

**UNIVERSITY OF MINNESOTA**

**BOARD OF REGENTS**

**Facilities Committee**

**Thursday, March 12, 2009**

**9:45 – 11:45 a.m.**

**600 McNamara Alumni Center, West Committee Room**

**Committee Members**

David Metzen, Chair  
Dallas Bohnsack, Vice Chair  
Anthony Baraga  
Maureen Ramirez  
David Larson  
Patricia Simmons

**Student Representatives**

Erick Elgin  
Emma Olson

**A G E N D A**

1. Resolution Related to the Campus Master Plan for the University of Minnesota Twin Cities - Action - K. O'Brien/J. Martin/O. Miller (pp. 2-98)
2. Capital Budget Amendment - Action - K. O'Brien/M. Perkins (pp. 99-102)
  - A. Walter Library Supercomputer Cooling & Power Increase Project
3. Capital Budget Amendments - Review/Action - K. O'Brien/F. Cerra/M. Perkins/ M. Marshak (pp. 103-109)
  - A. Schulze Diabetes Institute Preclinical Research Remodeling
  - B. NOvA Project – Phase I Road and Site Work
4. Schematic Plans - Review/Action - K. O'Brien/F. Cerra/M. Perkins/M. Marshak (pp. 110-114)
  - A. Center for Magnetic Resonance Research Renovation & Expansion
  - B. NOvA Project – Phase I Road and Site Work
5. Real Estate Transaction - Review - K. O'Brien/S. Weinberg (pp. 115-118)
  - A. Agreements for Use of University Facilities and Services with National Sports Foundation for USA Cup Soccer, July 15-16, 2009
6. Consent Report - Review/Action - K. O'Brien (p. 119)
7. Information Items - K. O'Brien (pp. 120-122)



**UNIVERSITY OF MINNESOTA  
BOARD OF REGENTS**

**Facilities Committee**

**March 12, 2009**

**Agenda Item:** Resolution Related to the Campus Master Plan for the University of Minnesota Twin Cities

review       review/action       action       discussion

**Presenters:** Vice President Kathleen O'Brien  
Professor Judith Martin  
Orlyn Miller, Director of Planning and Architecture

**Purpose:**

policy       background/context       oversight       strategic positioning

To present to the Board of Regents the updated Twin Cities Campus Master Plan. The Twin Cities Campus Master Plan supports the University's academic mission and guides future land use and capital project 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.

**Outline of Key Points/Policy Issues:**

The Master Plan describes a future for 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 inspires pride in the people who study, work, reside 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 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 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:

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 emphasizing pedestrians, bicycles and transit
9. Optimize the use of campus land and facilities and apply best practices
10. Make the campus environmentally and operationally sustainable
11. Utilize the campus as a living laboratory to advance the university's mission

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 be the foundation for daily operational decisions.

### ***Refinements to the Plan since reviewed in February***

Since the draft was presented to the Board at the February Meeting, staff has made refinements to the plan. These refinements consist of minor corrections, clarifications of policy direction, guidelines, and/or maps based upon comments from the Facilities Committee, from the University community, and other stakeholders during the comment period.

Substantive changes to the plan since the February draft reviewed by the Board include:

- Community Connections
  - Added discussion of social and interactive campus.
- Natural Resources
  - Added reference to use of native species as a tool to preserve and restore vegetation.
- Movement and Circulation
  - Added discussion of wayfinding across all modes of travel for public campus destinations.
  - Added discussion of healthy living to pedestrian priority guidelines.
  - Added map to represent Future Transportation Changes on campus.
  - Added guideline under signature streets to emphasize partnership activity to achieve goals.
  - Added discussion encouraging faculty and staff to live in adjacent neighborhoods to reduce commuting and demand for campus parking.
- Public Spaces and Buildings
  - Revised Development Framework Map: Added Scott, Ackerman, Tate, Mechanical Engineering (designated as adaptive reuse).
- District Plans
  - Added District Plan illustrations.
- Implementation
  - Added guideline under Administering the Plan to clarify that projects located at the physical edge of the campus will be developed in consultation with community members.
- Appendix
  - Provided a more detailed account of public involvement activities.
- Acknowledgements
  - Added Work Team members names.
  - Added recognition of adjacent communities and municipalities who participated in the MP process.<sup>3</sup>

## **Background Information:**

Board of Regents Policy: *Reservation and Delegation of Authority*, section VIII, subdivision 4, states "The Board reserves to itself authority to approve campus master plans and amendments thereto."

In 1992 the Chair of the Board of Regents and the President of the University appointed a Master Plan Steering Committee to "design and recommend a set of principles which will discipline and inspire the development of a master planning process."

In 1993, the Board of Regents adopted the following four Campus Master Planning principles as developed by the Master Plan Steering Committee:

- 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 a master plan vision.

In September 1996, the Board of Regents adopted a resolution directing the campus master plans reviewed earlier in the year to be used to "guide the future development of the campuses in accordance with the four planning principles and the policies, procedures and strategies therein will be the basis for all future master planning decisions."

## ***Master Plan Development:***

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

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. Rather than hiring a consultant to develop the plan, this steering committee, co-chaired by Vice President Kathleen O'Brien and Professor Judith Martin, served that working role. The Steering Committee developed an inclusive process for updating the plan that engaged over 75 additional faculty, staff, students, professional practitioners, and community members on the following five work teams:

- Enhancing the Campus
- Natural Features and Open Spaces
- Movement and Access
- Safety, Community Connections, & Collaborative Ventures
- Design and Preservation

The teams 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.



### ***Community Consultation:***

An important element of the plan drafting process was to open the process to input from various sources in the University community and from partners and neighbors in the broader community. In addition to periodic consultation with the Senate Committee on Finance and Planning and the President's executive team, the following events were convened to maximize opportunities for a public audience to participate in the evolution of the document.

1. In April- May 2007, Open Forums were held at three campus locations (East Bank, West Bank, and St. Paul) 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 sessions were convened by the Community Connections Work Group to identify issues as defined by community partners.
  - Hennepin County Transit, Community Works and Housing, and Transportation
  - 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
3. In May-June 2008, a second round of Open Forums were held at three campus locations (East Bank, West Bank, and St. Paul) to affirm planning principles and 'themed' guidelines, based on the reports that had been submitted by the five work teams.
4. In December 2008 and January 2009, preliminary guidelines and recommendations were previewed with the following standing committees and groups:
  - Southeast Economic Development Committee
  - St Paul Campus Community Advisory Committee
  - Prospect Park (PPERRIA) neighborhood Livability Committee
  - SE Como Housing and Livability Committee
  - Alliance District Partnership
  - City of Minneapolis Planning staff
5. In February 2009, a third round of Open Forums were held at three campus locations (East Bank, West Bank, and St. Paul) to preview the recommended guidelines and maps included in the Master Plan. In addition, a public meeting was held to preview the recommendations to the broader community. Notice of this meeting was published in the Bridge, a community newspaper serving neighborhoods close to the University. Email notifications to neighborhood associations also publicized this meeting date and the public comment period established to accompany the Regent's process.
6. 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.

### ***Summary of Community Comments:***

As noted above, to finalize the draft of the Twin Cities Campus Master Plan, the University sought input from the broader University community, the surrounding community, local jurisdictions, and other key stakeholders. In addition to the community meetings, the plan was posted on the University's website for review and comment. The following provides a high-level summary of the comments received in writing and at the community forums:

- Guiding Principles
  - Support for the concept of the campus as a living laboratory.
  - Support for greater emphasis on being open to the River.

- Community Connections
  - Desire for greater emphasis on the University's impact on adjacent communities.
  - Appreciation for the concept of Joint Planning Areas. Desire for collaboration on areas of mutual interest with neighbors.
  - Desire for greater emphasis on nurturing the social component of campus life-serendipitous encounters for conversation and collaboration.
  - Strong interest regarding the future plans for the Golf Course and the fields north of Larpenteur. Encouraged the University to partner with the community and Falcon Heights when planning for that area of campus.
  - Desire for a clear and definite geographical boundary for the University, and for the need to articulate how campus expansion will occur.
- Natural Features and Systems
  - Appreciation for emphasis on sustainability and focus on the River.
  - Support for the use of native species in sustainably managing campus landscapes.
  - Support for additional greening on campus, including the West Bank.
- Movement and Circulation
  - Desire for the plan to place greater emphasis on the needs of auto travel to and through the University, the infrastructure needed to accommodate it automobiles, and the need for collaboration with surrounding jurisdictions.
  - Desire for better wayfinding from and between parking facilities
  - Need for better protection of pedestrians and cyclists on Cleveland Avenue and Gortner Avenue (from Larpenteur to Folwell).
  - Appreciation for emphasis on bicycle transportation and expressed desire to improve of campus bike facilities
  - Need for expansion of tunnel connections on the East Bank
  - Desire for greater incentives to use transit, including for sporting events
  - Support for the inclusion of the concept of healthy living- particularly the focus on a walking-friendly campus.
  - Support for faculty and staff to live in adjacent neighborhoods as a means to reduce long distance commuting and on campus parking requirements.
  - Dissatisfaction with student parking in surrounding neighborhoods and over-occupancy of off-campus student housing.
- Public Spaces and Buildings
  - Desire for specific articulation of type and function of structures to be located at the interface between campus and the adjacent community.
  - Recommended avoidance of demolishing historic resources, especially in the Knoll, and recommended adherence to local and federal standards for the treatment of historic properties when planning new construction and modifications to existing buildings.
- Implementation
  - Desire for stronger statements regarding the involvement of the surrounding community and jurisdictional partners in master plan implementation, including capital project development.
- Master Planning Process
  - Appreciation for the inclusive process used by the University to develop this master plan – use of University expertise and consultation with surrounding communities.
  - Disappointment that the University did not involve surrounding neighborhoods more in the planning process.
  - Dissatisfaction with the length of time given to comment on the draft plan.

*Board of Regents review:*

Since June 2006, the Facilities Committee has received periodic updates as to the progress to update the campus plan. At their December 2008 meeting, the Facilities Committee received a detailed presentation regarding the process followed to update the plan and a preview of key recommendations. At their February 2009 meeting, the Facilities committee received a detailed presentation on the content of the Master Plan, including key guidelines and maps.



**REGENTS OF THE UNIVERSITY OF MINNESOTA**

**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.

# University of Minnesota Twin Cities Campus

discover connect sustain



Prepared for:

University of Minnesota

Board of Regents

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 Durgan, 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  
 Suzanne Sobotka, GAPSA representative  
 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

Craig Amundsen, Weisman Art Museum  
 Tony Brown, Recreational Sports  
 Chris Fraser, Institutional Research  
 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 +  
 Loretta Hanson, Parking and Transportation Service

### Staff Team



# Table of Contents

<b>Chapter One: Introduction</b> .....	<b>6</b>
Executive Summary .....	8
<b>Chapter Two: Overview</b> .....	<b>12</b>
Evolution of Campus .....	13
Master Plan Assumptions .....	16
<b>Chapter Three: Guiding Principles</b> .....	<b>18</b>
A Vision for the Future .....	19
Principles .....	20
<b>Chapter Four: Plan Elements and Guidelines</b> .....	<b>24</b>
Community Connections .....	25
Natural Features and Systems .....	30
Movement and Circulation .....	36
Public Spaces and Buildings .....	50
<b>Chapter Five: District Planning Profiles</b> .....	<b>60</b>
<b>Chapter Six: Implementation</b> .....	<b>82</b>

# 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, land scapes 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.

14

## 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.

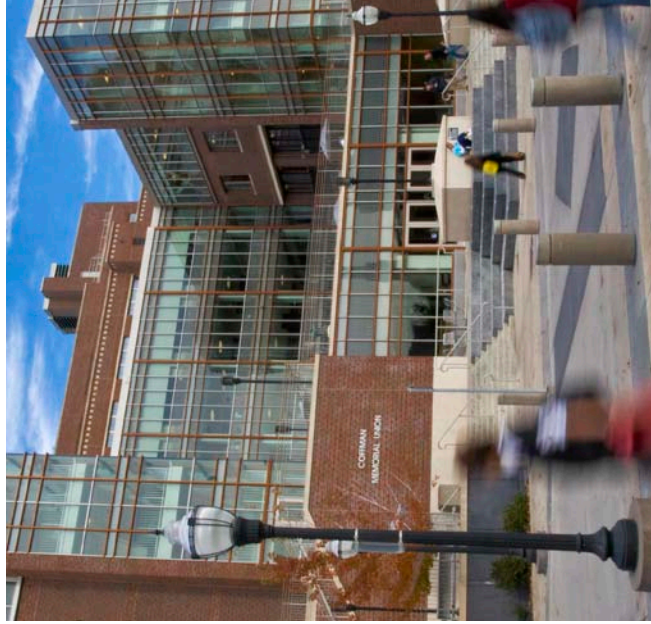
The foundational principles that describe the Master Plan's core values are listed below:

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 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 MNRA 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.





### Movement and Circulation

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.



24. Accommodate bicycles in on-street lanes at critical locations.

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.

### 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.

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

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 Summary

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:

- 17 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 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 universitycommunity 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.

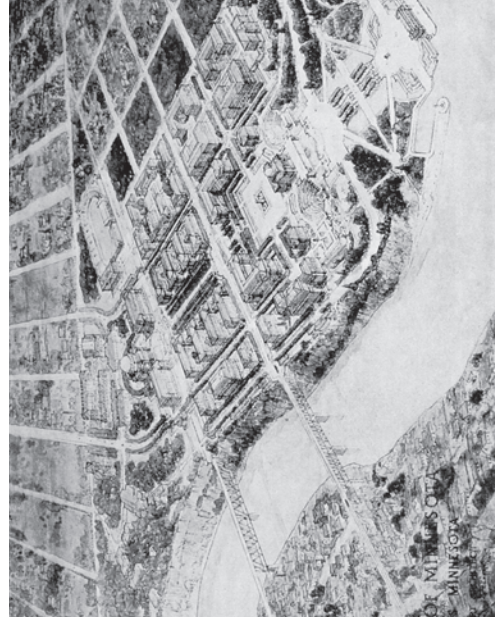
The East Bank has traditionally housed the liberal and design arts, humanities, technology and engineering as well as the medical school. The Academic Health Center is one of the most intensely developed areas on campus, supporting teaching, research, clinical practice and in-patient/out-patient hospital 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.

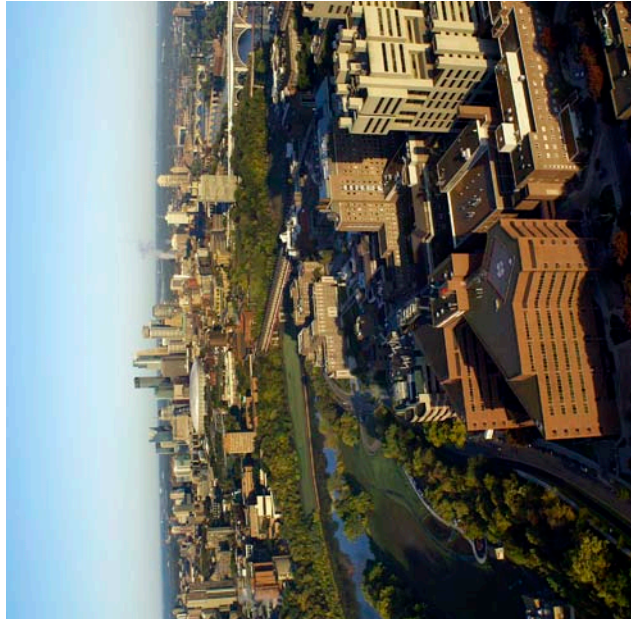


*Scholar's walk, a tree-lined pathway bisecting the East Bank, celebrates the research and classroom accomplishments of the U's award winning faculty and students.*



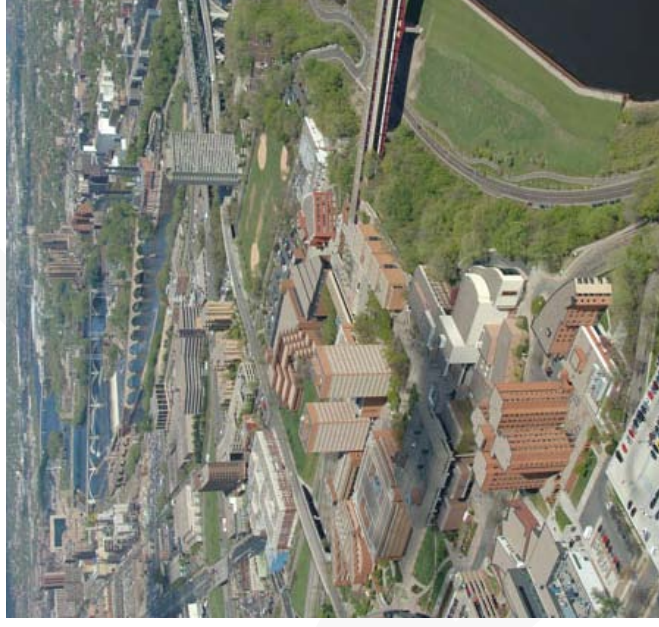
*Cass Gilbert's Master Plan Vision for the University of Minnesota, 1907.*





Looking west across the Mississippi River; residential 'Superblock' in the foreground.

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.



Westbank, with Middlebrook Hall in the foreground.

20

### Campus Evolution: Minneapolis



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. Two and a half 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.



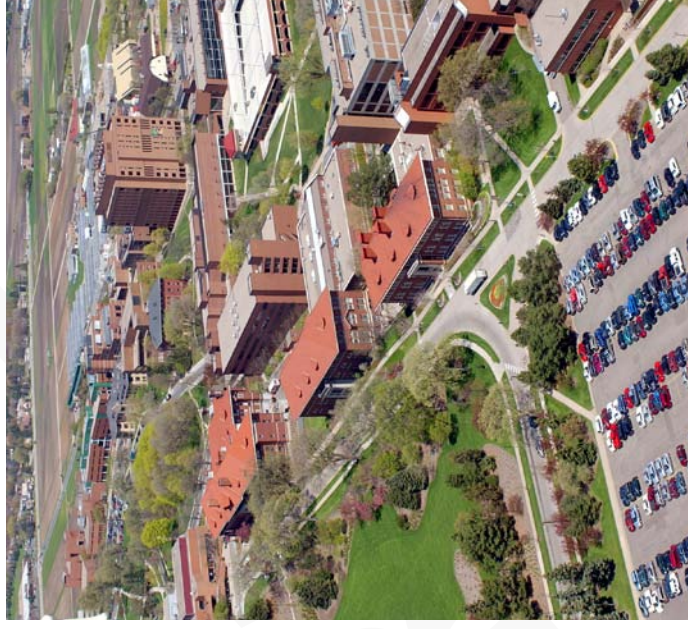
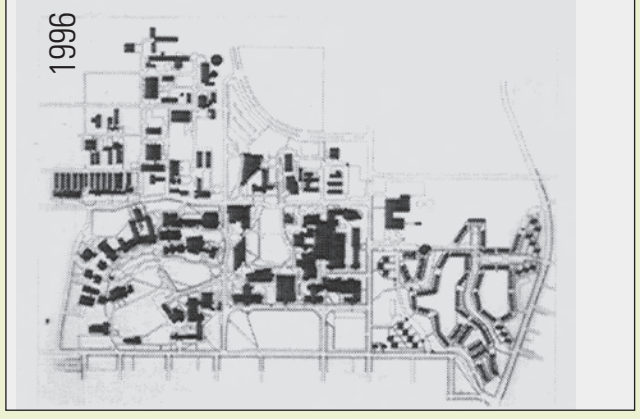
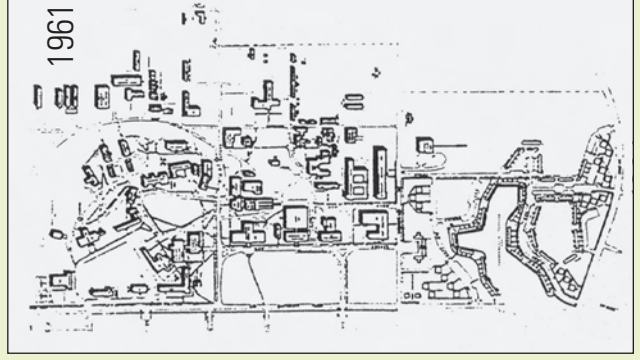
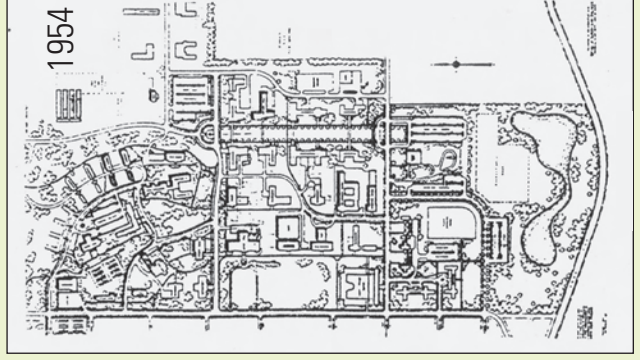
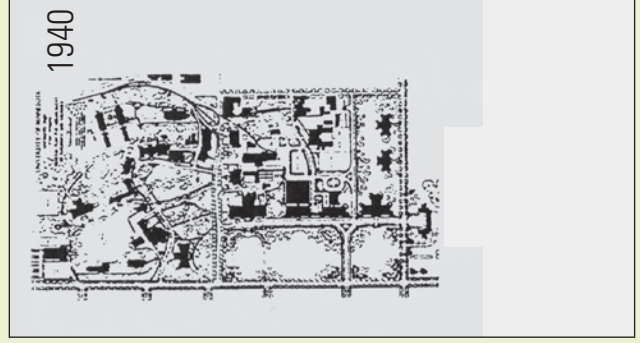
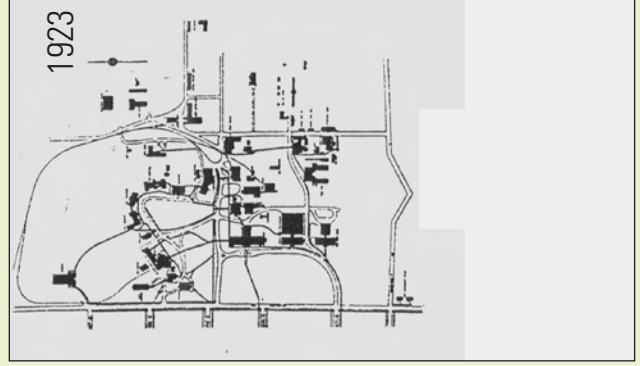
## St. Paul

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.

