td>13,200</td>
<td>4</td>
<td>52,800</td>
<td>7</td>
<td>92,400</td>
</tr>
<tr>
<td><strong>Support</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S1</td>
<td>30,200</td>
<td>2</td>
<td>60,400</td>
<td>2</td>
<td>60,400</td>
</tr>
<tr>
<td>S2</td>
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<td>2</td>
<td>60,400</td>
<td>2</td>
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<tr>
<td><strong>Mixed-Use</strong></td>
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<tr>
<td>M1</td>
<td>28,350</td>
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<tr>
<td>M2</td>
<td>11,150</td>
<td>10</td>
<td>111,500</td>
<td>10</td>
<td>111,500</td>
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</tbody>
</table>

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## DEVELOPMENT FRAMEWORK

The Development Framework Plan on the facing page combines the Development Area Plan from page 41 with some assumptions of how buildings could be organized in the District. The building zones, coded by primary use, are laid out using typical dimensions for each use type. Research and commons building zones are all 100 feet wide, which could be wider or narrower depending on the specific lab configuration.

The table on the left lists each building zone, defines the base gsf, and provides a low and high range for the number of floors and subsequent total gsf. This table is provided as a range of potential development and gives some indication as to the potential height the building could achieve. The actual gsf per building will vary depending on number of floors, configuration of the base floor, existence of a lower level, and whether penthouse space is provided or not.

The phase one area of development is identified by the block defined by 6th Street north to the future Granary Road extension, and from 21st Street to 23rd Avenue.
HEIGHT AND DENSITY
Using the table from page 42, an overall Floor Area Ratio (FAR) can be calculated for the District. Due to the non-typical building typologies of the entire District (i.e., stadium, intermodal station, etc.), the FAR was only calculated for the academic/research zone. This allows for a direct comparison to other research, clinical service, and academic districts.

The table to the right describes a high and low range of FAR that could be achieved in the zone based on the assumptions of height listed in the table on page 42. Since FAR is a function of density, the planned gsf of parking structures and existing facilities were also included in the calculation.

As a benchmarking exercise, the Northrop Mall and the AHC East Bank campus were analyzed to determine their FAR. These references allow for a better understanding of how the East Gateway District might look at a particular FAR. The analysis for each is summarized to the left. The low and high ranges proposed for the academic/research zone fall between the existing FAR of the Campus Mall and AHC East Bank campus.

Within the District, the plan recommends a building height minimum of 4 stories and a maximum of 7 stories. It is further recommended that the two gateway nodes have an increased height over the rest of the District, with buildings at 6th and Oak Streets recommended at 7 stories. This would result in an FAR range average of 1.7. Proposed mixed use buildings at the University Avenue/23rd Avenue intersection are recommended to reach 10 to 15 stories to create a true urban gateway and presence on Huron and University Avenues.

Overall, academic/research buildings between 4 and 7 stories will remain below the established height of the TCF Bank Stadium, as illustrated in the diagram below.
## ACADEMIC/RESEARCH FLOOR AREA RATIO

<table>
<thead>
<tr>
<th>Category</th>
<th>Low Range</th>
<th>High Range</th>
<th>Recommended FAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing GSF (Lions/McGuire, MBB, &amp; CMRR)</td>
<td>307,200</td>
<td>307,200</td>
<td>1.7</td>
</tr>
<tr>
<td>New Academic/Research GSF</td>
<td>1,907,000</td>
<td>3,134,000</td>
<td></td>
</tr>
<tr>
<td>Includes Research/Academic and Research Addition SF</td>
<td></td>
<td>Includes Research/Academic and Research Addition SF</td>
<td></td>
</tr>
<tr>
<td>Parking Structures GSF</td>
<td>648,800</td>
<td>648,800</td>
<td></td>
</tr>
<tr>
<td>Total GSF in Academic/Research Zone</td>
<td>2,863,000</td>
<td>4,090,000</td>
<td></td>
</tr>
<tr>
<td>Land Area of Zone</td>
<td>43.8 (acres)</td>
<td>43.8 (acres)</td>
<td></td>
</tr>
</tbody>
</table>

**Low Range FAR**: 1.5

**High Range FAR**: 2.1
TRANSIT CONNECTIONS
A key principle of the District Master Plan is the development of an integrated transportation system emphasizing pedestrians and transit. Due to the East Gateway District’s distance from the academic core, transit will be critical to ensuring connectivity to other research components on campus.

The primary connection to the rest of the university will be the planned Central Corridor LRT line. The line is planned to make stops in the East Gateway District and at the academic core at Washington Avenue and Union Street. Additionally, the proposed intermodal station will have a bus transfer station on the first floor. From there, users can access local and regional bus systems.

In addition to these connections, maintaining a direct shuttle connection between the District and the Academic Health Center will also be beneficial.

LIGHT RAIL
The planned Central Corridor LRT line will play a major role in connecting the East Gateway District to the academic core of campus.

STADIUM VILLAGE STATION
This is the planned section of the Stadium Village platform with 23rd Avenue on the left of the diagram.
VEHICULAR CIRCULATION AND SERVICE

Much of the proposed road network was recently implemented to accommodate the TCF Bank Stadium, to be completed in 2009. This network constitutes a substantial investment in infrastructure; therefore, the plan works with it as much as possible. Having been planned to accommodate future academic activity in the District, the planning team feels that the road network will perform reasonably well without major upgrades.

The East Gateway District is defined to the south by University Avenue. Along with Huron Boulevard, from the south, they provide regional access to the District. When Granary Road is realized in its entirety, it will be a third regional connection. As it is planned, the District will be bordered on the north and south by major vehicular corridors. The only internal east/west connection in the District is 6th Street. Internally, the District will have several north/south connectors that complete the local road network and tie the major east/west corridors together, improving access and visibility into the District, particularly from the future Granary Road.

Road Improvements

Two road realignments are proposed in the District: Oak Street at 6th Street, and 23rd Avenue north of 6th Street. Oak Street was rerouted from its original alignment to improve its intersection with University Avenue and accommodate traffic movement for the new stadium. Plans to extend Oak Street north of 6th Street would take it immediately west of the Lions/McGuire Translational Research Facility. However, a major water main and storm line remains in the old alignment of Oak Street, requiring a permanent easement.

Keeping both the easement and the currently planned Oak Street extension would result in a narrow parcel of land between the two corridors, not suited for development. The District Master Plan therefore proposes a future realignment of Oak Street at 6th Street, utilizing the former right-of-way as the new road alignment. This will require a reconstruction of the intersection of 6th and Oak Streets. This move allows consolidation of buildable land west of the Lions/McGuire Translational Research Facility for a new research cluster and gateway site on the west edge of the District.

In order to create more prominent views to the research cluster on 23rd Avenue, the plan proposes a realignment of the road north of 6th Street to close the view from University Avenue. This will create more visibility and identity for the academic and research facilities at 6th Street and 23rd Avenue, rather than lead to open views of the railyards beyond.

A shift in the alignment of the bus transitway between 23rd and 25th Avenues is also proposed to accommodate future construction of a multi-modal parking structure and its exit ramps.
Road Function and Hierarchy

University Avenue and 4th Street are major roadways that operate as one-way pairs starting at Oak Street and University Avenue. These corridors carry significant volumes of through traffic for the city and District. Their right-of-ways will be maintained in the District Master Plan.

Granary Road

The future Granary Road extension is envisioned as a regional connector and parkway. It will border the District on its north side, and is expected to carry significant traffic when completed. For planning purposes, the vehicular network within the District has been planned with limited new intersections at Granary Road to Oak Street, and 21st, 23rd, and 25th Avenues. Service drives will generally not be allowed from the parkway.

Granary Road should be treated as a front door/address street for future development. The proposed right-of-way and setback on Granary Road will allow for an approximate 25-foot landscape buffer on the southern, University-owned side of the road. This will include sufficient space for a multipurpose trail on its south side, and depending on final road design and layout, a potential bike trail on its north edge.

6th Street

The only east-west connector that traverses the District is 6th Street. It is a multi-functional street, accommodating vehicular traffic, campus bus traffic, pedestrian movement, and stormwater management. Its proposed cross-section allows for a 40-foot setback from edge of curb to building façades, able to accommodate stormwater swales planned and constructed, with pedestrian walks on both sides of the swales. As the District is further built out, increased pedestrian traffic in the District across 6th Street may necessitate installation of additional pedestrian crosswalks.

Primary Connectors

Oak Street, 23rd Avenue, and 25th Avenue are the primary north/south routes. They will extend to Granary Road, providing direct connection from Granary Road to University Avenue. Their proposed cross-section includes approximately 24 feet for pedestrian walks and landscape zones between the curb and building façade.

Secondary Connectors

As Granary Road is completed, secondary streets at 21st and 27th Avenues are proposed from 6th Street to Granary Road to complete the street grid of the District and provide access to service drives and future parking decks.
**Service Drives**

Service drives for the District will be accessed off of Oak Street and 21st, 23rd, and 25th Avenues. Service access for facilities south of 6th Street is recommended off of the service corridor constructed around the stadium. Here, the service drive doubles as a major pedestrian route, particularly on game days, and must be designed and maintained to a higher level of quality.

Where feasible, service functions and loading docks should be consolidated. They should be screened from public streets, adjacent pedestrian walks and courtyard spaces. In some cases, retrofitting existing loading docks with screening (walls or fencing) should occur as additions or renovations of buildings are undertaken. As future phases are programmed, combined loading docks into one central location to serve a grouping of buildings should be evaluated. As much as is feasible, service drives should incorporate pervious pavement to reduce runoff.