21

## Campus Evolution: 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. A new football stadium began in 2007, and 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 Haecker 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.

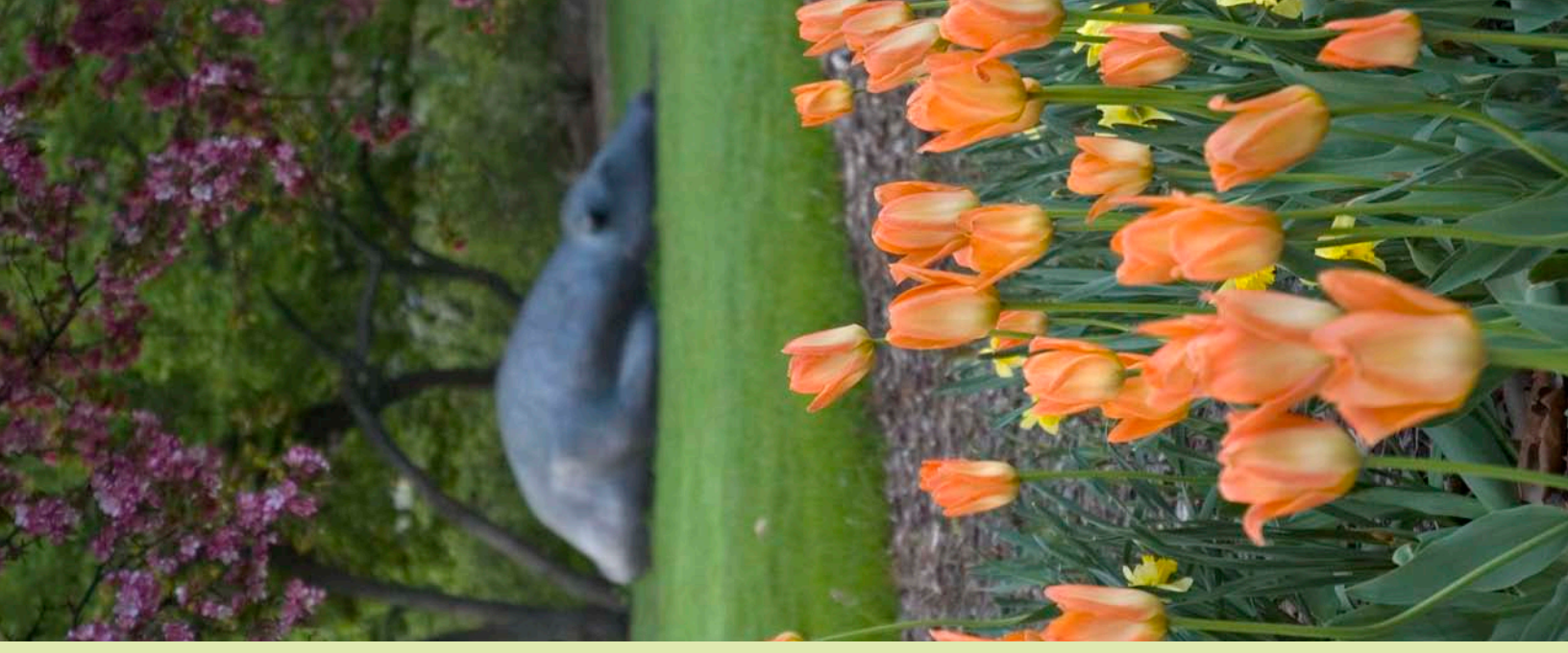
These initiatives to conserve, reduce and change practices are critical due to the significant annual investment in the buildings, lands and infrastructure of the academic enterprise that is the University of Minnesota.

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







UNIVERSITY OF MINNESOTA

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# Guiding Principles

# A VISION FOR THE FUTURE

25

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.





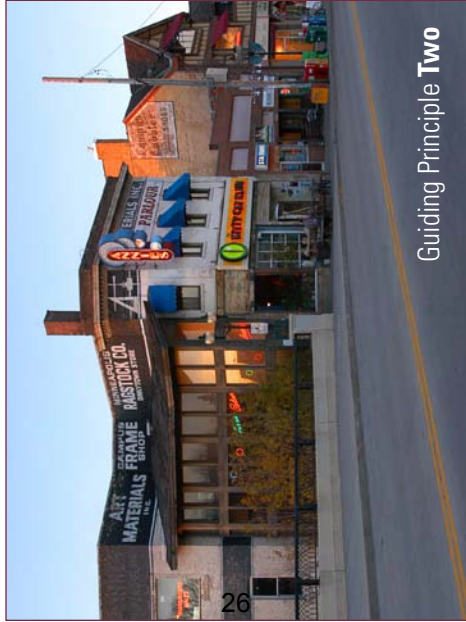
Guiding Principle One

## 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

### 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.



Guiding Principle Three

## 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 **Four**

#### 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.

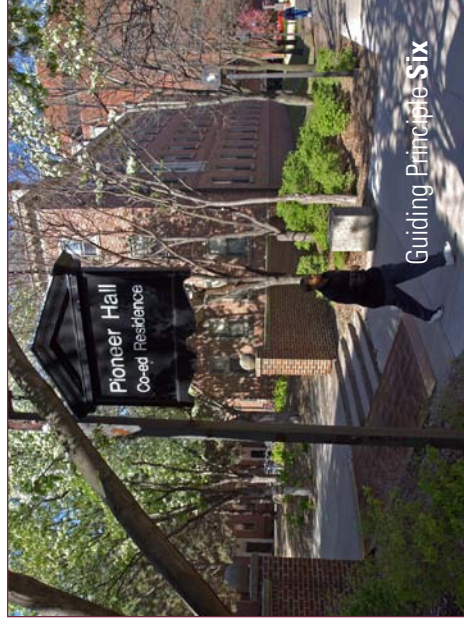


Guiding Principle **Five**

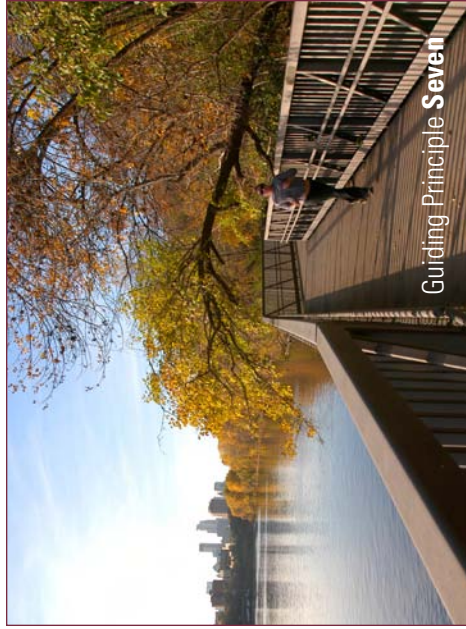
#### Guiding Principle **Six**

### **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.



Guiding Principle **Six**



Guiding Principle Seven

## 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

### 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.



Guiding Principle Ten



Guiding Principle Eleven

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

- a. 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.
- b. Continue to support teaching, applied research and service learning connections between the Twin Cities campus and surrounding communities.
- c. Design flexible learning, living, working, and gathering spaces to support community
- d. Promote the use of certain campus areas as a 24/7 learning environment
- e. Coordinate academic and physical resources to establish learning communities that extend beyond learning spaces and classrooms
- f. Leverage use of technology-enabled learning spaces for both use by the University and its community partners.
- g. Promote and enliven special spaces that define the University and enhance community
- h. 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

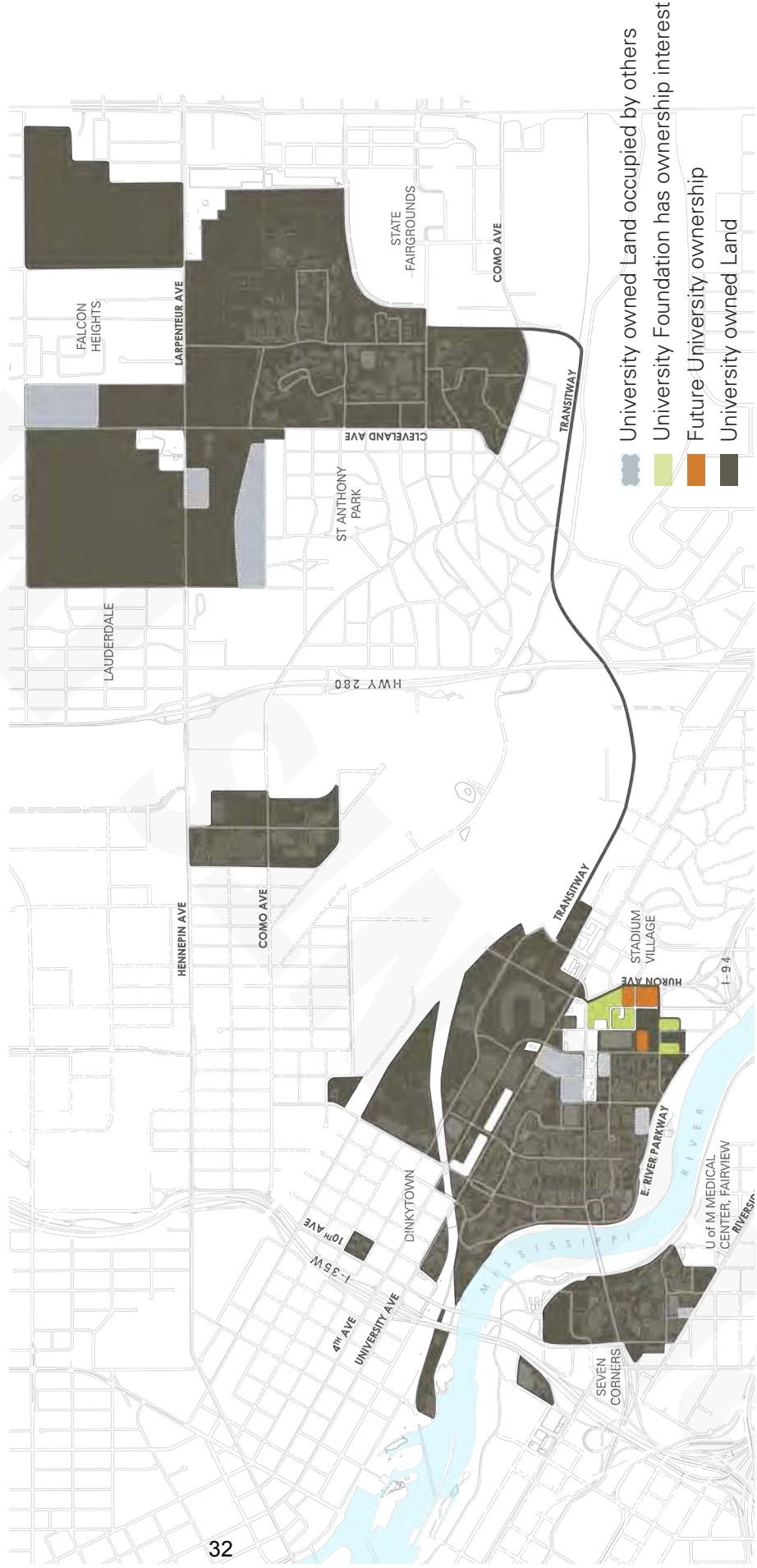


## Boundaries & Integration with Surroundings

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 Lands, 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.





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:

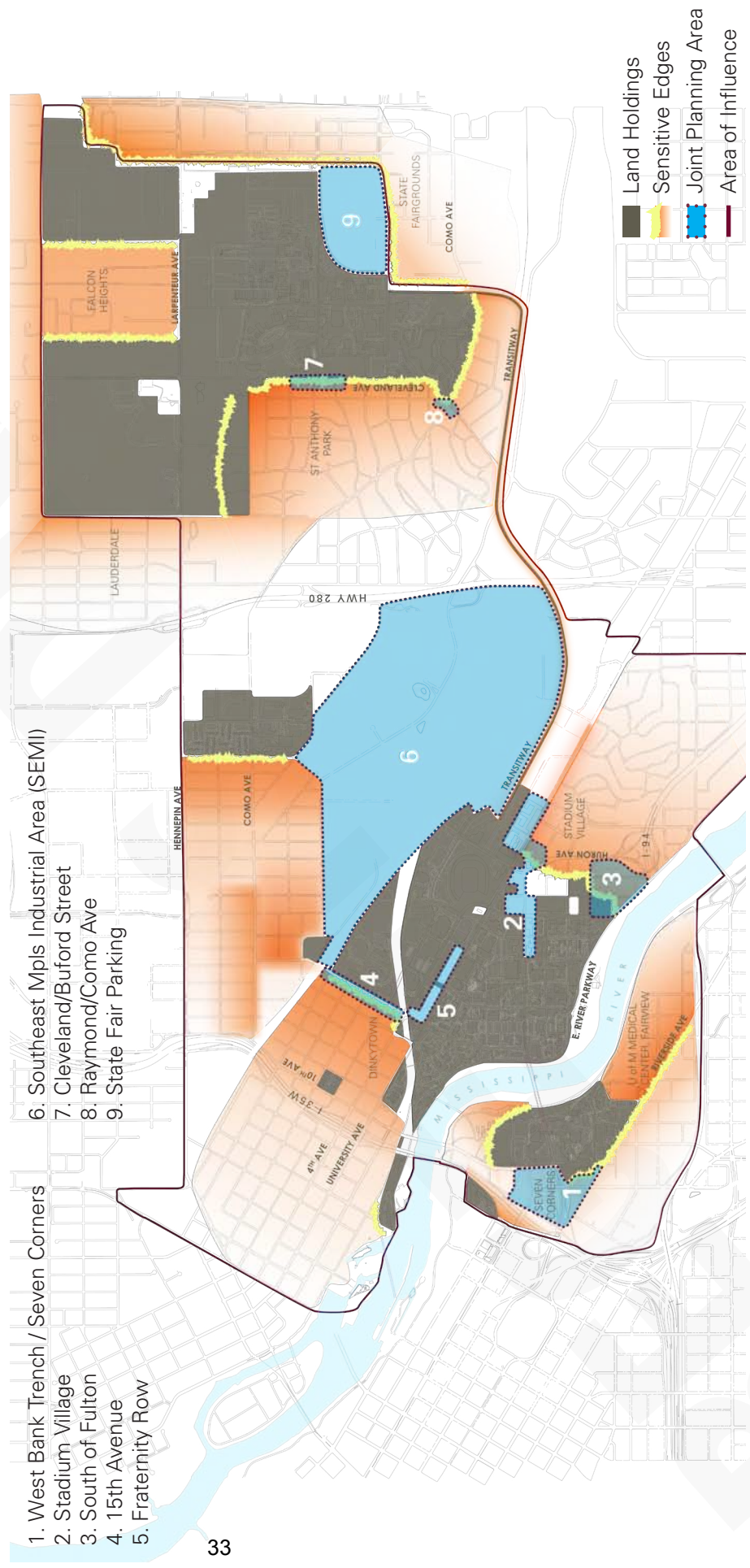
- Properties for which short or long term holding by the University would advance the objectives of the University Alliance.
- Land and facilities located within a joint planning area that have strategic value to the University and would stimulate redevelopment of the district.

**Guidelines**

- i. 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.
- j. 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.

• Properties that can be adapted to accommodate expanding University programs.

1. West Bank Trench / Seven Corners
2. Stadium Village
3. South of Fulton
4. 15th Avenue
5. Fraternity Row
6. Southeast Mpls Industrial Area (SEMII)
7. Cleveland/Buford Street
8. Raymond/Como Ave
9. State Fair Parking



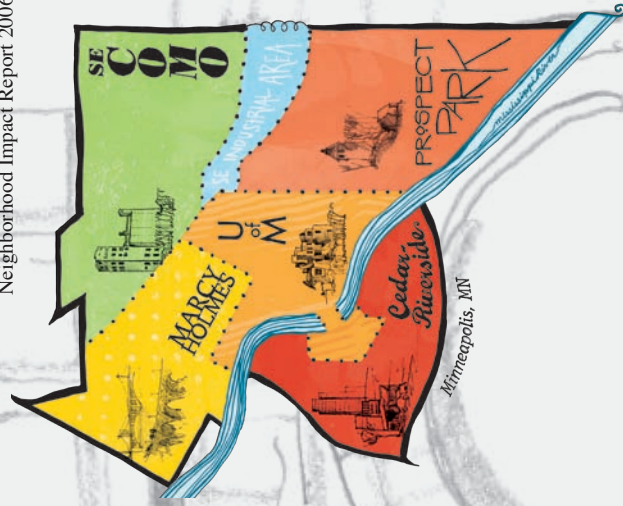
## University Alliance

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.”

34

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



*The University District Partnership includes housing, planning and coordinated initiatives between the University of MN Twin Cities Campus, adjacent neighborhoods, the City of Minneapolis and Hennepin County.*

## 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

- k. 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.
- l. Participate in initiatives that improve the visual image perceived along student and visitor pedestrian access routes.
- m. 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 of 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

## Guidelines

- n. Support the mutually reinforcing relationships as well as shared interests between activities on the Twin Cities Campus and in adjacent neighborhoods
- o. 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

- p. 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.
- q. 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.
- r. 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 in 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.

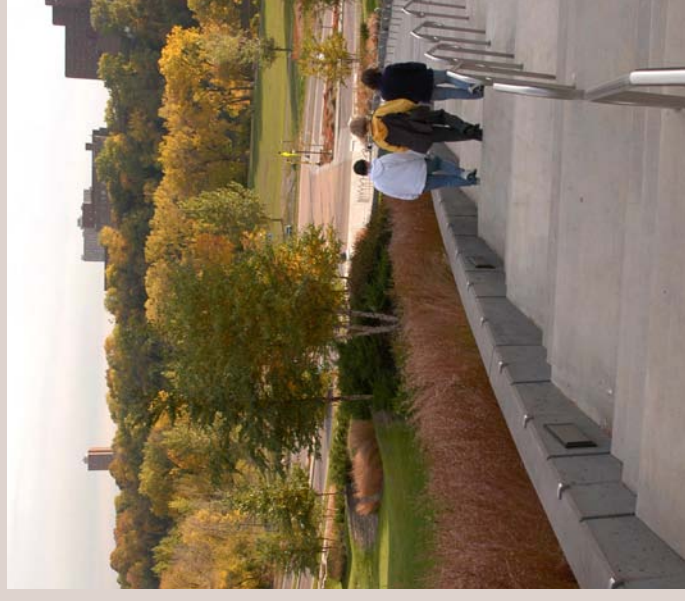
This section of the master plan addresses the natural setting and unbuilt spaces of the campus. These outdoor spaces provide both literal and metaphorical grounding for all of the principal purposes of the University. The Twin Cities campus' natural setting, overlaid by an open and welcoming civic realm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



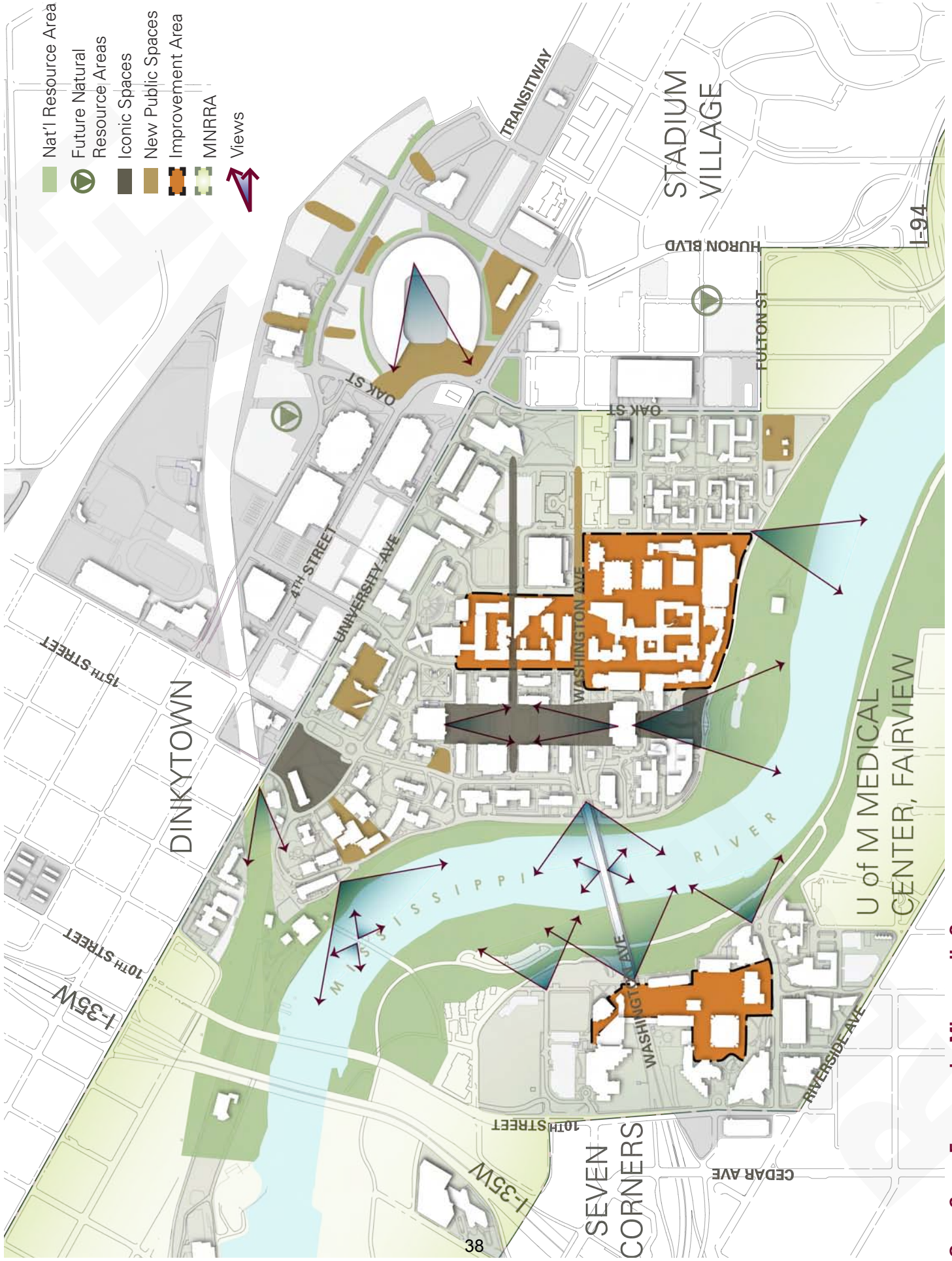
## Guiding Principles

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







Open Space Framework - Minneapolis Campus

### 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

- a. 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;
- b. Avoid disturbing topography and natural features or restore to natural conditions in the Mississippi River corridor wherever possible
- c. 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.