Design service corridors to provide efficient and consolidated access for loading and deliveries while creating a safe, attractive pedestrian environment. Service corridors must interact with open space elements (pedestrian malls) at a limited number of crossings. Design of corridors should manage speed, use pervious materials, and contain strategically placed signage and lighting. The design should offset other negative effects through planting and/or structures.
PEDESTRIAN CONNECTIONS
A rich network of pedestrian walks that connect District destinations to transit stops, parking, area retail, and the main campus is fundamental to promoting a sense of place and reduced reliance on the automobile. The District Master Plan delineates this network of primary and secondary pedestrian routes.

Primary and Secondary Routes
Primary routes reinforce the primary street corridors and paths of the District, on 6th Street, 23rd Avenue, Oak Street, and the proposed Science Walk, and the north/south malls and sidewalks that connect Granary Road into the District. Secondary routes are assumptions of future pedestrian movement, but less volume than primary routes. Primary routes may include wider walkways and paving, special wayfinding, and other site amenities.

Several primary pedestrian routes are proposed to break up the long blocks on 6th Street and 23rd Avenue. New mid-block crossings should be installed at these locations to slow traffic and provide a safer crossing. New, consistent mid-block crossing standards can be developed that will alert motorists to slow down and yield to pedestrians. One new pedestrian crossing signal may be warranted at the intersection of the proposed Science Walk and University Avenue. Further study should be conducted to determine if this can be a fully signalized intersection. The East Gateway District Master Plan includes conceptual recommendations for potential above-grade skyway connections, should future programming show demand for such facilities.

Skyway Guidelines
• Skyways in the District will transport:
  a) Research materials.
  b) Building occupants or visitors moving between research buildings.
• Skyways will not be built to connect the District to other campus venues or facilities.
• Skyways will connect buildings within research clusters when at-grade connections would disrupt open space elements or service corridors.
• Buildings will be designed to accommodate through-traffic circulation at the skyway level.
• Skyway connections should occur at a distance from intersections to allow for visibility and wayfinding at the street level.

Streetscape Character
Street cross-sections have been planned with enough distance between buildings and curb lines to allow room for sidewalks, a landscape zone at the curb, and a landscape zone at the building edge. The street edge landscape zone provides some buffer against traffic on the adjacent road. Street trees and tree pits could include a “green streets” design, using the planter area as a filter for local sidewalk run-off.
The landscape at the building edge provides interest along building façades without major entrances or active ground floor uses.

To activate and maintain a quality pedestrian realm, future buildings should include active uses and transparency at the ground level and at major building entries fronting 6th Street and 23rd Avenue. Street trees, pedestrian-scale lighting, site furniture, and wayfinding should be incorporated into a unified streetscape design that creates a contemporary, unique identity for the District, while harmonizing with previous campus site furniture standards. Energy-efficient lighting sources, drought-tolerant plantings, and porous pavement should be used for all pedestrian routes.

**Science Walk Extension**

One of the main pedestrian connections from the East Gateway District to the main campus is proposed along the old alignment of Oak Street, from 6th Street to Walnut Street and Scholars Walk. This route is currently used and designed as a service road to access loading docks at the McNamara Alumni Center and the Recreation Center. The plan proposes a re-design of this visual and physical axis as a major pedestrian route and an extension of Scholars Walk into the District. The re-design should continue to accommodate occasional delivery trucks and access to the loading dock of the Recreation Center. The Scholars Walk extension will take advantage of this pedestrian route with interpretive graphics that tell the story of the research conducted by the University.
TYPICAL GRANARY ROAD SECTION

TYPICAL 6TH STREET SECTION

TYPICAL PRIMARY CONNECTOR SECTION

TYPICAL SECONDARY CONNECTOR SECTION

Typical Streetscape
SETBACK DIAGRAM

LEGEND
- Existing Academic/Research
- Developable Land Area
- District Open Space Zones
- Stadium Open Space
- Stormwater Treatment Area
- Stadium Plaza and Circulation
- Setback

0' 200' 400' 800'
PARKING

In order to accommodate future development, surface parking lots will be replaced by structured parking in three locations: west of Oak Street off of 5th Street; a mid-District location east of 21st Avenue north of 6th Street; and the proposed multi-modal deck and transit stop on 23rd Avenue at 4th Street. Ramps will be distributed within a 3- to 5-minute walk of all facilities.

The current parking total is 3,082 spaces, all surface parking. Proposed parking is approximately 4,200 spaces, including up to 3,300 spaces in the three proposed decks. Smaller surface parking lots of 20 to 30 vehicles will be located throughout the District. A multipurpose space proposed at the southeast corner of the stadium has been included in the parking count. This area should be designed as a green, landscaped foreground to the TCF Bank Stadium, with pervious pavement, able to accommodate occasional parking and vendors/concessions on game days.