- use of the river flats and steam plant corridor (Dinky town underpass) for sports and recreation facilities;
- creation of multipurpose utility corridors, boulevards, parks and streets as a way to preserve public views of the river corridor;
- selective demolition in the Knoll and on the West Bank to create visual and physical links;

b. Support the intent and spirit of the Critical Area Act and MNPRA 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; and
- protecting and preserving the biological and ecological functions of the corridor.

- d. 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.

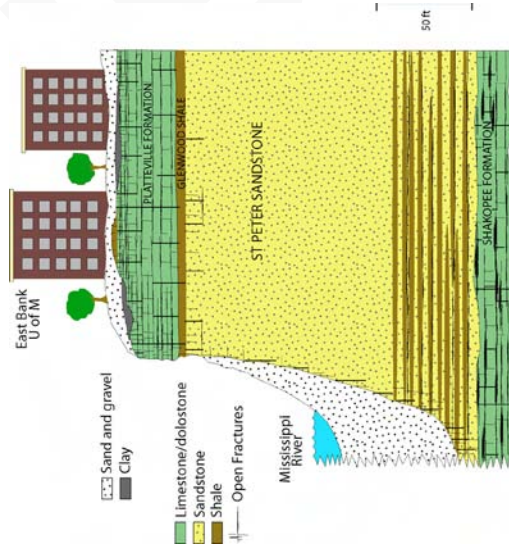
#### Guidelines

- e. 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.
- f. 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.



A geological subsurface database will support planning and 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

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

- i. Identify areas that should be held as open spaces in perpetuity based on their environmental significance.
- j. Manage campus landscapes with standards that achieve energy conservation, emission mitigation and reduction of other negative environmental impacts.
- k. Promote the use of campus lands and open spaces as research, teaching and demonstration spaces for outreach and scientific activities.



Northern Minnesota trees and plants in front of the Bell Museum









# Movement and Circulation

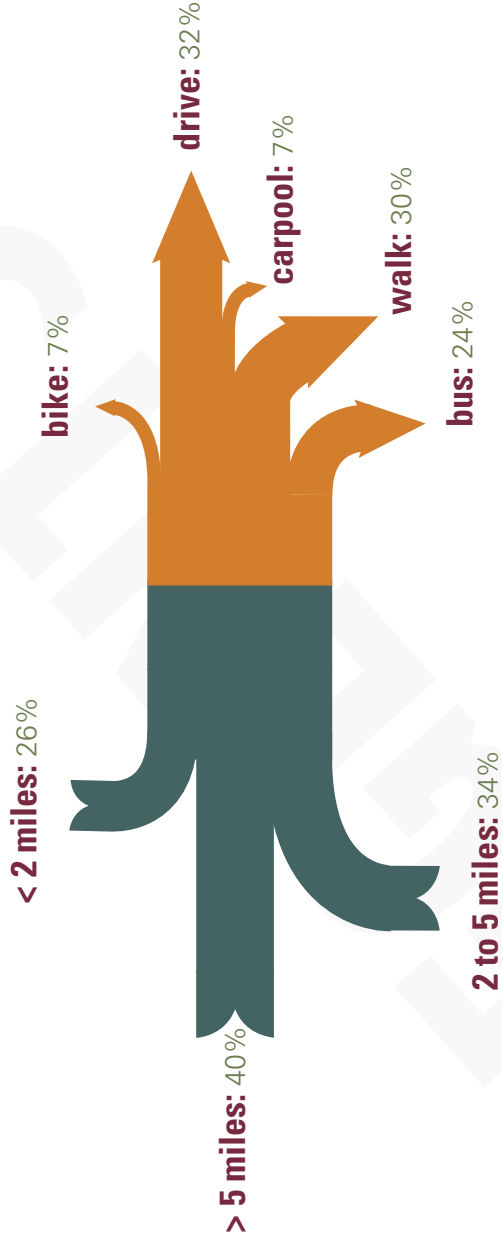
On a typical day, 80,000 people travel to the Minneapolis and St Paul campus districts. While nearly sixty percent commute from distances less than 5 miles away, approximately 32,000 of these people live more than 5 miles away from the campus. The transportation choices each of these people make for 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 and
- 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.







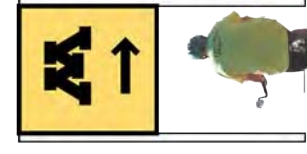
## Wayfinding Recognizable Routes Into the Campus

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.

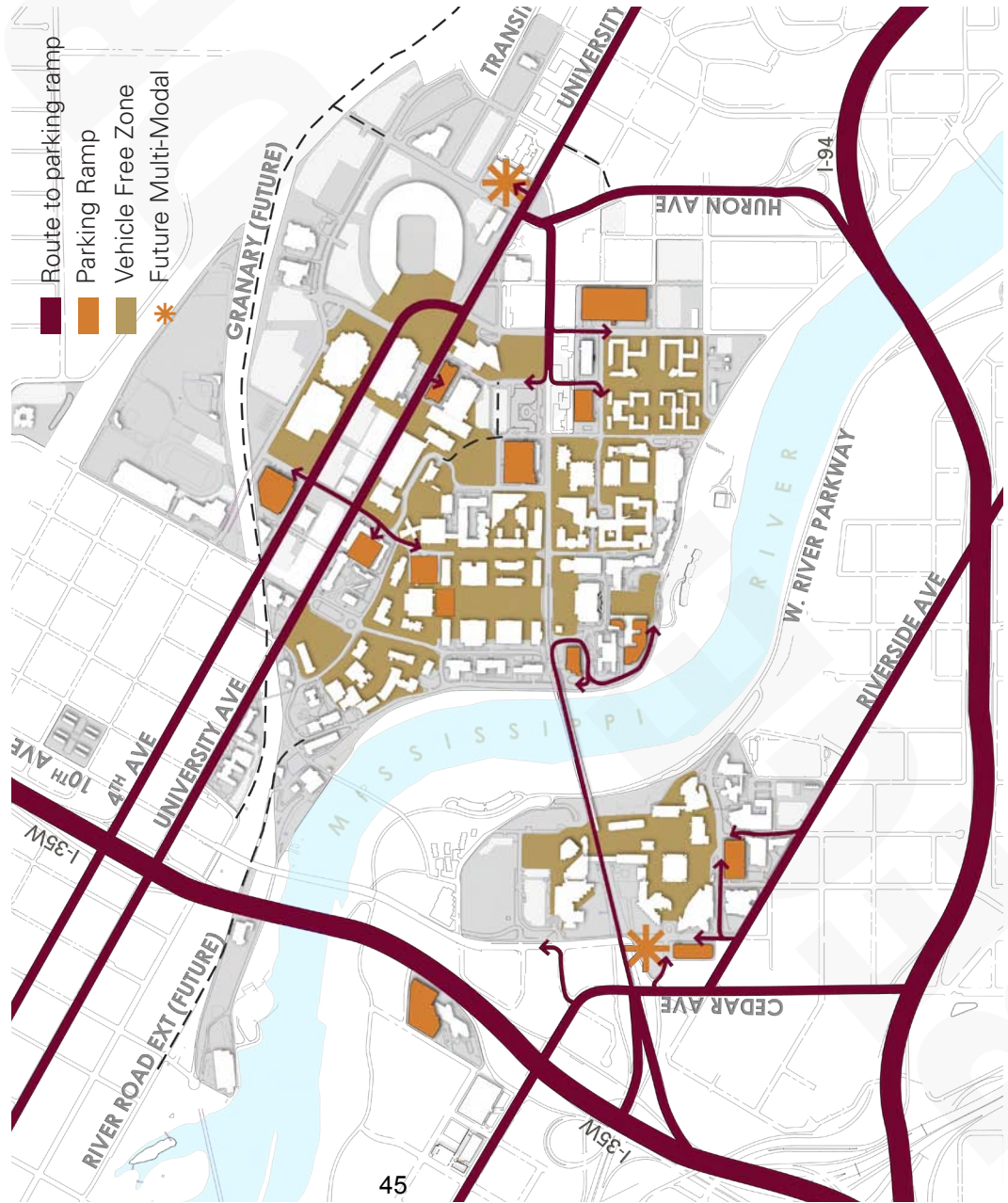
More detail is found on the Vehicle Wayfinding Map on page 39.

### Guidelines

- a. 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.
- b. Deploy digital and wireless technology when practical to meet wayfinding goals.
- c. Require legible, safe and welcoming pedestrian connections from public parking sites to centers of campus
- d. 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**

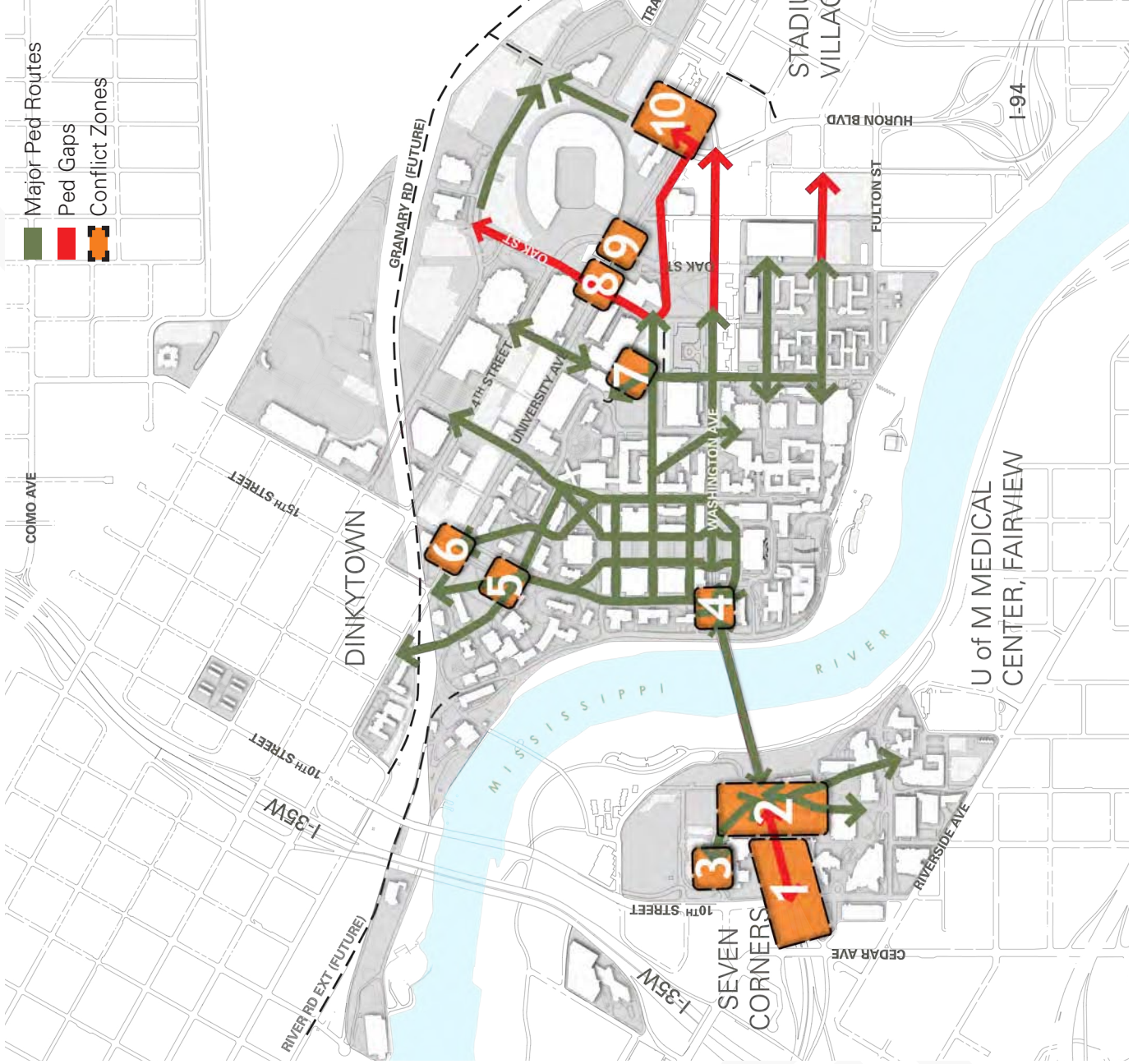


## Pedestrian Priority

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

- 4 ■ Establish vehicle-free zones where pedestrian volumes, iconic open spaces, and adjacent land use patterns preclude use except by pedestrians or cyclists.
  - 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
  - Extend the existing network of weather-protected environments (tunnels or skyways) in appropriate locations



Conflict zones indicate locations where transit traffic conditions should be improved, either through physical redesign or operational practices.

## Pedestrian Framework - Minneapolis Campus

## 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

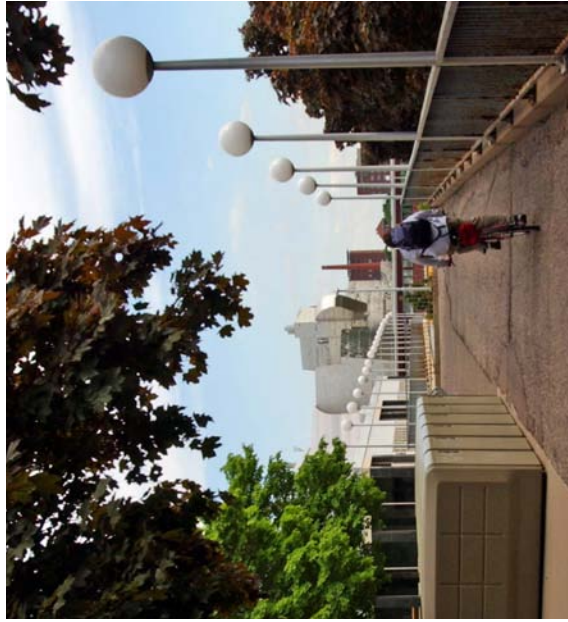
- e. Meet ADA requirements for pedestrian facility improvements to make all areas and facilities fully accessible.
- f. Apply the following principles for safe, accessible design of the pedestrian environment:
  - Avoid the creation of isolated dead end spaces, sunken or elevated plazas out of direct 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

47



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.

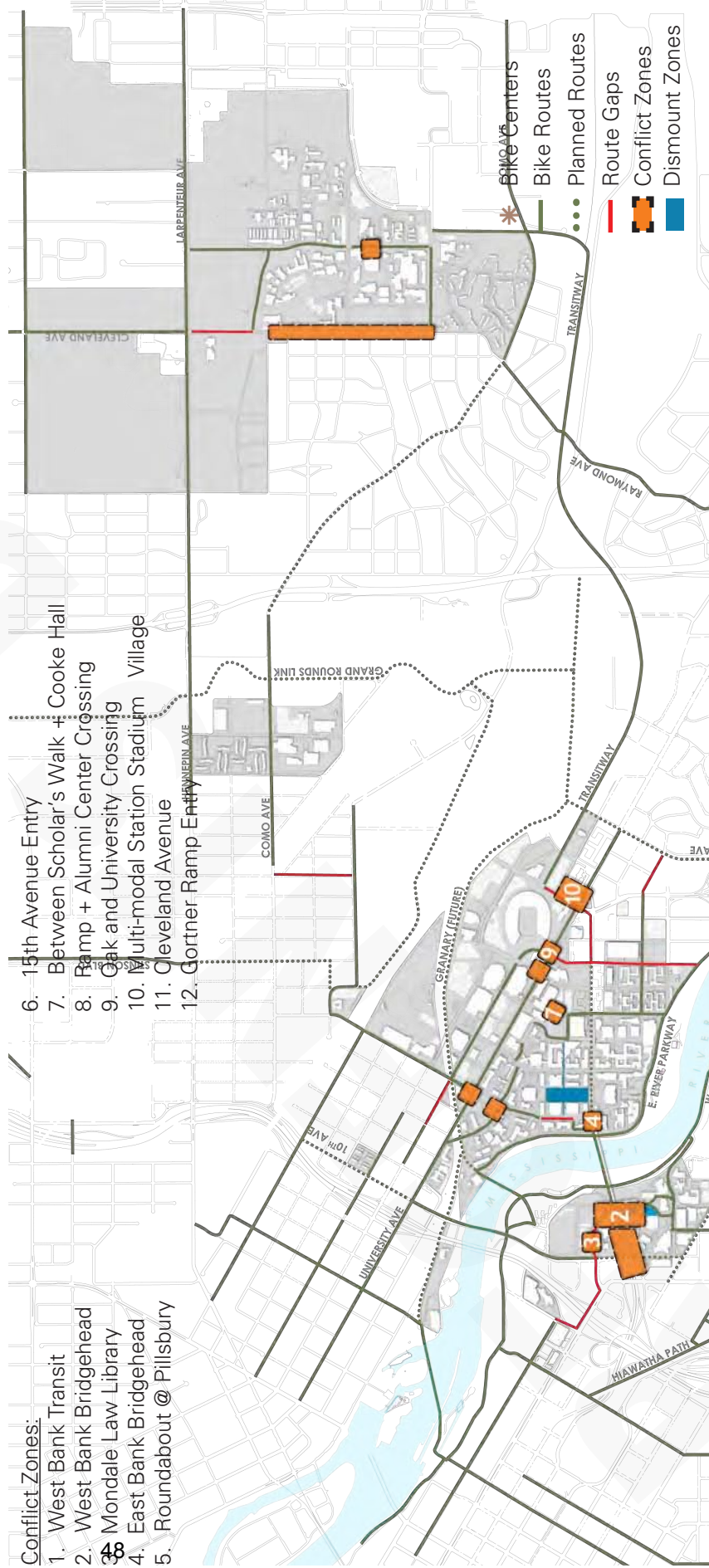
## Bicycle Movement on Campus

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.

### 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 Village
11. Cleveland Avenue
12. Gortner Ramp Entry



## Bike Network - Twin Cities Campus

Conflict zones indicate locations where pedestrian traffic conditions should be improved, either through physical redesign or operational practices.

## Guidelines

- g. Subordinate bicycle travel to accommodate pedestrians within the campus.
- h. Encourage cyclists to respect dismount zones and limit speeds (maximum 10 m.p.h) to reduce conflicts where there is high pedestrian traffic.
- i. Separate bike and pedestrian traffic when possible by integrating the bicycle network into the street network with on-street lanes.
- j. 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

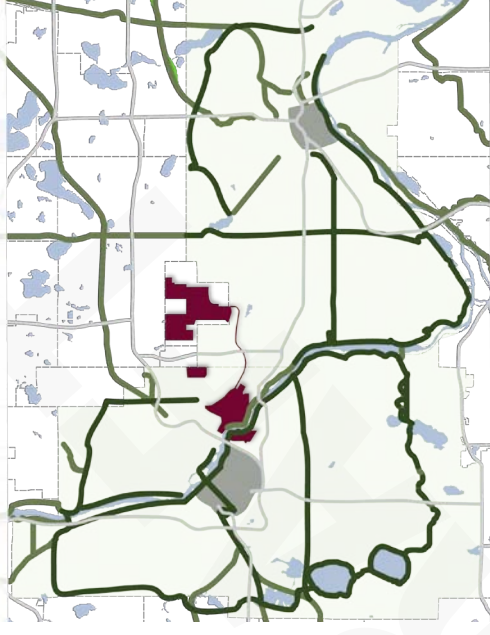
- k. Collaborate with other governmental units to develop regional bike routes that provide access to campus.
- l. Provide safe, convenient accommodation for cyclists on paths that are clearly delineated from other modes of traffic.
- 49
- m. Ensure the safety of bicyclists sharing movement space with 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.