At the lower range density, the parking ratio of spaces to square feet (sf) of development is approximately 1/500 to 600. The ratio of parking to development will vary depending on building type. Guidelines of spaces/use follow (assumes no transit):

- Wet lab 1 space/700 sf
- Dry lab 1 space/500 sf
- Office 1 space/350 sf

Assuming a mode split in the future of 70/30 (70% use single occupancy vehicles; 30% walk or use transit, carpool, or bike), that would reduce the guidelines as follows:

- Wet lab 1 space/700 sf
- Dry lab 1 space/500 sf
- Office 1 space/350 sf

The long-term parking strategy for the East Gateway District will depend in large part on the nature of future uses and construction of the Central Corridor LRT line. The University should continue to encourage Transportation Demand Management strategies to curb demand for single occupancy vehicles and to promote transit ridership.

SRF Consultants conducted a parking analysis for the East Gateway District Master Plan based on future built conditions to year 2015, testing for the lower density target, and including construction of the Central Corridor LRT line. SRF Consultants assumed that a new 2-lane roadway and extension of 25th Avenue from University Avenue to Huron Boulevard will be constructed as well as a reconfiguration of the intersection of 25th Avenue and Huron Boulevard. They found that with these proposed improvements, future roads and intersections would be capable of handling three parking ramps at the proposed sizes.

Parking ramps will be a strong part of the visual character of the District and should be guided by the architectural design guidelines. Active ground floor uses should be planned for the front façade of decks adjacent to primary corridors and pedestrian routes.
The parking deck proposed at 5th and Oak Streets will need access to 5th Street without compromising the future building site fronting 5th Street.
LANDSCAPE AND OPEN SPACE

Early objectives for the East Gateway District emphasized the creation of a cohesive, memorable system of public spaces. To achieve this goal, the District Master Plan proposes an interconnected network of public and semi-public spaces to balance the proposed density of the District with a sense of physical order, openness, and human scale.

Just as the east bank of the Twin Cities campus is formed by a hierarchy of malls, quadrangles, courtyards, and streets, the open space proposed for the East Gateway District is shaped by a hierarchy of similar elements that include:

- Pedestrian malls.
- Courtyards.
- Gateways and plazas.
- Streets and the public realm.

Pedestrian Malls

At lengths of 700 to 800 feet, the current development pattern of over-scaled blocks and roadways designed to the automobile do not enhance the pedestrian experience. The creation of a smaller block pattern with a series of pedestrian malls every 300 to 400 feet will provide more connections through the District, breaking up the scale of the mega-blocks into a more human-scaled urban grid. These pedestrian malls are proposed as similar in scale and character to existing pedestrian routes and former streets on the main campus, such as Church Street north of Washington Avenue and Scholars Walk. Their landscape character will emphasize a linear pattern of movement, open sight lines, and an enhanced pedestrian environment with shade, landscape, lighting, site furniture, and public art.

Enclosed connections between buildings should occur above the first story level as skywalks when crossing pedestrian malls, to allow continuous north/south pedestrian movement. In limited circumstances, if above-grade connections are not feasible, at-grade connections between buildings could be considered only if recessed from the primary frontage of the façade, with transparency and doorways to allow visual access and pedestrian movement through the connection.

Courtyards

Courtyards support the social life and intellectual exchange of a campus. A blend of enclosure and openness, the proposed courtyards will make the District a place made of many smaller places—some more intimate; some more engaging. They are intended to provide informal outdoor space for the immediate building occupants, with visibility and accessibility to other District users. Their landscape character can range from informal, unscripted space to more formal, programmed, and unique environments. Courtyards should include a rich palette of landscape and pedestrian amenities, including outdoor seating, shade, lighting, and plantings for color and seasonal interest.
The Illustrative Plan conveys the intended scale and character of Distinct open space and pedestrian connections.
Pedestrian malls provide important breaks within District blocks, adding open space, views, and pedestrian access throughout the District.

As linear elements, pedestrian malls should be clearly articulated with a lush landscape, canopy trees, pedestrian lighting and furnishings, and pervious pavement.
**Gateways and Plazas**

Two major spaces will anchor the East Gateway District—a major plaza at University Avenue and Huron Boulevard, and a new plaza on the corner of a realigned Oak Street at 6th Street. Both of these gateway plazas are intended as foreground open spaces allowing uninterrupted views to new research and mixed use facilities surrounding the space. New buildings should be oriented to the gateway plazas, with active building bases and major entrances opening onto the space.

The plaza proposed at Oak and 6th Streets serves as a foreground plaza for new research buildings and the Mariucci Arena. This space is envisioned as an urban plaza able to accommodate a high volume of foot traffic on event days. It should be designed with street trees, hardscape areas, lighting, site furnishings, special features such as water or civic art, and high quality materials and finishes. The plaza should easily connect both physically and visually to the proposed Science Walk.

Currently the landscaped berm that divides traffic on Washington Avenue, Huron Boulevard, and University Avenue is proposed as a gateway plaza and a highly urban space surrounded by taller, mixed use buildings, creating a true architectural gateway to the East Gateway District. Major building entries and active ground floor uses should be incorporated to enliven this plaza, with pedestrian amenities and an elegant urban landscape to mitigate the traffic and transit activity of this key corner.

**Stadium Corner**

Stadium Corner is the southeast corner of the stadium block, and is currently occupied by a university office building. In the long term, that building should be replaced with a multipurpose open space that can accommodate game day vendors and concessionaires, and the foot traffic arriving by the Central Corridor LRT line across 23rd Avenue. A flexible landscape zone within a grid of canopy trees will bring down the scale of the space and make it inviting for pedestrians on non-game days.

**Streets and the Public Realm**

Streets within the East Gateway District are the backbone of the pedestrian experience. The two primary corridors in the District are 23rd Avenue and 6th Street, which link the District to Stadium Village and the future transit center on 23rd Avenue, and to the athletic area and Dinkytown on 5th/6th Streets. The character of 23rd Avenue on the east side of the District has multiple purposes. It is both a part of the stadium block and part of the vehicular and pedestrian entry to the East Gateway District. With construction of the Central Corridor LRT transit stop and a proposed multi-modal parking deck and bus transit center, 23rd Avenue will also become a significant pedestrian corridor.

A series of vegetated swales in the 6th Street right-of-way will accommodate the District’s stormwater run-off. As the District builds out, more sophisticated models to capture and treat run-off should be incorporated that
include porous pavement, seatwalls, and other linear elements. Pedestrian walks should be constructed on both sides of the bio-swales with connecting paths across to improve pedestrian access to future facilities.

**Sustainable Landscape**

Sustainable design methods for treating urban storm run-off can be incorporated into the open space network of the District as features within courtyards and pedestrian malls, and along the 6th Street corridor. Porous paving should be used for all pedestrian hardscape areas to encourage infiltration. Plant material of native and drought-tolerant species should be used throughout.

The University of Cincinnati provides an excellent example of an urban plaza and gateway to an athletic stadium.

The 6th Street rain gardens can include a more urban edge and refinement.
ART OPPORTUNITIES
Public art will give identity, branding, and a memorable sense of place to the East Gateway District. It will provide interpretive opportunities to explain the research done within the District and its impact to the University, city, state, and country.

The District Master Plan proposes a number of locations for future public art installations as part of the open space network, organized in a hierarchy dependent on the scale and spatial relationship to their surroundings.

Gateway Scale Opportunities
Two gateway locations are identified: one at the Stadium Corner on University and 23rd Avenues, and the second at the intersection of Oak and 6th Streets. Public art in these locations will need to be monumental in scale, visible from a distance, and in proportion to the scale of its plaza space and adjacent buildings such as the stadium, arena, and future research buildings. It must be legible from many vantage points, yet engaging at a pedestrian scale.

District Scale Opportunities
Located at the terminus of major view corridors along the pedestrian malls, these spaces are scaled and situated in a smaller proportion of open space than gateway spaces; however, these locations often have the stadium as a backdrop. Public art at the District scale should be visible and accessible by many within the District.

Courtyard Scale Opportunities
Located within research courtyards, public art at this level is more intimate—legible at a more personal scale. It helps animate the courtyard experience within a cluster of buildings. It may also be viewed from many upper floor vantage points.
PUBLIC ART OPPORTUNITIES AND LOCATIONS

LEGEND

Gateway Scale Opportunities
District Scale Opportunities
Courtyard Scale Opportunities
Utilities and Infrastructure

Due to the integral nature of the infrastructure system compared with the rest of the campus, this plan does not include an exhaustive utility study. Rather, utility and infrastructure conditions were analyzed to determine potential modifications and challenges to implementing the District Master Plan.

Parallel to this study, the University is evaluating campus-wide infrastructure needs. This study along with future studies will be necessary to effectively implement an efficient and sustainable infrastructure network.

Utility Concerns

There were two medium and one major potential concern identified through this study. Each concern is identified in the diagram on the facing page and described in the adjacent table. While the footprints that create these points of concern are flexible, the plan suggests looking at the possibility of relocating these utilities when it is time to move forward with the specific facilities to allow optimal development.

Through the planning process, the one major area of concern was determined to be worth considering for relocation in the future because of the quality of space that would be created at the Oak and 6th Streets gateway. Additionally, the steam line in question may have to be upgraded to provide additional supply. Decisions about when to relocate utilities at the Oak and 6th gateway will be assessed based on financial and development opportunity parameters. This phase of development is anticipated to occur in the long term future.