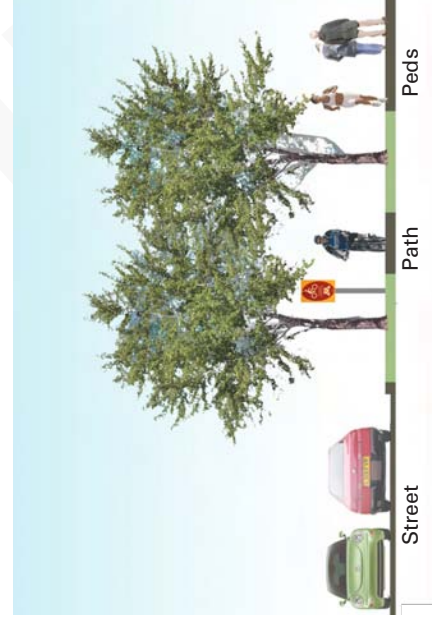
### Guidelines

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



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

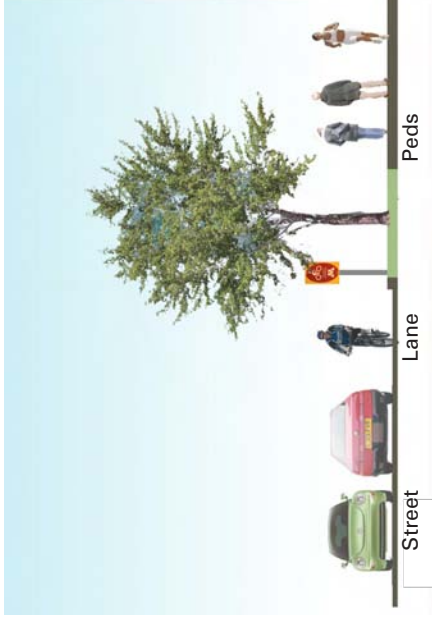
## Regional Trail Network



**Bike Path**



**Bike Route**



**Bike Lane**



### 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.

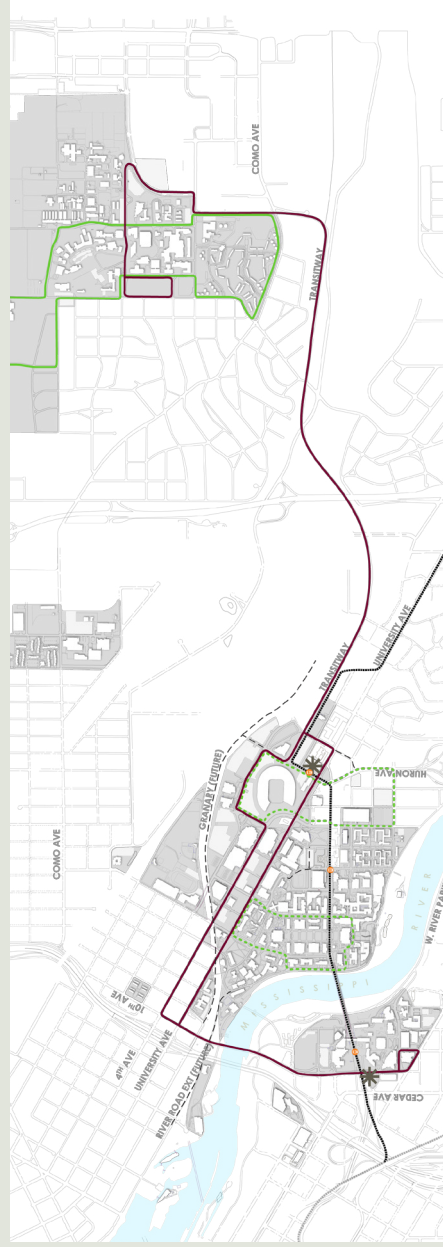
The volume of pedestrian and bicycle traffic on Washington Avenue will increase substantially due to the absence of automobiles. The University will capitalize on the benefits provided by the Central Corridor LRT by creating an attractive pedestrian focused environment on the five block portion of Washington 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.



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

- p. Pursue traffic mitigation on campus streets to minimize negative impacts on campus buildings
- q. Design streetscapes on LRT corridors to prioritize pedestrian comfort and convenience, wayfinding and visual recognition of the University campus

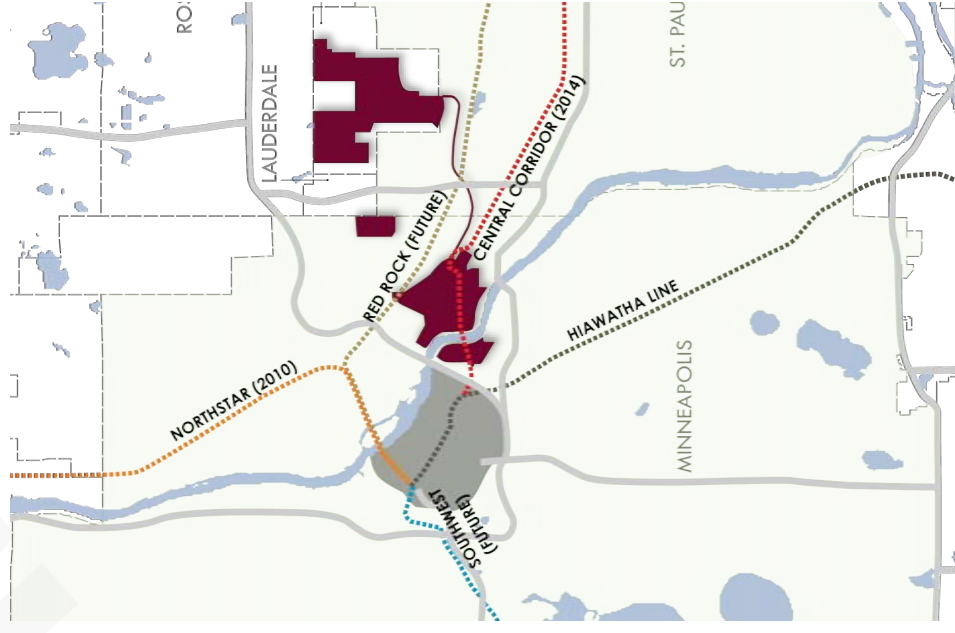


Campus circulator and inter-campus service is planned to be re-routed once LRT operations begin in approximately 2013.

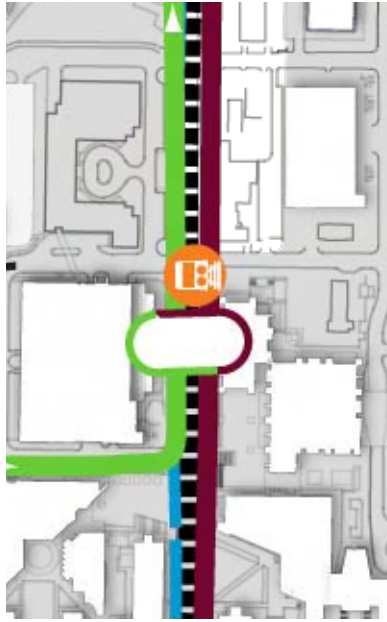
### Future Transportation Changes

### 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.



### Planned Regional Rail Line Expansion



### Synchronized Transit Stop

#### 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 Village
11. Cleveland Avenue
12. Gortner Ramp Entry

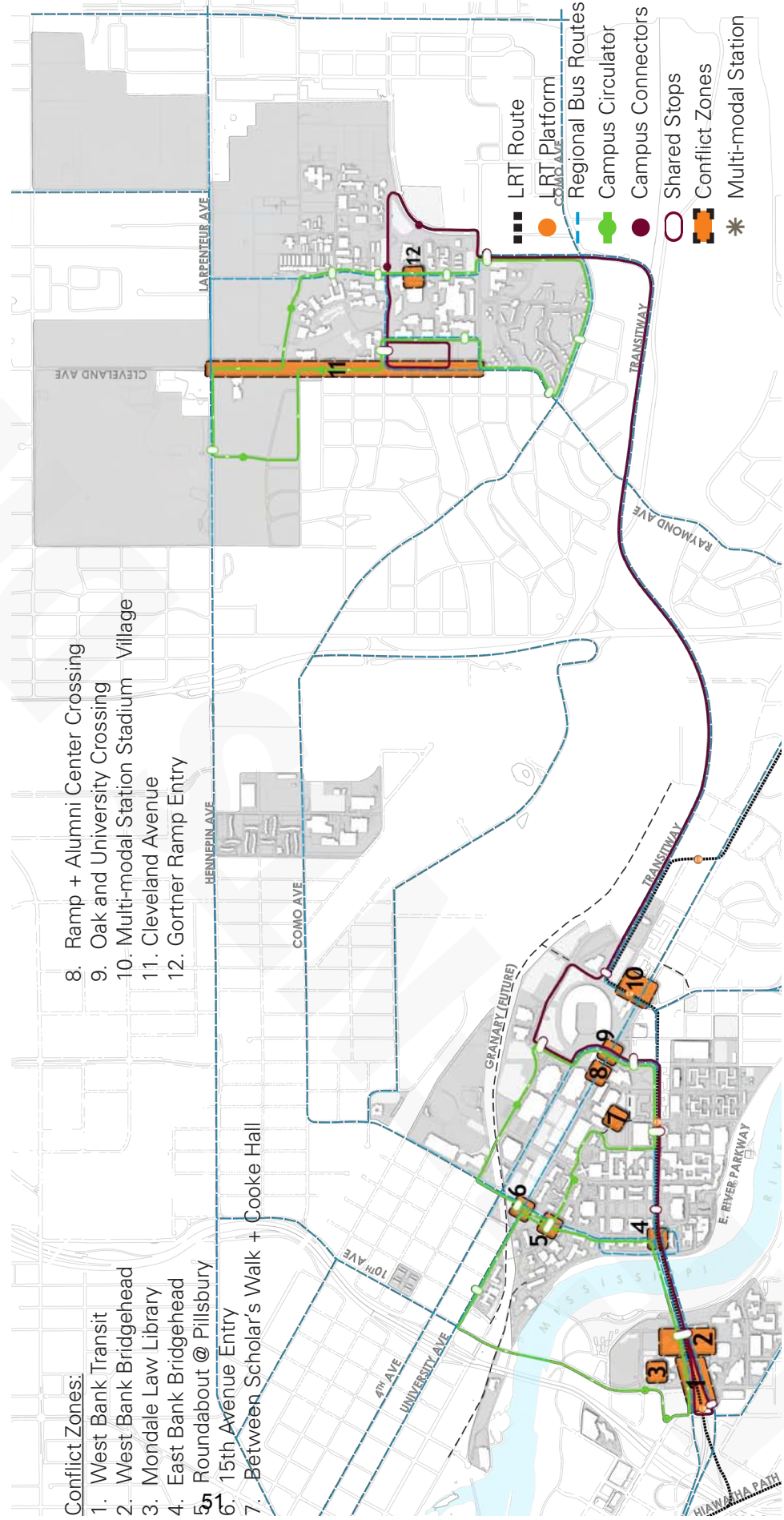
*Left: Synchronized transit stops provide links between regional bus service and campus transit. In future years, the two types of service will include LRT service as well.*

### 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

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



### Transit Framework - Twin Cities Campus

*Conflict zones indicate locations where transit traffic conditions should be improved, either through physical redesign or operational practices.*



### On Campus Service

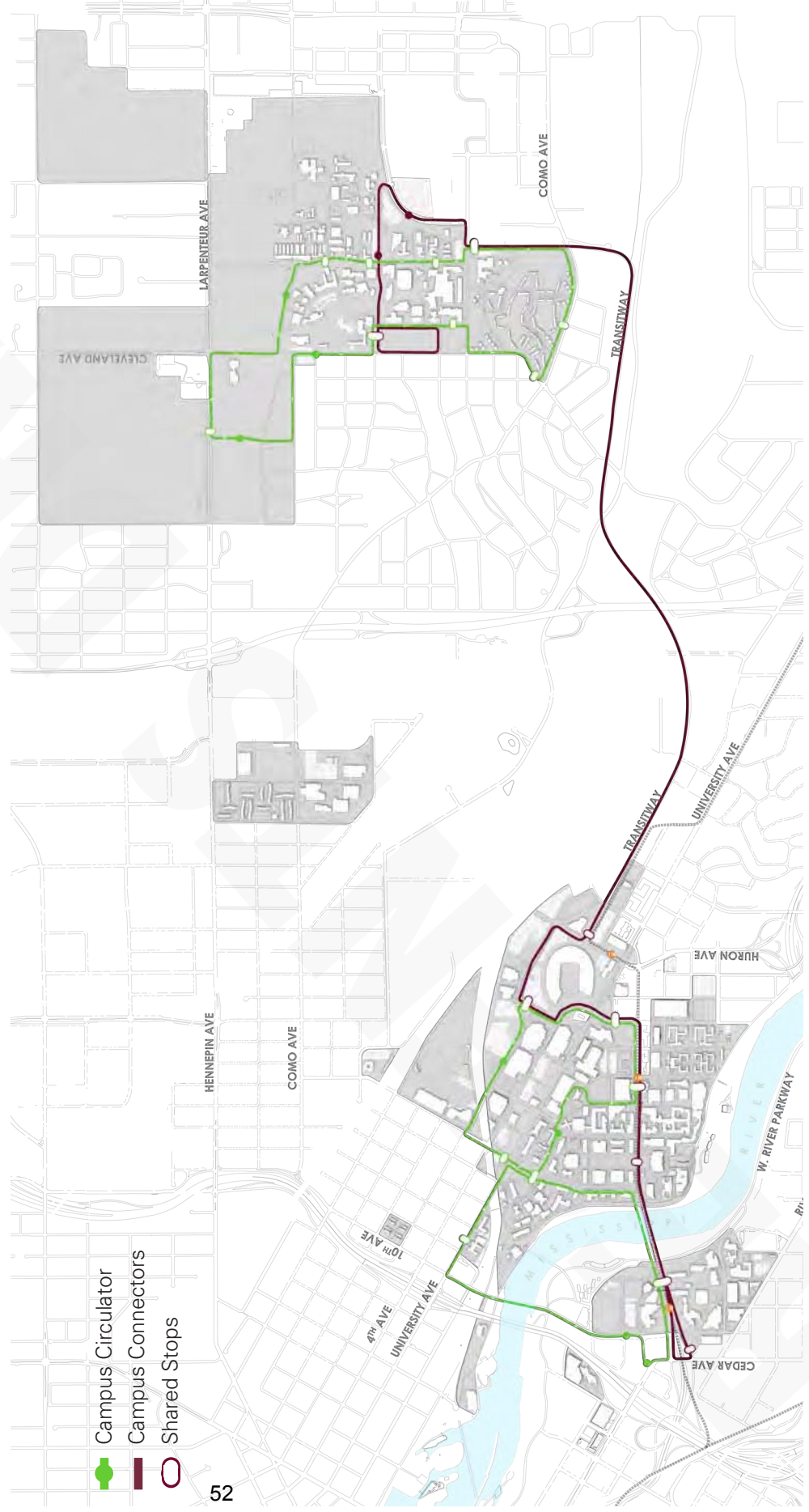
The regional transit system interfaces with the University transit services at transit stops along major arterials that pass through the campus. The University's on-campus transit system consists of two components: the campus shuttle and the campus connector.

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

- 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 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.

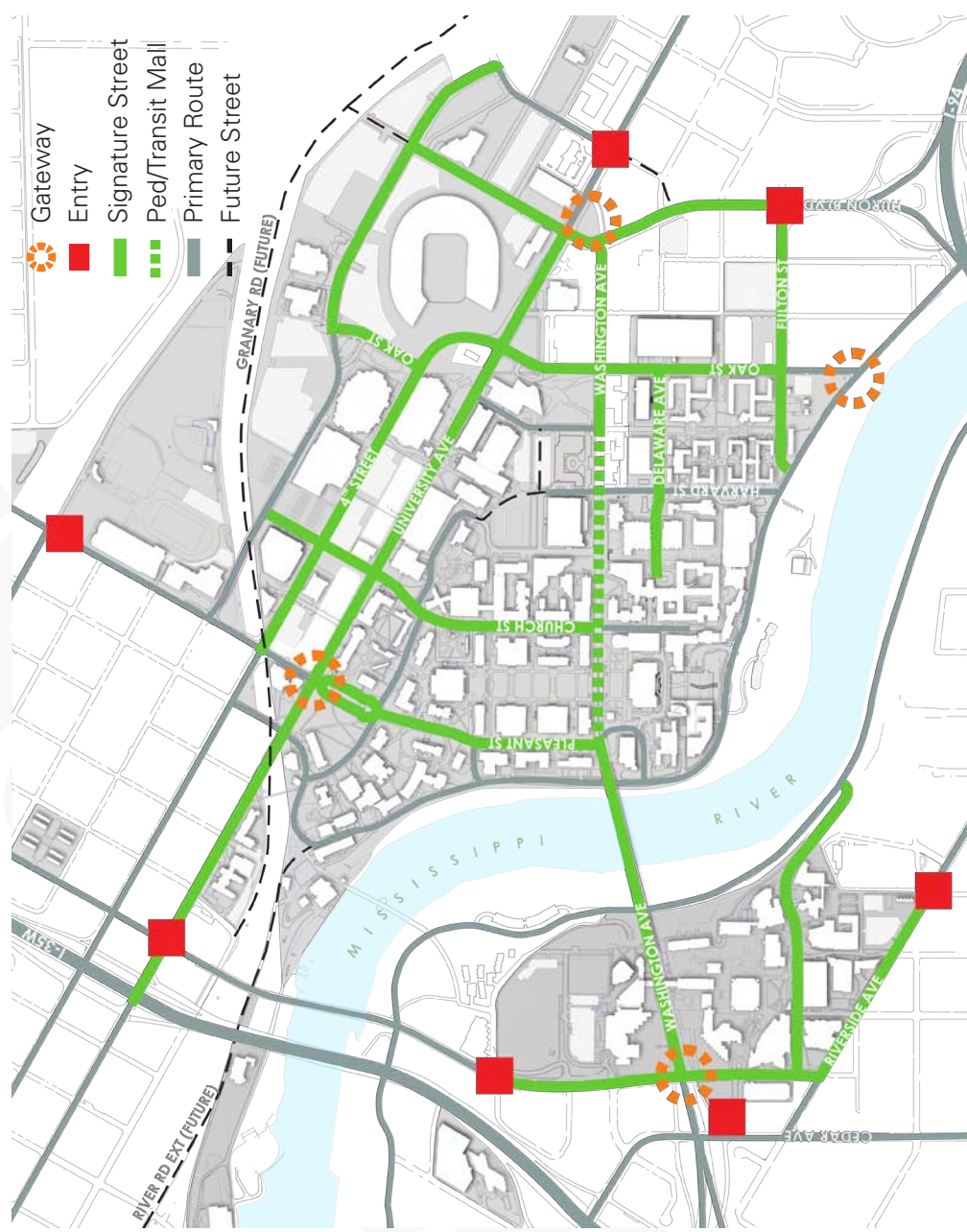
## Guidelines

- t. Adapt the use of innovative technologies to improve transit facilities and service for members of the university community.
- 53
- u. Develop transit shelters/ waiting areas to accommodate rider volume while maintaining appropriate pedestrian thoroughfares in varied sidewalk conditions
- v. Use signage and shared design elements, including lighting, to identify primary pedestrian routes to and from major transit waiting areas
- w. 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.



Automobile Framework - Minneapolis 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

1. Design signature streets to accommodate all modes of travel, with walking as the highest priority followed by bicycling, transit, and private vehicles.
2. 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.
3. 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

- x. Create a network that is easily understood and well connected for daily users and occasional visitors.
- y. Design local campus streets for safe and comfortable use by multiple modes of transportation.
- z. Discourage through traffic on local campus streets using techniques that limit speed.



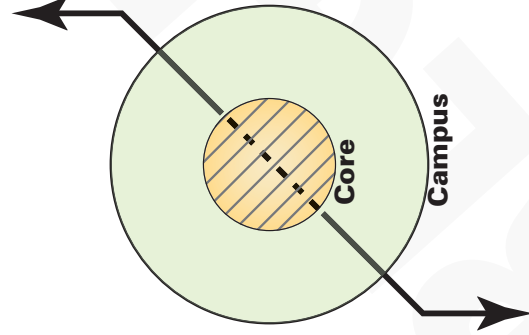
Vehicle Framework - St Paul Campus

## 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

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



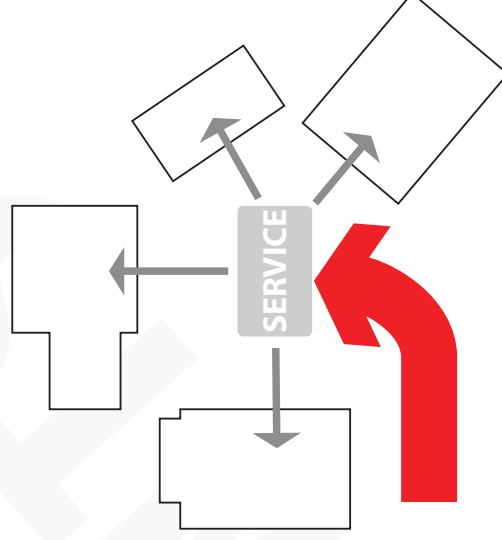
**Limited Vehicular Access to Core Streets**

## 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

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



**Centralized Service Access**

## 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

- gg. Promote existing park-and-ride lots and expand park-and-ride service to primary campus destinations.
- hh. Locate parking structures in proximity to arterial streets to minimize conflicts with pedestrian or bicyclist travel.
- ii. 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, an visual character that unifies the Twin Cities campus, integration of these districts would benefit the campus' identity.

57

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.

- Coherence means that the campus is understandable. It has a visual order that is recognizable, with parts that relate to a definable whole.
- Connection is provided through easy pedestrian movement and perceptible cues to find destinations within and beyond campus.
- Comfort is created through a physical environment that establishes a sense of well being, providing safety, security, and protection from the elements.

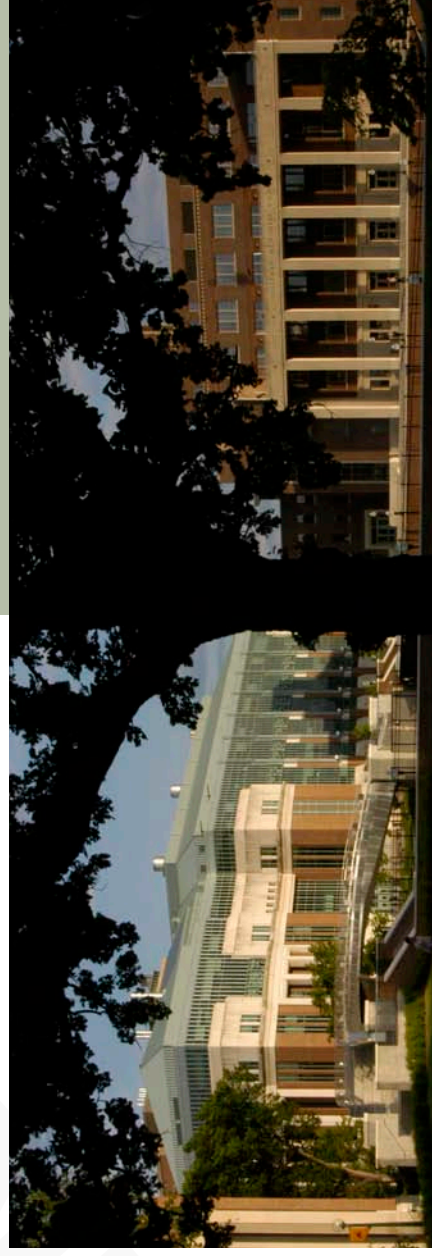
## Guiding Principles

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

■ 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.



*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 nifies 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 few special use or landmark buildings specifically designed for contrast or to 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 Lawn and character 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.

- b. Give special design attention to pedestrian amenities on dedicated pedestrian pathways.
- c. Design vertical connections between grade and existing skyways and tunnels to be visible, understandable, and accessible.
- d. Enhance access and orientation to the below grade net work by providing natural light openings (skylights, clerestory windows) and highly visible signage.
- e. Design building entrances with common paths to be used by people with and without disabilities.

### Guidelines

- a. Preserve iconic public spaces that provide orientation and order



Northrop Mall, 2005

## 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

- e. Preserve the existing overarching visual order on campus by maintaining design continuity.
- f. Create visual linkages between new buildings and existing buildings through similar scale, materials, style, and window patterns and proportions.



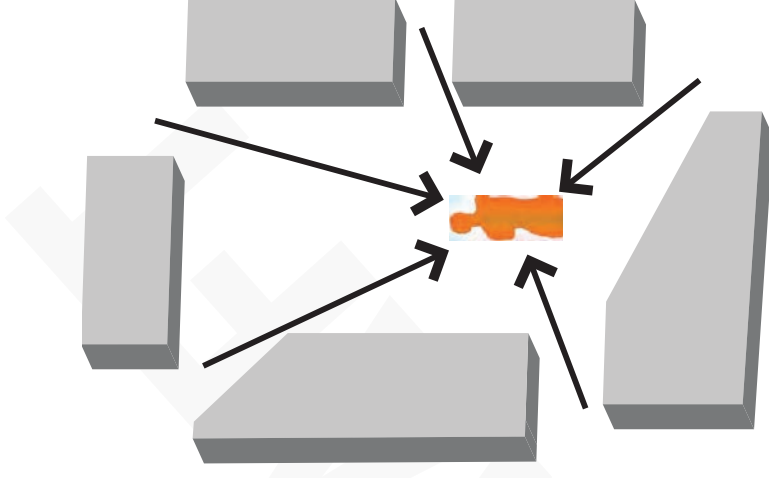
*Plant Genomics, St Paul Campus*

## Continuity and Variety

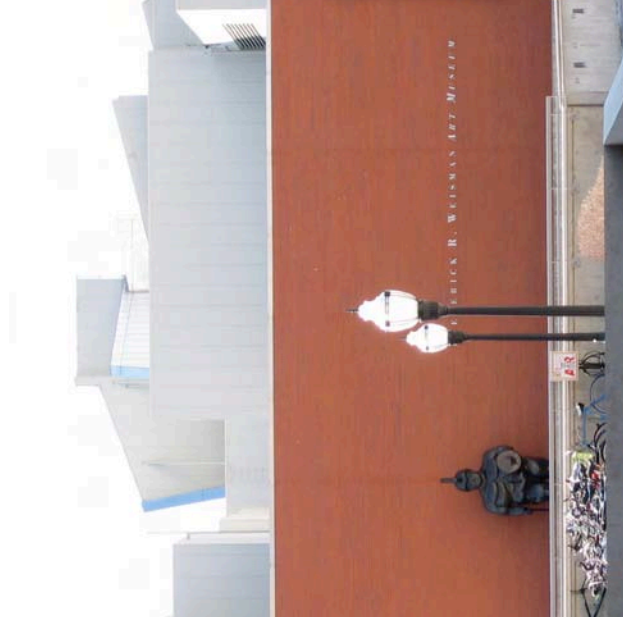
Public spaces should use common materials to create a definable whole with an overarching visual character. Limited examples of landmark buildings should, whenever possible, stand apart from other campus buildings, like the McNamara Gateway Center. Such unique buildings cannot be overly dominant and should relate to other campus buildings. New buildings must limit using the 'landmark building' approach. The cumulative effect of campus building fabric creates the 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

- g. 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 predecessor.
- h. Provide public space furnishings that are compatible in style, materials and scale within each campus district.
- i. Locate public art to provide focal points and variety within each district.



## Public Art located at focal point



*Temporary art installation, Minneapolis East Bank*



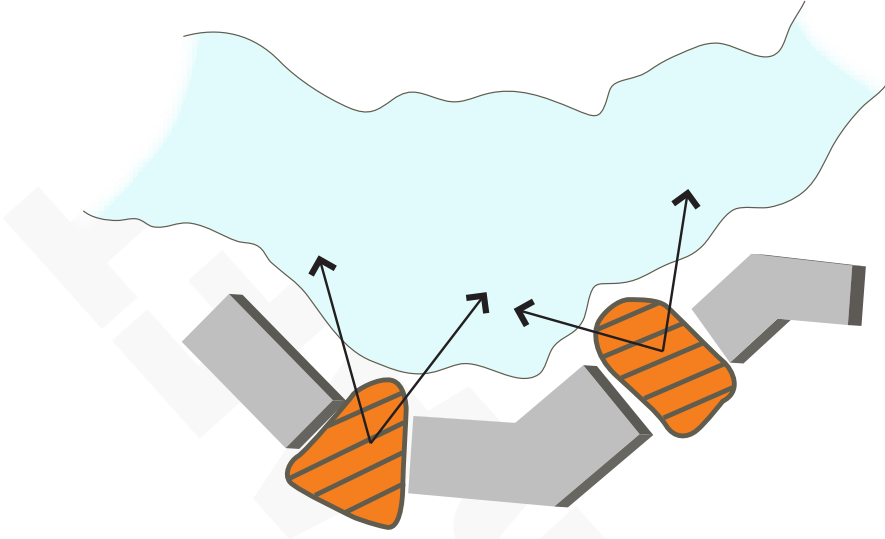
## Definition and Borders

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

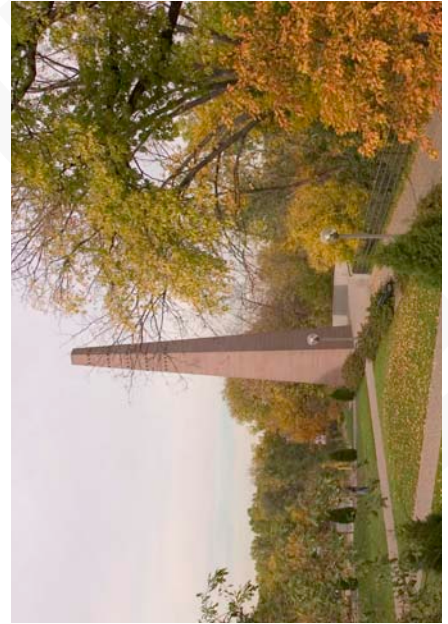
active ground floor uses, visible from these pedestrian paths. Taller buildings along pedestrian paths should have setback terraced profiles to mitigate adverse wind conditions. Natural features, such as the river corridor, should be celebrated in building designs that orient interior public spaces to 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

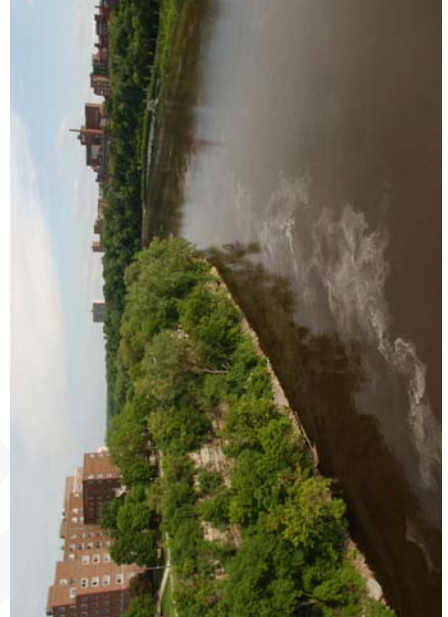
- j. Form new outdoor public spaces to take maximum advantage of natural features, particularly the Mississippi River.
- k. Evaluate new buildings designs for their effect on existing and new public spaces.
- l. Preserve mature trees to continue to provide continuity, shade and a sense of enclosure.



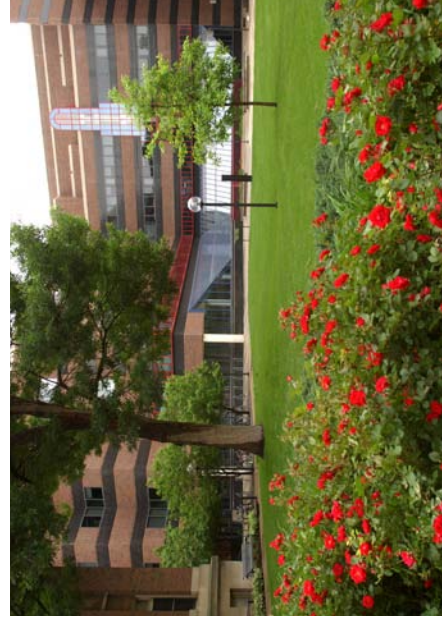
## Views of Mississippi from Outdoor Spaces



Art installations on the West Bank and the upper bluff.



Views from the Washington Avenue bridge



Planting borders on public 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 enjoy 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

- m. Border public spaces with vehicular and pedestrian circulation paths to enhance visibility and security.
- n. Furnish pedestrian circulation paths to be comfortable and safe.
- 61. o. Landscape and furnish public spaces to avoid interfering with views of the spaces from adjacent buildings and paths.
- p. Celebrate natural features by designing interior and exterior spaces to take maximum advantage of their views.



*New public spaces at the Education Sciences building*

### 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 the 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 in our academic community values.



*Clear and visible paths promote safety in public spaces*

### Guidelines

- q. Design campus public spaces to enhance the unified character of the campus while reinforcing individual district identity.
- r. Provide consistent pedestrian-scale light fixtures throughout each campus district.



*Public spaces are brought to life by the campus community*



### 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 found each other.



*Flexible spaces perform multiple functions inviting interactions.*



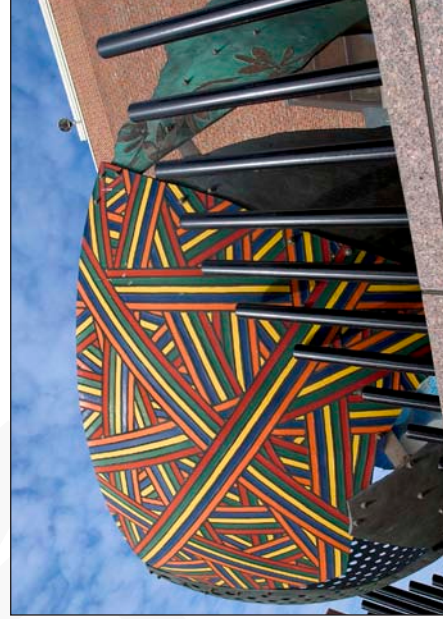
*Northrop Mall is one of the campus' most widely used public spaces*

### Guidelines

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



*Public spaces should use high quality durable materials*



*Public art provides symbolic messages to animate the campus*

### Durability

Design of campus public spaces requires careful consideration of their maintenance and management and of the specific design elements. Tradeoffs between short-term construction costs and long-term maintenance should favor use of materials and construction techniques that will 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 in itself attract additional use. Proper design will create a vital, integrated campus.

### Guidelines

- t. Design public spaces for durability and ease of maintenance.

## 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 needs 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 their contribution to campus character, and to their district.

### Guidelines

- u. Design new buildings to contribute to a unified overall campus character, while reinforcing the identity of the particular district in which it is located.
- v. Use brick and stone as the primary building materials in buildings throughout campus.
- w. 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.

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

### 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. Any required new buildings should be designed flexibly to accommodate identified needs as well as future undefined needs.

### Guidelines

- x. 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 review should determining compliance with these guidelines.

### Guidelines

- y. Design new buildings as a team collaborative process.





- NHRP Listed
- NHRP Eligible
- Expanded Old Campus District
- Mall District - Regents Historic Designation



64

**Cultural Resources - Minneapolis Campus**



**Cultural Resources - St Paul Campus**

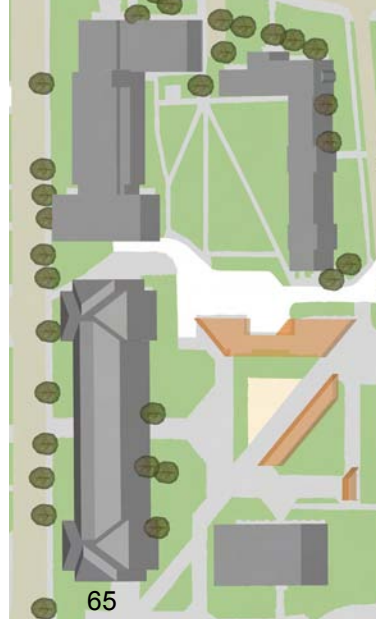
**Notes**

- 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 may 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, public spaces and natural features. New buildings developed on the edges of campus should be sensitive to their impacts on adjacent and sometimes historic neighborhoods.



*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.

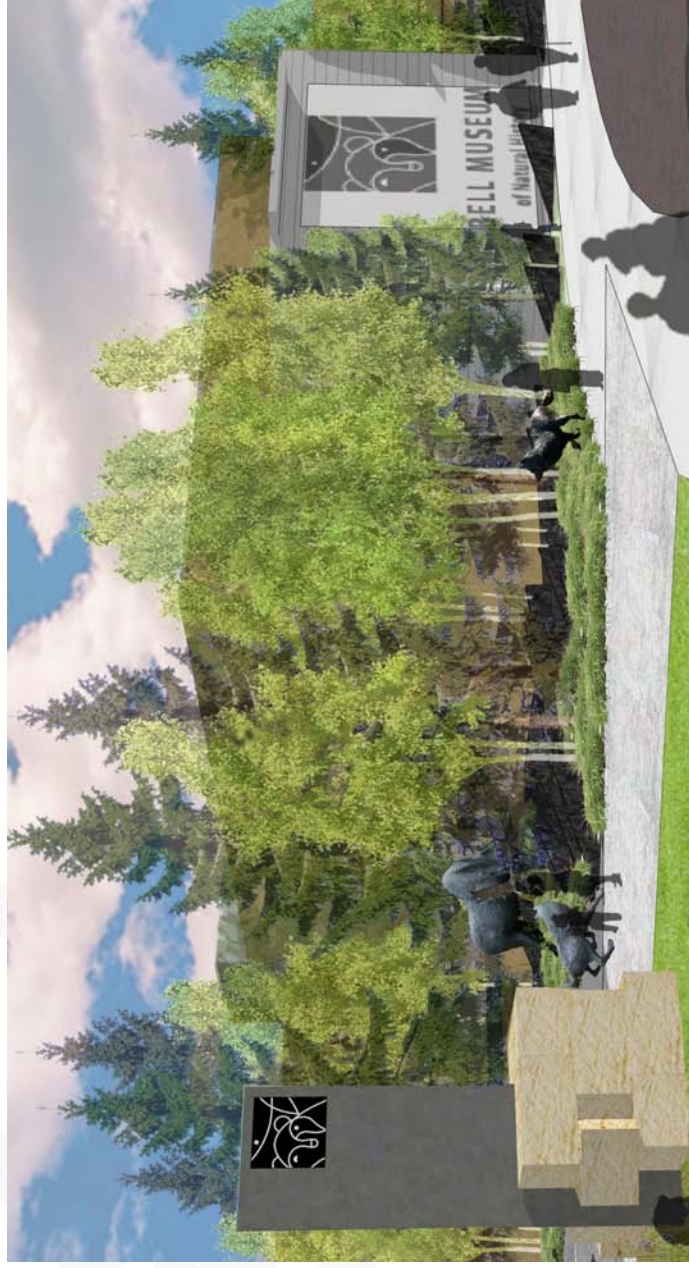
*Right: The proposed new Bell Museum on the St Paul site fully adopted the principles of sustainability in site and building design with a focus on LEED principles and silver level certification.*

## Guidelines

- z. Preserve historic buildings whenever possible by adapting buildings to new programmatic needs.
- aa. 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.

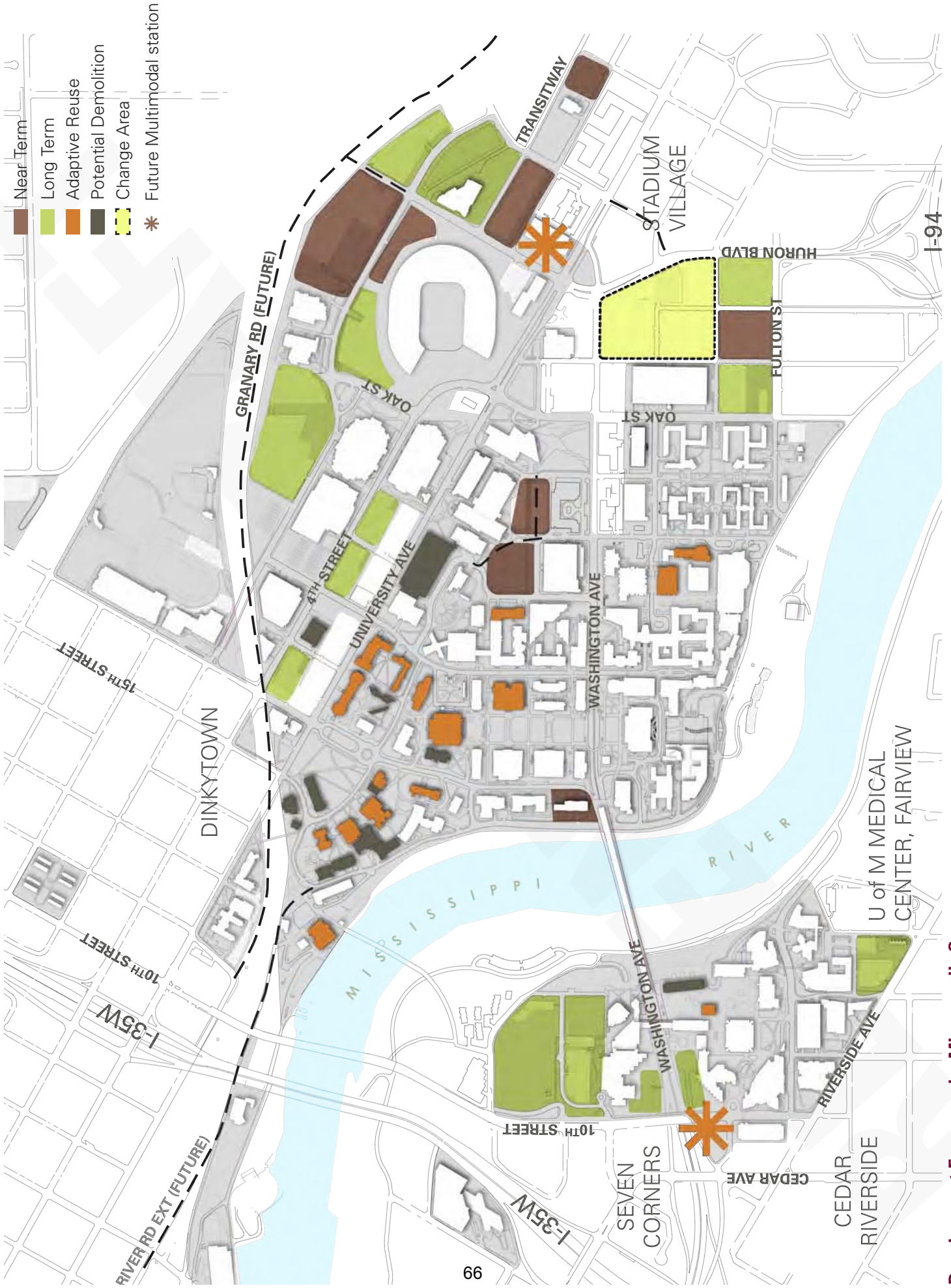


*Jones Hall is a recent example of the University's investment in historic renovation and adaptive reuse.*

## Guidelines

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





## Development Framework Map

Near term development means 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.