Infrastructure Expansion

As noted on the plan on the facing page, the current electric and steam supply lines do not exist to 23rd Avenue. This poses a problem for the first phase of research buildings discussed later in this report. These utilities will need to be extended before opening any new research facilities east of where they currently end.

The Utility Master Plan, approved in 2009, suggests that a new power generation plant may be required by approximately 2020. This may include the acquisition of a 5- to 10-acre site northeast of campus.

Infrastructure Corridors

When infrastructure is expanded, it is extremely important that lines and tunnels be implemented outside of potential development zones. Open space corridors and roadways are ideal locations for utilities even if they result in slightly longer utility runs. The major area of concern identified in the plan was created because the line was built along the shortest path through a parking lot rather than the existing roadway.

Utility Corridors

Major utilities should be kept to roads and open space corridors to preserve future building footprints.

Future Utility Modifications/ Areas of Concern

1. Proposed research facility is over a 12” water main. This is a medium impact.
2. Proposed research facility is over an electrical ductbank and a steam supply. The ductbank is a medium impact. The steam supply is a major impact.
3. Proposed research facility is over a 36” storm sewer. This is a medium impact.
LIMIT OF STEAM AND ELECTRICAL UTILITIES

LEGEND
- Storm Sewer
- Sanitary Sewer
- Water Main
- Steam
- Electrical Ductbank
- Area of Concern
ARCHITECTURAL DESIGN GUIDELINES

The architecture of the East Gateway District will help define a new area of campus. The University hasn’t undertaken the planning, design, and construction of a district of this size and scale since the West Bank area was developed in the 1960s. The District buildings must work together as parts of the District and a part of campus, while still respecting the design intent and programmatic requirements of individual buildings.

CAMPUS DISTRICT

The Twin Cities campus is loosely organized into districts, each easily identified by name or landmark: Northrop Memorial Auditorium or Mariucci Arena, for example, identify not only the name of a place but also identify the campus areas they occupy. These identities define the district and provide a means of orientation. Each district is held together by elements common or unique to that district. These elements include commonalities related to location, use, formal order, or arrangement within a district, to more architectural commonalities such as age, massing, materials, geometry, fenestration, and level of ornamentation.

With a long history as the “back” of campus, the East Gateway District has a number of challenges to overcome to integrate fully into the University’s built fabric. These challenges represent a collective opportunity for architects and designers to fully connect the new district into a large and diverse campus.

PHILOSOPHY

The overarching philosophy of the architectural guidelines as a response to the challenges facing the District is threefold: first to unify the District as a place of biosciences research; second, to integrate the new District into the existing campus; and third, to identify the District as a research center at the University of Minnesota. The architectural guidelines work to be a descriptive impetus for design rather than prescribing definite rules or standards.

EAST GATEWAY DISTRICT CHALLENGES

1. District at the Back/District at the Edge

The addition of the TCF Bank Stadium and recent research buildings has begun to shift the perception of “back door” for this part of campus. The District’s location at the edge of campus, adjacent to athletic venues and close to active retail uses south of University Avenue, creates the opportunity for integrating the District more fully into the campus and urban fabric. The condition of “edge” therefore can become an opportunity for “gateway,” a type of new threshold into campus.

2. Inconsistent Context

The stadium and arenas have set one built example for the District. They are of one type and character—traditional, monumental, and brick. Recent research buildings of the District provide a second architectural context, with more glazing and articulation of massing and scale. Rail lines and historic silos are the sole remnants of the industrial history of the area, providing...
a third context in the District. A design opportunity lies in incorporating each of these influences as parts of a broad whole, and an impetus for the design of contemporary science and research buildings.

3. Stadium Dominates the District
The new TCF Bank Stadium is large by almost any architectural standard. Its proximity to other athletic venues adds to the feeling that this area can only house buildings of a similar scale. New buildings should address the scale and materiality of the athletic venues, but must also mediate between their sheer size and the more human-scaled, contemporary environment of future research buildings.
ARCHITECTURAL CONTEXT
Architecturally, the University’s campus is extraordinarily diverse. The variety of architectural styles embodies the past 150 years of American architectural history. Richardsonian Romanesque, PWA Moderne, International Style, New Brutalism, examples of the various historic revivals from the turn of the twentieth century, and the contemporary eclectic styles of the last twenty years are all represented on campus.

Lively neighborhoods have developed at the edges of campus, home to small-scale restaurants; retail establishments; and staff, faculty, and student housing. They are equally diverse in building size, age, and use. These neighborhoods are important to the vitality and definition of the campus.

The recent University master plan recognizes the eclectic nature of the campus and architectural styles over its evolution. However, the principles of the campus-wide master plan also strive for cohesiveness in the campus environment, through appropriate scale, common materiality, buildings that shape positive outdoor space, the treatment of primary entrances, etc. This does not imply that new construction should copy historic styles, but rather look to successful examples on campus that embody these principles and create memorable places.