Development Framework - St Paul Campus







# District Planning Profiles

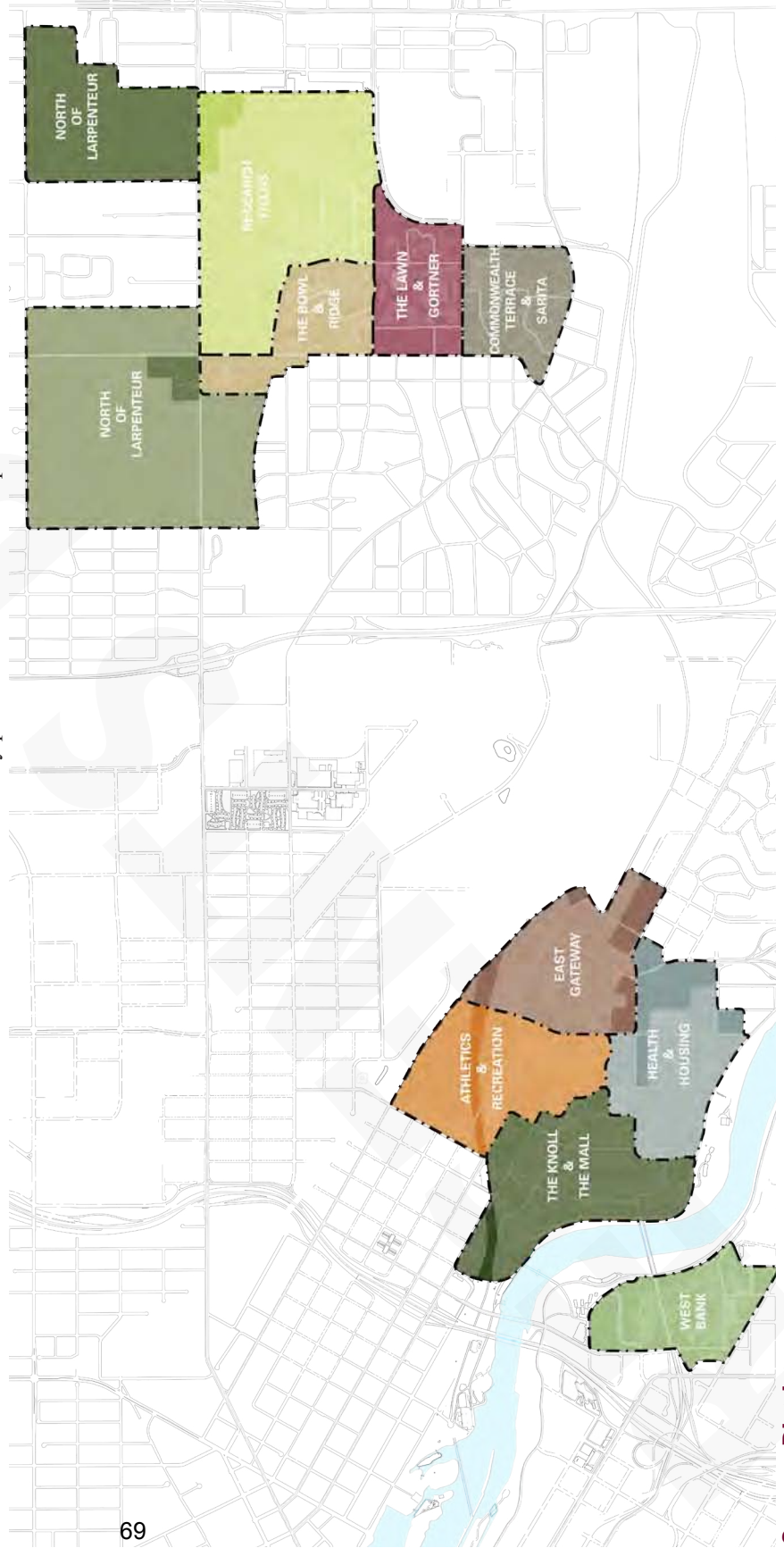
The University is comprised of a series of academic neighborhoods, called campus districts for the purpose of the Campus Master Plan. These districts are defined primarily by similar uses and activity.

## Campus Districts Defined

Each of the districts named in this chapter are 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).*







- Gateway
- ➔ Conflict Zones
- ⋯ LRT Route
- Near Term
- Long Term
- Adaptive Reuse
- Potential Demolition
- Nat'l Resource Area
- Iconic Spaces
- New Public Spaces

## 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.



- Gateway
- ➔ Conflict Zones
- LRT Platform
- ⋯ LRT Route
- Near Term
- Long Term
- Adaptive Reuse
- Nat'l Resource Area
- Iconic Spaces
- New Public Spaces
- Change Area



## 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 from their initial construction, 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 future, 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

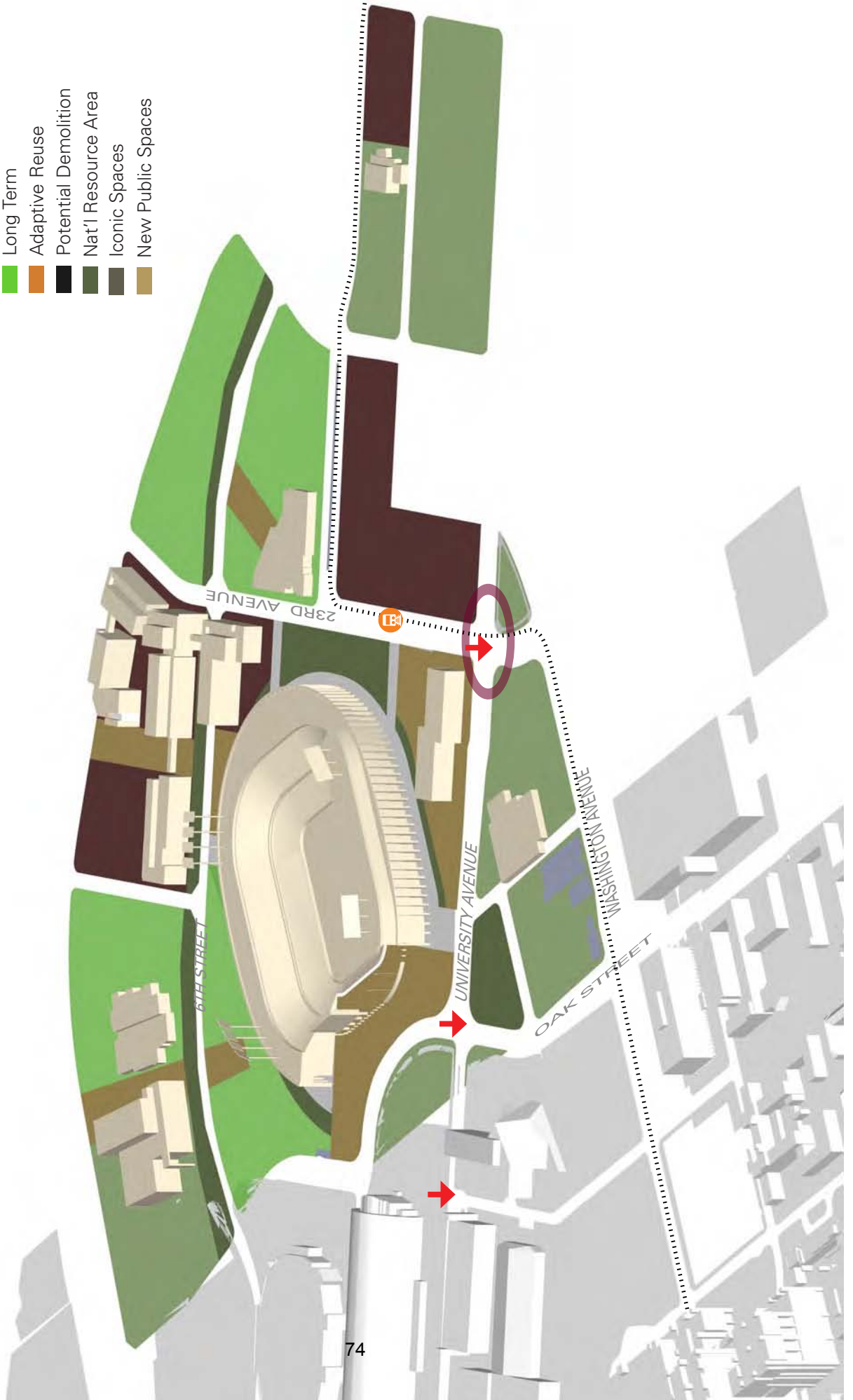
The scale and diversity of the physical environment of the Health Sciences district reflect the size and complexity of the Health Sciences program. It's origins as a teaching center were advanced by the development of new surgical techniques, such as the nation's first open heart surgery in 1952, and 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 rain gardens 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.



- Gateway
- ➔ Conflict Zones
- LRT Platform
- ▬ LRT Route
- Near Term
- Long Term
- Adaptive Reuse
- Potential Demolition
- Nat'l Resource Area
- Iconic Spaces
- New Public Spaces



## 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 reinforce the existing 6th 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 plans 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 to do so 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 was 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 vehicle 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, with the development of the Arts Quarter beginning in 1999.

77

## 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; on the northern recreational fields and on 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.

- Gateway
- ➔ Conflict Zones
- LRT Platform
- LRT Route
- Near Term
- Long Term
- Adaptive Reuse
- Potential Demolition
- Nat'l Resource Area





- Gateway
- ➔ Conflict Zones
- ⋯ LRT Route
- Near Term
- Long Term
- Potential Demolition

## 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 nighttime playing field lighting, parking, noise and traffic flows, 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.



- Gateway
- ➔ Conflict Zones
- Near Term
- Long Term
- Nat'l Resource Area



## St Paul Districts

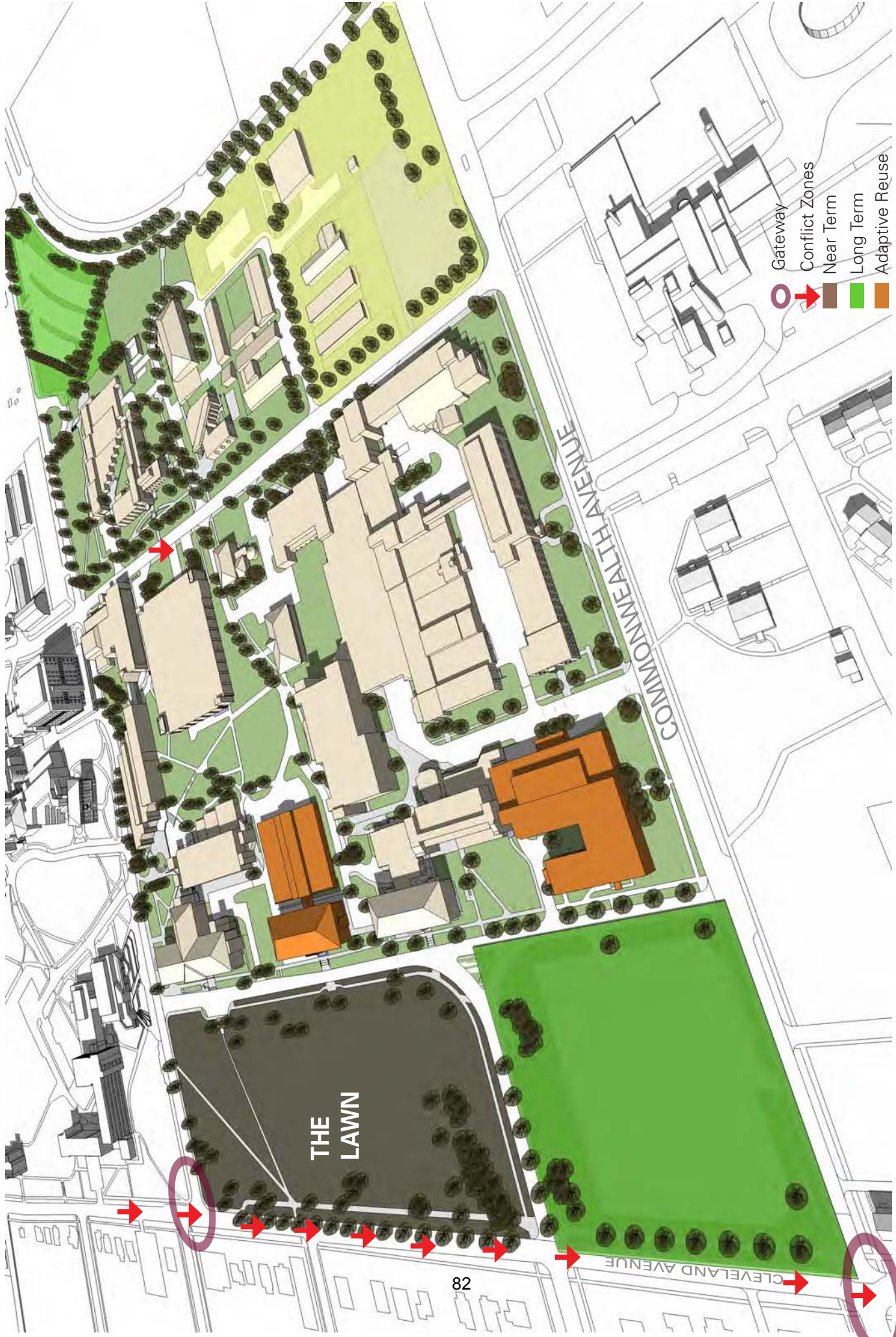
### Concentration of The Bowl and the Ridge

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 comprised 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 an 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 2008).
- 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.





- Gateway
- Conflict Zones
- Near Term
- Long Term
- Adaptive Reuse
- Selective Replacement Area

THE LAWN

82

CLEVELAND AVENUE

COMMONWEALTH AVENUE

## The Lawn

In the first decades of the 20th Century, a collection of three classical buildings were 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 and transit hub and the 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 reserved 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.



○ Gateway

■ Selective Replacement Area



## 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 core 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



- Gateway
- ➔ Conflict Zones
- Nat'l Resource Area



### **Housing: Grove and Commonwealth Terrace**

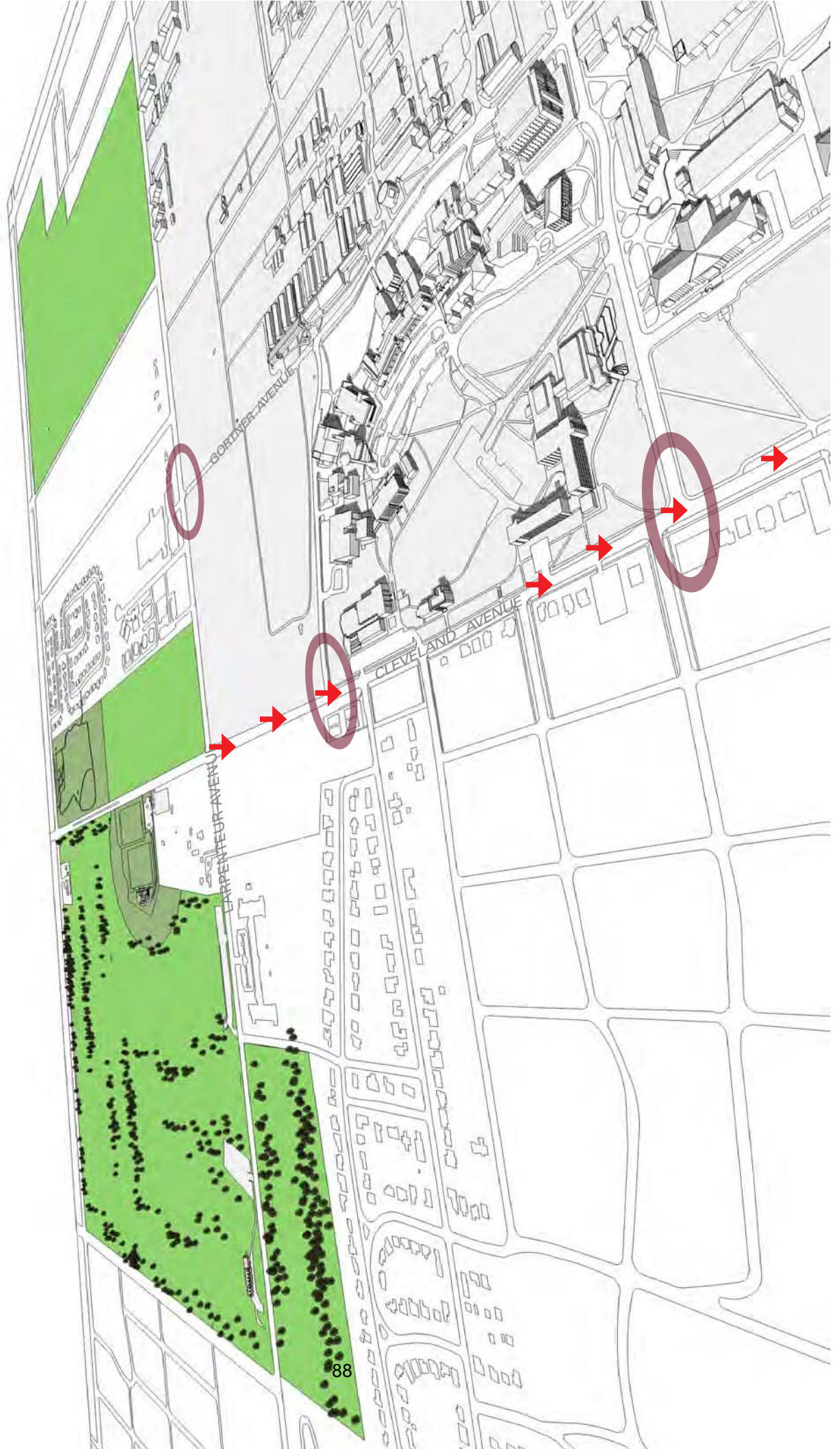
Two residential neighborhoods exist on the St. Paul campus: Commonwealth Terrace and the University Grove. Commonwealth Terrace provides housing for families and has become a diverse, international neighborhood. Reinvestment and renewal over time is expected in the long term without changing the use 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.
- Transportation conflicts along Cleveland Avenue, between transit, pedestrians, bikes and parked cars, will be managed at key crossing locations at Commonwealth Avenue.
- A future north-south bicycle route will be considered on several candidate locations, including Cleveland, Raymond and Gortner Avenue.



- Gateway
- Conflict Zones
- Long Term



## Recreational Edges and Support Agricultural Fields: North of Larpenteur

Currently, the recreational facilities north of Larpenteur, such as the Golf Course, the Soccer Stadium, intermural 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.







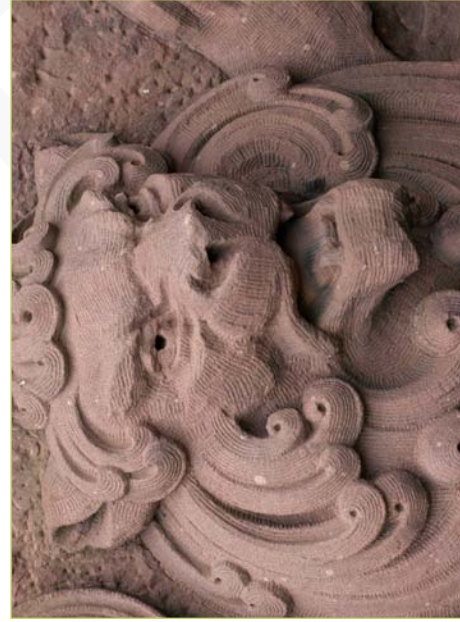
# Implementing the Master Plan

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.



## Administering 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 affect 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. Pre-design 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. Pre-design 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 pre-design.

## 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 pre-design 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.

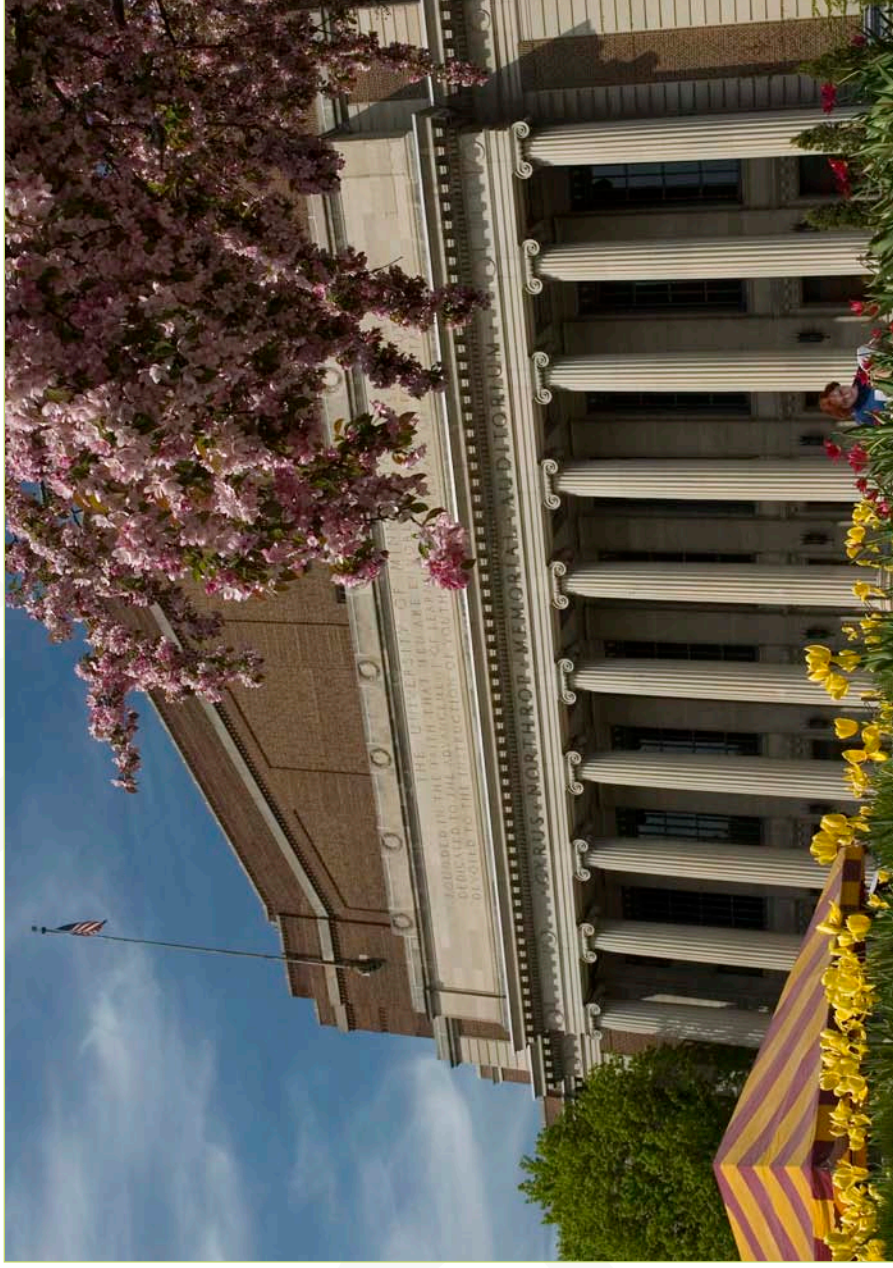
The plan will be elaborated upon and refined through the preparation of district plans that will provide detailed recommendations for future building and infrastructure improvements. Several district plans have already been completed, such as the West Bank Arts Quarter or are in the final stages of preparation, 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 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.