DESIGN PRINCIPLES
1. Commons facilities within buildings form centers for multi-building development and interaction.
2. Commons facilities will be architecturally iconic to address their unique role in the District.
3. Lab buildings will have circulation corridors fronting Oak Street, 6th Street, and 23rd Avenue.
4. Offices, support spaces, and circulation elements will be separately articulated.
5. Major street walls will be predominantly masonry.
6. Bridges and walkways will be uniquely designed to complement adjacent buildings.
7. Building bases should feel open and use glazing as a dominant material and provide weather cover near doorways.
8. Ground level façades on Oak Street, 6th Street, and 23rd Avenue will have as much transparency and activity visible to the street as possible to animate the pedestrian environment.
9. An integrated landscape of terraces, water, and planting will accent building entrances.
10. Courtyards will be landscaped and accessible.
ARCHITECTURAL CHARACTER

Architectural Character

1. Use predominately brick, with limited areas of stone, metal, or other accent materials for building exteriors.
2. Provide a variety of heights, textures, and scales.
3. Construct buildings of not less than 3 stories nor more than 7 stories.
4. Use large glass walls to enhance entrances, important internal circulation events, and courtyards.
5. Connect buildings with interesting bridges and walkways.
6. Design and arrange internal and external space to support connectivity and collaboration.
7. Design commons facilities within buildings to be iconic through massing, materials, and lighting.
8. Accent building entrances with integrated landscape of terraces, water, and planting.
9. Achieve at least USGBC LEED® Gold certification for all buildings and landscapes.
Research Pragmatics
1. Use predominately modular open labs capable of adapting to future wet or dry programs.
2. Provide at least 15-foot floor height with a minimum 22-foot structural span throughout.
3. Locate adequate support spaces between labs and corridors.
4. Aggregate principal investigator offices around areas for casual interaction and collaboration.
5. Provide natural light to labs and offices.
Interaction

1. Develop a program model to achieve 55% efficiency to support casual collaborative spaces.
2. Provide artwork and display areas that describe scientific inquiry in formal public areas.
3. Locate small lounges, atria, staircases, seminar spaces, and conference rooms to foster interaction.
4. Provide a variety of soft seating, tables and chairs, and adjoining flexible storage space.
5. Locate interaction areas along the path of travel between labs, offices, and circulation corridors.
6. Zone multiple areas from formal to completely unscripted throughout.
7. Provide technology, white boards, coffee kitchens, a variety of soft seating, and tables and chairs.
8. Allow for display of various media illustrating current areas of inquiry.
Sustainability
1. Require all new buildings to attain USGBC LEED® Gold certification.
2. Continue to implement the East Gateway Stormwater Management strategy, including green roofs, bio-swales, and infiltration planters.
3. Develop traffic/transit plans to leverage the intermodal station and existing campus transit systems.
4. Similar to the existing Scholars Walk, create a Science Walk display that tells the story of the University’s commitment to the interrelated challenges of the biosciences and environmental sustainability.
PHASE 1 DEVELOPMENT PLAN

The East Gateway District Master Plan is an extension of the Twin Cities Campus Master Plan, approved by the Board of Regents in March 2009.

The District Master Plan will be used to guide future development decisions and influence operations decisions in the District. Planning and design efforts will refer to the District Master Plan when projects are being defined, sites are selected, and in both pre-design and schematic design stages of development.

Project Development and Approvals

Specific objectives and strategies for capital projects affecting land use, buildings, open spaces, landscape, and infrastructure will be determined in consultation with the District Master Plan.

The ultimate responsibility for day-to-day administration of the District Master Plan is held by the Vice President of University Services. Projects will be reviewed at the pre-design and schematic design level of detail by Planning and Architecture staff, who will provide analysis and recommendations to the Biomedical Discovery District Executive Committee.

Phasing and Planning Horizon

Near-term activities, projected within 0-5 years, are expected to include:
1. Coordinated site planning, programming, and construction of biomedical research facilities in the area noted as Phase 1 on the following diagram by summer 2009.
2. Expanded additional energy capacity (steam and chilled water for heating and cooling) to support these buildings as buildout occurs. Distribution networks are planned for orderly expansion in this District coincident with the first phase of building construction.
3. Construction of a realigned segment of 23rd Avenue, north of 6th Street in the first phase of building development.
4. Commencement of stadium events in September 2009, consisting primarily of University of Minnesota football games and other athletic events.
5. Commencement of the Central Corridor LRT service by approximately 2014, operated and owned by Metropolitan Council.

Long-term activities, more than 5 years into the future, are expected to include:
1. Redevelopment of key sites for University-related use, including the Thompson Center for Environmental Management (501 23rd Avenue SE) and the 2221 University Office Plaza building (2221 University Avenue SE)
2. Development of two other parking/multi-modal facilities within the District, and sized to meet reductions in parking demand and increasing use of regional and on-campus transit.
3. Construction of a realigned segment of 23rd Avenue, north of 6th Street in the first phase of building development.
4. Commencement of stadium events in September 2009, consisting primarily of University of Minnesota football games and other athletic events.
5. Commencement of the Central Corridor LRT service by approximately 2014, operated and owned by Metropolitan Council.

Updates on project activities within the District may be found at the Capital Planning and Project Management website at http://www/cppm.umn.edu
A Vision to Guide Long-Term Growth and Change in Key Areas of the Twin Cities Campus

Board of Regents Work Session
February 11, 2015
A 30+ Year Vision for the Future…
Planning Principles and Assumptions for Discussion:
Land, Facilities, and Space that are Aligned, Managed, and Sustainable

- Strengthen linkages between research, teaching & learning, and patient care
- Prioritize patient and visitor convenience, way-finding, and ease of access
- Ensure quality, affordable, community-based first and second year residential experience
- Strengthen residential communities that support student interaction, convenience, and academic success
- Strategically balance reinvestment in existing facilities with new construction; as well as current campus footprint and land acquisition
- Advance key interests of the University and the surrounding community through creation of public private partnerships
- Encourage private investment near campus that is compatible with U interests
Areas of Focus

East Gateway

Southeast Gateway

Campus Growth: Regents Boundary

Source: 2009 Twin Cities Campus Master Plan, page 31
Strategic Land Acquisition

- Targeted real estate acquisition on meeting direct mission activities
- Opportunistic real estate acquisition focused exclusively at the edges of campus
- Periodically reached out to private land owners on willingness to sell
- Use of eminent domain has been limited and only if necessary to meet clear public purpose
- Limited real estate acquisitions to ‘average’ of appraised values
Campus Development Framework for Discussion

- Academic core and support functions
- Current and future patterns
- Outreach and public focused functions
- Street networks and supporting infrastructure
Development Strategy Areas

1. ADVANCE OUTREACH MISSION
   - Prioritize human scale medium-density development
   - Improve the pedestrian experience.
   - Connect the AHC and the BDD.
   - Locate clinical and potential new hospital.
   - Acquire land strategically.

2. REINVEST IN THE CAMPUS CORE
   - Prioritize the pedestrian experience.
   - Locate collaboration spaces in ground floors.
   - Maintain density.
   - Improve path and open space connectivity.
   - Design to discourage car use in campus core.
   - Ensure safe paths, open spaces, and entries.

3. REINFORCE THE TRANSIT CORRIDOR
   - Prioritize mixed-use development.
   - Activate the street edge.
   - Stitch together East and West Banks.
   - Design a pedestrian-friendly environment.
   - Create a distinct identity.

4. ENGAGE THE RIVER
   - Create new physical and visual connections.
   - Design riverfront open space sites.
   - Design buildings with both river and campus faces.
   - Develop housing to support student experience.

5. INTEGRATE CAMPUS AND COMMUNITY EDGES
   - Participate in efforts in joint planning areas.
   - Define land use patterns and density in context.
   - Determine new build sites and demo candidates.
   - Improve safe routes to and through campus.
Southeast Gateway

• A primary entrance to campus
• Adequate land for growth and expansion
• Maintain transportation capacity for vehicles, bikes, pedestrian movement
• Land use focus on patient access, outreach
A Primary Entrance to Campus
Adequate Land for Growth and Expansion

• Within near term (10 year horizon), predicted needs can be accommodated
• Land acquisition costs and consequences
Land Use Focus on Patient Access, Academic Mission, Outreach

- Future land use focus on clinical activity (patient related), new hospital facility, other academic uses
- Align investments for transportation to predominant mode of travel (ped, bike, vehicle), including parking needs

If new East Bank Hospital investment
Land Use Focus on Patient Access, Academic Mission, Outreach

- Allocate future land use to support clinical activity (patient related and research), other campus or supportive development needs.
- Maintain the current hospital at present day location
- Align investments for transportation to predominant mode of travel (ped, bike, vehicle)

If no new East Bank hospital investment
East Gateway

- East Gateway: density and activity
- Strategic and opportunistic land acquisition
- Interaction with adjacent development and planning (Prospect North)
East Gateway: Density and Activity
Development and Plans for Adjacent Areas

- City of Minneapolis
- Prospect North/Innovation District
- University of Minnesota Foundation
- Real Estate Advisors
Prospect North: Innovation District

- **Different objective:** Support academic mission vs economic development
- **Coordinated infrastructure build out**
  - Local street network
  - Protection of Transitway corridor
  - Future Granary Corridor
  - District Energy potential (generator and user)
A 30+ Year Vision for the Future…