### Guide lines:

- e. 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.

- f. 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



LEARNERS FIRST



## 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.

#### The campus master plan should:

- 1.1 Establish how the physical setting will embody the distinctive missions of each campus.
- 1.2 Highlight and celebrate the special realities of each campus, including its natural setting and ecological structure, architectural and landscape heritage, and its surrounding settlement patterns. The unique and special qualities of each place should be made an integral part of the educational experience.

- 1.3 Organize the landscape and places to establish a coherent circulation and infrastructure pattern for the campus as a whole.

- 1.4 Determine building location and design guidelines so each incremental addition to the campus will contribute to a distinctive and inspiring vision of the whole.

- 1.5 Encourage exemplary architecture and landscape architecture which demonstrates sensitivity to local conditions and contributes to the master plan vision.

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

#### 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”.

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

#### 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.

# Acknowledgements

We would gratefully like to acknowledge the assistance of the following people in the preparation of this document:

Community Connections Work Team	Design and Preservation Work Team	Enhancing the Campus Work Team	Movement and Access Work Team	Natural Features and Open Spaces Work Team
<b>Chair</b> Becky Yust	<b>Co-chairs</b> Terry Bock Judith Martin	<b>Co-chairs</b> Denise Guerin Gerald Rinehart	<b>Co-chairs</b> David Levinson Robert Johns	<b>Co-Chairs</b> Arthur Erdman Lance Neckar
<b>Members</b> Sheila Ards John Carlson Katie Fournier Susan Gehrz Sarah Greening Greg Hestness Laurel Hirt Justin Miller Jan Morlock Kris Nelson Laurie Scheich	<b>Members</b> Craig Amundsen Nicholas Baker Meagan Beekman James Litsheim Thomas Meyer Mark Pharis Kate Solomonson Madelon Sprengnether Dewey Thorbeck	<b>Members</b> Scott Ellison Steve Fitzgerald Chris Frazier John Koepke Robert Kvakik Peggy Mann Rinehart Laurie McLaughlin Katy Olson Tim Ouirgley Jim Turman Jenna Strain Ray Voelker Lorelee Wederstrom	<b>Members</b> Bob Baker Gary Barnes Sandra Cullen Steve Frooman Lonetta Hanson Tom Johnson Kevin Krizek Henry Liu Les Potts Michael Ramolae Chad Rathmann Xinkai Wu	<b>Members</b> Tony Brown Brian Fewell Clinton Hewitt Peter Kobliska Barbara Liukkonen Jerome Malmquist Robert McMaster Patrick Nunnally Andrew Phelan Thomas Ritzer
<b>Community Involvement</b>				

We recognize the contribution of citizens, residents and officials of partner agencies who participated in the Master Planning process:

- |   |   |
|---|---|
| Hennepin County Community Works, Housing and Transit                    | Marcy Holmes Neighborhood Association                                   |
| City of Minneapolis Planning  | Southeast Como Improvement Association Livability and Housing Committee |
| City of St Paul Planning and Economic Development                       | Prospect Park Livability Committee                                      |
| City of Falcon Heights City Council and Planning Commission             | St Anthony Park Land Use Committee                                      |
| University District Alliance Partnership, Vision and Planning Committee | West Bank Community Coalition Land Use Committee                        |







**UNIVERSITY OF MINNESOTA  
BOARD OF REGENTS**

**Facilities Committee**

**March 12, 2009**

**Agenda Item:** Capital Budget Amendment

review       review/action       action       discussion

**Presenters:** Vice President Kathleen O'Brien  
Associate Vice President Michael Perkins

**Purpose:**

policy       background/context       oversight       strategic positioning

In accordance with Board of Regents Policy: *Reservation and Delegation of Authority*, review the following Capital Budget Amendment:

- Amend the Fiscal Year 2009 Capital Budget by \$600,000 to increase funding for the design and construction of the Walter Library Supercomputer Cooling and Power Increase Project on the Twin Cities Campus.

**Outline of Key Points/Policy Issues:**

The Supercomputing Institute for Advanced Computational Research, located in Walter Library, is planning the installation of a new supercomputer. The current cooling and electrical power capacity capacities located in the main computer room B40 are insufficient to accommodate the new supercomputer. The cooling capacity must be increased by approximately 100 tons and the electrical capacity must be increased by 500 KVA. This project will provide the mechanical and electrical infrastructure within Walter Library to cool and power the new supercomputer.

**Background Information:**

Refer to the attached project data sheet for this project.

The project parameters were unknown when the Fiscal Year 2009 Capital Budget was prepared. The size of the new supercomputer the Minnesota Supercomputer Institute was planning to purchase was not know at the time the Fiscal Year 2009 Capital Budget was prepared; therefore, the amount of cooling and power need for the new computer was also unknown. This project was reviewed by the Facilities Committee at its February 2009 meeting.

**President's Recommendation for Action:**

The President recommends approval of the following Fiscal Year 2009 Capital Budget Amendment:

- Amend the Fiscal Year 2009 Capital Budget by \$600,000 to include funding for the design and construction of the Walter Library Supercomputer Cooling and Power Increase Project on the Twin Cities Campus.



**Walter Library Supercomputer – Increase Cooling & Power  
Twin Cities Campus  
Project No. 01-042-09-1297**

**1. Basis for Request:**

The Supercomputing Institute for Advanced Computational Research, located in Walter Library, is planning the installation of a new supercomputer. The current cooling and electrical power capacities located in the main computer room B40 are insufficient to accommodate the new supercomputer. The cooling capacity must be increased by approximately 100 tons and the electrical capacity must be increased by 500 KVA. This project will provide the mechanical and electrical infrastructure within Walter Library to cool and power the new supercomputer.

Installation of this new supercomputer will enable large-scale computations never before possible at the University of Minnesota and will enable MSI (Minnesota Supercomputer Institute) to provide services and resources to a broad range of University researchers. In a communication dated 20 October 2008, President Robert H. Bruininks stated "... enhancement of our research capacity to meet the demand for University resources, equipment, and support by researchers ..." as one of only three "essential areas of investment" for the University. This new supercomputer system is being purchased specifically as a means to enhance the University's research capacity and will significantly do so.

However, MSI needs enhancements to the existing machine room in order to handle the increased power demands and associated cooling requirements. This capital project will provide the necessary enhancements to allow MSI to host this new supercomputing system. There are no existing campus facilities that could appropriately host such a system. It was not known until very recently just how large MSI's next systems procurement would be which is why this project was not included in the last year's fiscal budget.

**2. Scope of Project:**

This project will utilize the existing computer room B40 in Water Library for the installation of the new supercomputer. The project will install the necessary electrical power systems and mechanical cooling systems. This project does not affect the exterior of Walter Library.

**3. Environmental Issues:**

There are no environmental issues.

**4. Cost Estimate:**

Construction Cost	\$500,000
Non Construction Cost	<u>100,000</u>
Total Project Cost	\$600,000

**5. Capital Funding:**

Supercomputing Institute for Advanced Computational Research \$600,000

**6. Capital Budget Approvals:**

This project was not included in the capital budget process last year because MSI was not certain of the amount of funding available for the supercomputer procurement until recently. The existing MSI machine would have been capable of handling a smaller system without upgrades. However, the level of funding available for this new supercomputer mandates immediate growth in the power and cooling capabilities.

**7. Annual Operating and Maintenance Cost and Source of Revenue:**

MSI will pay on-going maintenance costs associated with the new power and cooling equipment as part of its regular operating budget. These costs are typically 5-10% of the equipment costs. For the new uninterruptible power supply (UPS) that will provide an additional 500 kVA, this would roughly be \$15,000 annually. These costs do not vary much year-by-year as maintenance includes changing out bad batteries with new one which are made with newer technology and last longer. These costs are not a significant percentage of MSI's existing annual maintenance costs. Once this project is completed, MSI will have additional capacity for both the new supercomputing system as well as associated growth in storage requirements. Researchers generate more and more data and want to perform more and increasingly complex analyses on that data.

**8. Time Schedule:**

Complete Design	Feb 2009
Construction Bid/Contract	April 2009
Begin construction	May 2009
Complete construction	July 2009

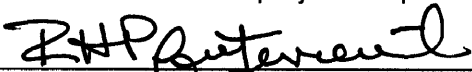
**9. Engineer:**

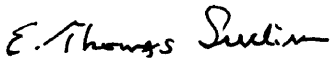
Dunham Associates

The project delivery method is design-bid-build.

**10. Recommendation:**

The above described project scope of work, cost, funding, and schedule is appropriate:

 1/29/09  
 \_\_\_\_\_  
 Richard Pfitzenreuter, Vice President and Chief Financial Officer

 1-29-09  
 \_\_\_\_\_  
 E. Thomas Sullivan, Senior Vice President for Academic Affairs and Provost

 1/29/09  
 \_\_\_\_\_  
 Kathleen O'Brien, Vice President for University Services



**WALTER  
LIBRARY**



# Walter Library, Twin Cities Campus



**UNIVERSITY OF MINNESOTA  
BOARD OF REGENTS**

**Facilities Committee**

**March 12, 2009**

**Agenda Item:** Capital Budget Amendment

review       review/action       action       discussion

**Presenters:** Vice President Kathleen O'Brien  
Senior Vice President Frank Cerra  
Associate Vice President Michael Perkins  
Professor Marvin Marshak

**Purpose:**

policy       background/context       oversight       strategic positioning

In accordance with Board of Regents Policy: *Reservation and Delegation of Authority*, review and take action on the following Capital Budget Amendments:

- Amend the Fiscal Year 2009 Capital Budget by \$720,000 to fund the design and construction of remodeling work to develop preclinical research space for the Schulze Diabetes Institute on the Twin Cities Campus.
- Amend the Fiscal Year 2009 Capital Budget by \$15,395,000 to fund the design and construction of the Nova Project – Phase I Road and Site Work located at Ash River, Minnesota.

**Outline of Key Points/Policy Issues:**

Refer to the attached project data sheets for each project.

**Schulze Diabetes Institute**

In December 2008, the University received a \$40 million gift from Richard M. Schulze Family Foundation to pursue an accelerated cure for type 1 diabetes. This gift necessitates expedited remodeling of research facilities, which must begin this spring in order to support the accelerated research schedule.

**Nova Project – Phase I Road and Site Work**

The University of Minnesota, as a primary leading institution within the NOvA Collaboration, intends to construct a large physics detector in Northern Minnesota approximately 30 miles southeast of International Falls, near the Town of Ash River to intercept and detect neutrinos produced approximately 800 km away at Fermi National Accelerator laboratory in Batavia, Illinois. Neutrinos can change from one type to another and understanding the details of how they change is an important goal of the worldwide physics community. Detecting the neutrinos at a large distance from their point of production is important to maximize some of the effects to be studied. The combination of the neutrino beam at Fermilab and a detector site in Northern Minnesota gives the NOvA Collaboration a unique opportunity to study neutrinos more precisely than at any other existing facility.



## **Background Information:**

### **Schulze Diabetes Institute**

Review/action of this capital budget amendment for the Schulze Diabetes Institute is requested at this time in order to accommodate the accelerated research schedule required by the Schulze Family Foundation's gift. Renovation of the space to house the Schulze Diabetes Institute needs to begin as soon as possible to ensure research space is ready summer 2009. The Facilities Committee received an overview of this project as an information item at their February 2009 Meeting.

### **Nova Project – Phase I Road and Site Work**

The design, construction and operation of the NOvA facility are funded by the Department of Energy per a cooperative agreement with the University. Funding for Phase I of this project may become available this spring (after the Fiscal Year 2009 Capital Budget was prepared). In order to position the University to proceed with the Phase I work this spring, review/action on the capital budget amendment is requested at this time. Phase I site preparation work includes upgrade of approximately 3.5 miles of existing logging road, clearing and grubbing of the building site and the rock excavation for the Detector Enclosure. The second phase of the project is the development of the Far Detector Building. Phase II of the project will be brought back to the Regents once funding is available and is not a part of this project.

In July 2007, the Board of Regents acting as the Responsible Governmental Unit for the environmental review process; in September 2007, the Board approved acquisition of the property on which NOvA is planned to be sited; and in November 2007, as the Responsible Governmental Unit, the Board of Regents acted upon the Environmental Assessment Worksheet for the project.

## **President's Recommendation for Action:**

The President recommends approval of the following Capital Budget Amendments

- Amend the Fiscal Year 2009 Capital Budget by \$720,000 to fund the design and construction of remodeling to develop preclinical research space for the Schulze Diabetes Institute on the Twin Cities Campus.
- Amend the Fiscal Year 2009 Capital Budget by \$15,395,000 to fund the design and construction of the Nova Project – Phase I Road and Site Work located at Ash River, Minnesota.

**Schulze Diabetes Institute Preclinical Research Remodeling  
Saint Paul Campus  
Project No. 02-416-09-1465**

**1. Basis for Request:**

In December, the University received a \$40 million gift from the Richard M. Schulze Family Foundation to pursue an accelerated cure for type 1 diabetes. This gift necessitates the expedited remodeling of research facilities, which must begin this spring in order to support the accelerated research schedule. This request is for an amendment to the 2009 fiscal year capital budget.

**2. Scope of Project:**

The Schulze Diabetes Institute (SDI) proposes to renovate a total of 5,700 gross square feet for a pre-clinical research area on the St. Paul campus. The space was originally constructed as research housing many years ago. The size and contiguous nature of the space provided the opportunity to expand research functions in a way that no other space on either the Minneapolis or Saint Paul campuses could accommodate without incurring major expense. The physical layout, heating, ventilation, air conditioning and security systems that are currently in place mitigate the need for a more significant renovation. In addition to the need for fewer dollars required to remodel this location, it brings together all of the research components for the Institute. Additional space has been identified on the Saint Paul campus for an islet isolation lab and operatory suite to further increase program efficiencies.

The project will provide holding facilities, preparation and procedure rooms, support space and office space. The existing heating, ventilation, air conditioning, plumbing, fire protection, safety, and security systems in the project area will be modified to meet the requirements of this program.

**3. Environmental Issues:**

A Facility Condition Assessment has been completed for this building. A drain replacement project was recently completed in the project area in which some abatement of materials was required. Any remaining hazardous materials will be removed before the project is started.

**4. Cost Estimate:**

Construction Cost	\$580,000.00
Non Construction Cost	<u>\$140,000.00</u>
Total Project Cost	\$720,000.00

**5. Capital Funding:**

An approved \$720,000 internal loan between the Budget Office and Research Animal Resources (RAR) will provide the financing for this project.



**6. Capital Budget Approvals:**

This Capital Budget Amendment is driven by the receipt of a major gift in December 2008. The timing of this gift had previously been unknown. This gift necessitates the expenditure of research facilities, which must begin this spring in order to support the accelerated research schedule. Review/Action by the Regents is requested in March 2009 to ensure program research space is available this summer.

**7. Annual Operating and Maintenance Cost and Source of Revenue:**

The new project occurs within the same footprint and is of a similar use to the previous occupancy. Thus, annual operating and maintenance costs will remain relatively the same and no new source of revenue would be necessary.

**8. Time Schedule:**

Action by Board of Regents	March 2009
Construction start	April 2009
Construction completion	July 2009

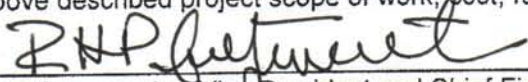
The project delivery method will be design – bid – build.

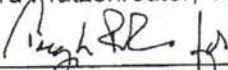
**9. Architect / Engineer:**

RSP Architects  
LKPB Engineers

**10. Recommendation:**

The above described project scope of work, cost, funding, and schedule is appropriate:

  
\_\_\_\_\_  
Richard Pfitzenreuter, Vice President and Chief Financial Officer

  
\_\_\_\_\_  
Frank Cervia, Senior Vice President, Academic Health Center

 2/26/09  
\_\_\_\_\_  
Kathleen O'Brien, Vice President for University Services

**NOvA Project NOvA Project: Phase I Road and Site Work**  
**Ash River, Minnesota**  
**Project No. 03-896-06-1711**

**1. Basis for Request:**

The University of Minnesota, as a leading institution within the NOvA (NuMI Off-Axis Electron Neutrino Appearance Experiment) collaboration, intends to construct a large physics detector in Northern Minnesota approximately 30 miles southeast of International Falls, near the unincorporated settlement of Ash River, MN to intercept and detect neutrinos produced approximately 810 km away at Fermi National Accelerator Laboratory (Fermilab) in Batavia, IL. Neutrinos can change from one type to another, and understanding the details of how they change is an important goal of the worldwide physics community. Detecting the neutrinos at a large distance from their point of production is important to maximize some of the effects to be studied. The combination of the existing Fermilab to Soudan MN neutrino beam and a new detector sited near Ash River gives the NOvA Collaboration a unique opportunity to study neutrinos more precisely than at any other existing facility worldwide.

The design, construction and operation of this facility are funded by the Department of Energy per a Cooperative Agreement with University of Minnesota. This project was not included in the last fiscal year budget because it was subject to Department of Energy (DOE) funding. FY 2009 DOE funding is now expected soon as a result of the enactment of the America Recovery and Reinvestment Act and the expected enactment of HR 1105 FY 2009 Omnibus Appropriations Act. The DOE will pay all costs of construction and operation of the NOvA Facility.

**2. Scope of Project:**

The scope of work consists of two subprojects: The NOvA Site Preparation package includes the upgrade of approximately 3.5 miles of existing logging road to provide all weather access to the Far Detector Building, clearing and grubbing of the building site and the rock excavation for the Detector Enclosure. The excavated rock will be crushed and sized in order to be used as road base and shielding berm. The second subproject is the approximate 40,000 GSF Far Detector Building and consists of a below grade enclosure (approximately 70 feet wide by 70 feet tall and 350 feet long). The enclosure will be situated approximately 40 feet into the rock and will have cast-in-place concrete floor slab and walls. The roof of the Detector Enclosure will be a composite construction of precast concrete planks with a cast-in-place concrete topping. A 0.5 foot deep barite aggregate layer will provide cosmic ray shielding for the Detector Enclosure. Other features of the Detector Enclosure include cast-in-place concrete support spaces such as Computer Room, Control Room and Electrical Equipment Room. The Detector Enclosure will have four levels of steel access walkways on the west side that lead to exit stairs.

The adjacent, at-grade, Service Building will include a Loading Dock, Office, Toilet, Scintillator Equipment Room, Mechanical Equipment Room and Fire Protection Room. The Service Building will be a metal sided, structural steel building with a modified bitumen roof membrane. Adjacent to the Loading Dock is a tanker unloading facility sized to accommodate four (4) trailers and appropriate spill containment.



The mechanical systems for the facility include rooftop HVAC units, sump pumps, ventilation fans and related accessories. The fire protection system for the facility will be a water mist system with 20,000 gallons of onsite water storage.

**3. Environmental Issues:**

Environmental conditions at the project site have been investigated by a qualified environmental consultant. The site is virgin land. The project budget incorporates a contingency and will be responsible for the corrective cost of any unforeseen environmental issues.

As the Responsible Governmental Unit, the Board of Regents acted upon the Environmental Assessment Worksheet for the Project in November 2007.

**4. Cost Estimate:**

**Phase I: Road Work + Site Prep**

Construction Cost	\$12,800,000	
Non Construction Cost	<u>2,595,000</u>	
Total Project Cost	\$15,395,000	

**Total Project (Phase I and II):**

Construction Cost	\$35,847,000	\$896 GSF
Non Construction Cost	<u>14,276,090</u>	
Total Project Cost	\$50,123,090	\$1,253 GSF

**5. Capital Funding:**

All project capital cost is funded by Department of Energy.

**6. Capital Budget Approvals:**

The design, construction and operation of this facility are funded by the Department of Energy per a Cooperative Agreement with University of Minnesota. This project was not included in the last fiscal year budget because it was subject to Department of Energy (DOE) funding. FY 2009 DOE funding is now imminent and is the basis of paying all project related costs.

**7. Annual Operating and Maintenance Cost and Source of Revenue:**

Annual operating and maintenance cost for this remote facility are estimated at \$350,000 to \$400,000, in addition to the cost of the scientific and technical staff. The Department of Energy will pay 100% of those costs plus the University's negotiated indirect cost recovery. This operational protocol is identical to the one that has been in place for more than 25 years at the University's Soudan Underground Laboratory Lab located in Soudan, MN.

**8. Time Schedule:**

Complete Design	February 2009
Establish Construction Guaranteed Maximum Price	April 2009
Begin construction (Phase I)	May 2009
Complete construction (Phase I)	October 2009
Complete construction (Phase II)	August 2011

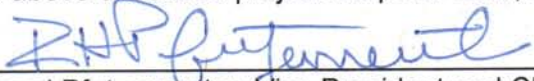
**12. Architect/Engineer of Record:**


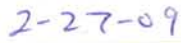
Burns & McDonnell is the Engineer/Architect of Record.

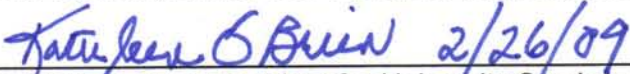
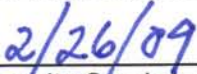
The project delivery method is construction manager at risk.

**13. Recommendation:**

The above described project scope of work, cost, funding, and schedule is appropriate:

  
\_\_\_\_\_  
Richard Pfitzenreuter, Vice President and Chief Financial Officer

   
\_\_\_\_\_  
E. Thomas Sullivan, Senior Vice President for Academic Affairs and Provost

   
\_\_\_\_\_  
Kathleen O'Brien, Vice President for University Services





**UNIVERSITY OF MINNESOTA  
BOARD OF REGENTS**

**Facilities Committee**

**March 12, 2009**

**Agenda Item:** Schematic Plans

review       review/action       action       discussion

**Presenters:** Vice President Kathleen O'Brien  
Senior Vice President Frank Cerra  
Associate Vice President Michael Perkins  
Professor Marvin Marshak

**Purpose:**

policy       background/context       oversight       strategic positioning

In accordance with Board of Regents Policy: *Reservation and Delegation of Authority*, review and take action of schematic plans for the following projects:

- Center for Magnetic Resonance Research Expansion and Renovation, Twin Cities Campus
- NOvA Project Phase I Road and Site Work, Ash Minnesota

**Outline of Key Points/Policy Issues:**

The project schematic plans will be presented at the committee meeting. The attached project data sheet addresses the basis for request, project scope, cost estimate, funding, and schedule. A map locating the projects on the campus is also attached.

***Center for Magnetic Resonance Research (CMRR)***

The CMRR is an interdepartmental and interdisciplinary research laboratory that provides state-of-the-art instrumentation, expertise, and infrastructure to carry out biomedical research utilizing the unique capabilities provided by ultra high-field magnetic resonance imaging and magnetic resonance spectroscopy methodology. The central aim of the research conducted in CMRR is to non-invasively obtain functional, physiological, and biochemical information in intact biological systems, and use this capability to probe biological processes in health and disease. This CMRR renovation and expansion project will be the first building in the Biomedical research Facilities Program approved by the 2008 legislature.

***NOvA Project Phase I Road and Site Work***

The University of Minnesota, as a primary leading institution within the NOvA Collaboration, intends to construct a large physics detector in Northern Minnesota approximately 30 miles southeast of International Falls, near the Town of Ash River to intercept and detect neutrinos produced approximately 800 km away at Fermi National Accelerator laboratory in Batavia, Illinois. Neutrinos can change from one type to another and understanding the details of how they change is an important goal of the worldwide physics community. Detecting the neutrinos at a large distance from their point of production is important to maximize some of the effects to be studied. The combination of the neutrino beam at Fermilab and a detector

site in Northern Minnesota gives the NOvA Collaboration a unique opportunity to study neutrinos more precisely than at any other existing facility. The design, construction and operation of the NOvA facility are funded by the Department of Energy per a cooperative agreement with the University. Funding for Phase I of this project became available after the Fiscal Year 2009 Capital Budget was prepared. In order to proceed with the Phase I work this spring review/action on the capital budget amendment is requested at this time. Phase I site preparation work includes upgrade of approximately 3.5 miles of existing logging road, clearing and grubbing of the building site and the rock excavation for the Detector Enclosure. The second phase of the project is the development of the Far Detector Building. Phase II of the project will be brought back to the Regents once funding is available and is not a part of this project.

### **Background Information:**

The Fiscal Year 2009 Capital Budget approved by the Board of Regents in June 2008 authorized \$53,200,000 for the design and construction of the Center for magnetic Resonance Research Renovation and Addition.

An amendment to the Fiscal Year 2009 Capital Budget is being requested at this time for the NOvA Project Phase I Road and Site Work.

### **President's Recommendation for Action:**

The President recommends approval of the schematic plans and of the appropriate administrative officers proceeding with the award of contracts for the development of construction documents and construction for the following projects:

- Center for Magnetic Resonance Research Renovation and Expansion on the Twin Cities Campus
- NOvA Project Phase I Road and Site Work, Ash River, Minnesota



**Center for Magnetic Resonance Research (CMRR)  
Renovation and Expansion  
Twin Cities Campus  
Project No. 01-180-08-1687 Capital Budget File #2967**

**1. Basis for Request:**

The University's Center for Magnetic Resonance Research (CMRR) was established in 1991 as a result of rapidly growing and successful in vivo magnetic resonance imaging (MRI) and magnetic resonance spectroscopy (MRS) research efforts. Today, the CMRR is an interdepartmental and interdisciplinary research laboratory that provides state-of-the-art instrumentation, expertise, and infrastructure to carry out biomedical research utilizing the unique capabilities provided by ultra high-field MRI and MRS methodology. The central aim of the research conducted in CMRR is to non-invasively obtain functional, physiological, and biochemical information in intact biological systems, and use this capability to probe biological processes in health and disease.

With a commitment to growing its long and proud tradition of accomplishment in research, the University needs to continue its investment in this state-of-the-art magnetic imaging research facility. If CMRR is to maintain a leadership position, it is imperative further steps are taken to keep the research capabilities in CMRR ahead of the competition. The existing facility that opened in 1997 is equipped with six high field magnets with magnetic field strength of 4 Tesla and greater: the most notable being a 9.4 Tesla with a 65cm bore. A small renovation is currently underway that will house a 16.4 Tesla magnet, which will be the strongest of its kind in the nation. This large renovation and expansion of the CMRR will add a 7 Tesla magnet and 10.5 Tesla magnet, provide state-of-the-art research imaging space, as well as a cyclotron production facility, clinical/patient imaging space and the associated office and support space.

**2. Scope of Project:**

The existing 40,800 gross square foot one-story freestanding CMRR is located at 2021 Sixth Street Southeast; in the emerging East Gateway District of the Twin Cities East Bank (Minneapolis) Campus. This CMRR renovation and expansion project will be the first building in the Biomedical Research Facilities Program approved by the 2008 legislature. The project includes new construction of a two story 61,750 gross square feet addition and renovation of 7,920 square feet. The project will provide a new building entry oriented on the corner of 6<sup>th</sup> Street and 21<sup>st</sup> Avenue and will also include a skyway connection to the adjacent Medical Biosciences Building. The project will also extend 21<sup>st</sup> Avenue to the north to provide access for the building service area. Materials to be used are consistent with the adjacent McGuire Translational Research Facility, Medical Biosciences Building, and TCF Bank Stadium: brick, clear anodized aluminum window systems with lightly tinted glazing and buff tone cast stone accents.

**3. Environmental Issues:**

Considerable historical environmental data is available for the East Gateway District and correspondingly, a Site Contingency Plan will be developed by a qualified environmental consultant that identifies procedures and protocol in the event hazardous materials are encountered during construction. Any environmental issues encountered during the excavation will be addressed as a part of the project.

**4. Cost Estimate:**

Construction Cost	\$28,513,000
Non Construction Cost	8,345,000
Imaging Equipment and Shielding:	<u>16,342,000</u>
Total Project Cost	\$53,200,000

**5. Capital Funding:**

State of Minnesota	\$39,900,000
University of Minnesota	<u>13,300,000</u>
Total Funding	\$53,200,000

**6. Capital Budget Approvals:**

The project is included in the 2009 Capital Budget that was approved by the Board of Regents in June 2008.

**7. Annual Operating and Maintenance Cost and Source of Revenue:**

The annual cost to operate and maintain the existing facility was \$14.73 / gross square foot (\$7.77 for utilities and \$6.96 for non-utility costs) or approximately \$595,000 in 2007. The addition will increase the operating and maintenance cost by approximately \$910,000 per year. An agreement on the funding of the required building operating costs will be completed consistent with the compact / budget process.

**8. Time Schedule:**

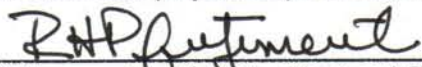
Begin construction	Spring 2009
Complete construction	Fall 2010

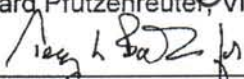
**9. Architect / Construction Manager:**

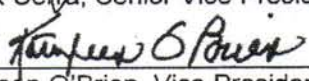
RSP Architects  
M A Mortenson Construction

**10. Recommendation:**

The above described project scope of work, cost, funding, and schedule is appropriate:

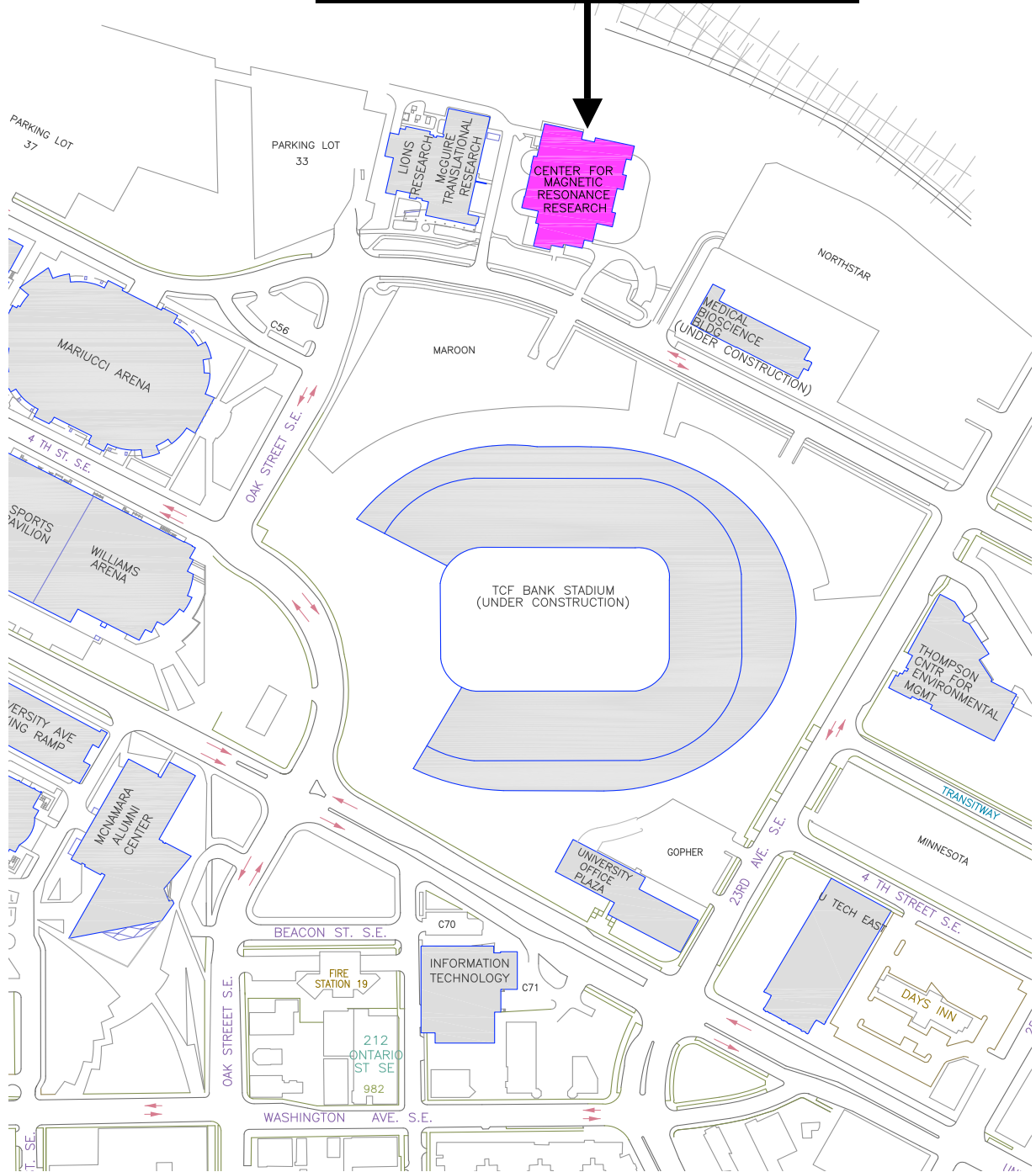
  
\_\_\_\_\_  
Richard Pfitzenreuter, Vice President and Chief Financial Officer

  
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Frank Cerra, Senior Vice President Health Sciences

 2/26/09  
\_\_\_\_\_  
Kathleen O'Brien, Vice President for University Services



# CENTER FOR MAGNETIC RESONANCE RESEARCH



## Center for Magnetic Resonance Research Renovation, Twin Cities Campus



**UNIVERSITY OF MINNESOTA  
BOARD OF REGENTS**

**Facilities Committee**

**March 12, 2009**

**Agenda Item:** Real Estate Transaction

review       review/action       action       discussion

**Presenters:** Vice President Kathleen O'Brien  
Susan Carlson Weinberg, Director of Real Estate

**Purpose:**

policy       background/context       oversight       strategic positioning

In accordance with Board of Regents Policy: *Reservation and Delegation of Authority*, review the following real estate transaction:

- Agreements for Use of University Facilities and Services with National Sports Center Foundation, Inc. for USA Cup Soccer 2009, July 15 – 26, 2009 (Twin Cities Campus)

**Outline of Key Points/Policy Issues:**

The details of this transaction and its financial impact are described in the transaction information pages immediately following this page.

**Background Information:**

Board of Regents Policy: *Reservation and Delegation of Authority* states that the Board of Regents reserves to itself authority “to approve the purchase or sale of real property having a value greater than \$250,000 or larger than ten (10) acres” and all “leases of real property, easements and other interests in real property if the initial term amount to be paid by or to the University exceeds \$250,000, consistent with Board policies.”

**President's Recommendation for Action:**

The President recommends approval of the following real estate transaction:

- Agreements for Use of University Facilities and Services with National Sports Center Foundation, Inc. for USA Cup Soccer 2009, July 15 – 26, 2009 (Twin Cities Campus)



**AGREEMENTS FOR USE OF UNIVERSITY FACILITIES AND SERVICES  
WITH NATIONAL SPORTS CENTER FOUNDATION, INC.  
FOR USA CUP SOCCER 2009, JULY 15 - 26, 2009  
(TWIN CITIES CAMPUS)**

**1. Recommended Action**

The President recommends that the appropriate administrative officers receive authorization to execute the agreements with National Sports Center Foundation Inc. for its use of University facilities and services for USA Cup Soccer 2009 on July 15 through 26, 2009.

**2. Description of Facilities and Services**

Lodging: Multi-bed space for approximately 1,400 youth and 300 adults located in Territorial Hall, 417 Walnut Street S.E; Centennial Hall, 624 Delaware Street S.E.; and Frontier Hall, 701 Fulton Street, S.E.; July 15 through 26, 2009.

Group Registration Facilities: Frontier Hall Lounge, Centennial Lobby and Territorial Front Desk.

Food Services: Residential dining in Centennial Hall from July 15 (dinner) through July 26, 2009 (lunch).

Parking: Approximately 50 reserved spaces in University parking facilities mutually agreeable to the parties.

**3. Basis for Request**

Many youth and adults attending and participating in the USA Cup Soccer held at the National Sports Center in Blaine have been housed and fed at the University of Minnesota over the past 19 years. For the USA Cup Soccer in 2009, University registration and lodging facilities, dining services, and parking for approximately 1,400 youth and 300 adults have been requested.

**4. Fees**

The National Sports Center Foundation will pay an estimated \$277,760 for lodging and registration facilities, \$261,395 (taxes included) for food service,

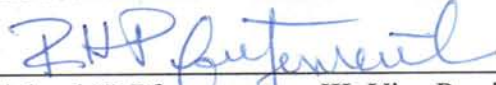
and \$3,240 for parking and technology services, for a total of \$542,395 for its USA Cup Soccer 2009 during the period of July 15 through 26, 2009.

**5. Use of Funds Received by the University**

Housing and Residential Life will receive the payment for the lodging and registration facilities estimated at \$277,760. University Dining Services will receive the payment for the food services, including taxes, estimated at \$261,395. Parking and Transportation Services will receive the payment for reserved parking estimated at \$3,240.

**6. Recommendations:**

The above-described real estate transaction is appropriate:



Richard H. Pfitzenreuter, III, Vice President for Finance and CFO



2-27-08

E. Thomas Sullivan, Senior Vice President for Academic Affairs and Provost



Kathleen O'Brien, Vice President for University Services





<p>This map is intended to be used for planning purposes only and should not be relied upon where a survey is required.</p> <p>Base Data: Real Estate Office U of M Facilities Management</p>	
<p>Facilities to be used by National Sports Foundation</p>	<p><b>Agreements for Use with National Sports Foundation for USA Cup Soccer, July 15 - 26, 2009</b></p>
<p><b>Board of Regents University of Minnesota</b></p>	



**UNIVERSITY OF MINNESOTA  
BOARD OF REGENTS**

**Facilities Committee**

**March 12, 2009**

**Agenda Item:** Consent Report

review       review/action       action       discussion

**Presenters:** Vice President Kathleen O'Brien

**Purpose:**

policy       background/context       oversight       strategic positioning

There are no consent agenda items for the March Facilities Committee meeting.

**Outline of Key Points/Policy Issues:**

**Background Information:**





**UNIVERSITY OF MINNESOTA  
BOARD OF REGENTS**

**Facilities Committee**

**February 12, 2008**

**Agenda Item:** Information Item

review       review/action       action       discussion

**Presenters:** Vice President Kathleen O'Brien

**Purpose:**

policy       background/context       oversight       strategic positioning

To update the Board of Regents on the University's planned expansion of facilities for University of Minnesota Rochester - lease of additional office space and improvement of currently leased space

**Outline of Key Points/Policy Issues:**

The University is currently negotiating a lease for 7,888 square feet of additional office space described as Suite 400, 103 South Broadway, Rochester, for the Rochester Campus. These premises are connected by skyway to the 56,752 square feet of classroom, office, laboratory, student services and bookstore space currently under lease for the University of Minnesota Rochester in the building known as The Shops at University Square at 111 South Broadway, Rochester. Once the lease negotiations are completed, the Regents will be asked to review and act upon this lease transaction, tentatively scheduled for May 2009.

In addition, the planned increases in student population and new academic programs beginning Fall Semester, 2009 for the Rochester Campus require an increase in laboratory spaces. Accordingly, two standard classrooms on the fourth floor of The Shops at University Square leased by the University will be remodeled into a hooded chemistry lab and a multipurpose science lab. Additionally, the project will include the furnishings for six existing classrooms, one on the fourth floor and three on the third floor, including installation of audiovisual and media resources. To complete this project by the beginning of Fall Semester 2009, construction work will need to commence in May 2009. Accordingly, the Regents will be asked to review and act upon a capital budget amendment for this project in May 2009.

**Background Information:**

Information items are intended to provide the Board of Regents with information needed for them to perform their oversight responsibilities.

**EXPANSION OF FACILITIES FOR UNIVERSITY OF MINNESOTA ROCHESTER -  
A LEASE FOR ADDITIONAL OFFICE SPACE  
AND A LEASEHOLD IMPROVEMENT PROJECT  
IN CURRENTLY LEASED SPACE  
(ROCHESTER CAMPUS)**

**Lease for Additional Office Space**

The University is currently negotiating a lease for 7,888 square feet of additional office space described as Suite 400, 103 South Broadway, Rochester, for the Rochester Campus. These premises are connected by skyway to the 56,752 square feet of classroom, office, laboratory, student services and bookstore space currently under lease for the University of Minnesota Rochester in the building known as The Shops at University Square at 111 South Broadway, Rochester.

The office space to be leased at 103 South Broadway is required for additional faculty and staff for the Rochester Campus. The space requires minimal work (carpet cleaning and painting) for occupancy by the University. The University has purchased the office cubicles and furniture used in the premises by the former tenant.

The University expects the lease to commence June 1, 2009 and continue on the same term as the lease for the 56,752 square feet at 111 South Broadway, with an August 31, 2013 expiration date for the initial lease term and three successive three-year renewal options thereafter.

The anticipated source of funding for the lease costs for the 7,888 square feet is Rochester Campus operations and maintenance funding.

Once the lease negotiations are completed, the Regents will be asked to review and act upon this lease transaction, tentatively scheduled for May 2009.

**Leasehold Improvement Project**

The University began leasing space in the building known as The Shops at University Square at 111 South Broadway, Rochester, on September 1, 2007. Currently, the University leases the 3<sup>rd</sup> and 4<sup>th</sup> floors totaling 52,924 square feet of classroom, office and laboratory space, and 3,828 square feet on the first floor for a bookstore and student services.

The planned increases in student population and new academic programs beginning Fall Semester, 2009 for the Rochester Campus require an increase in laboratory spaces. Accordingly, two standard classrooms on the fourth floor of The Shops at University Square leased by the University will be remodeled into a hooded chemistry lab and a multipurpose science lab. Additionally, the project will include the furnishings for six existing classrooms,



one on the fourth floor and three on the third floor, including installation of audiovisual and media resources.

The estimated cost of the project is \$1.5 million. The University has requested that the City of Rochester designate city sales tax revenue for this project.

To complete this project by the beginning of Fall Semester, 2009, construction work will need to commence in May 2009. Accordingly, the Regents will be asked to review and act upon a capital budget amendment for this project in May 2009.