

### Acknowledgements







UW-Green Bay Master Plan Steering Committee

Sue Hammersmith, UW-Green Bay Provost

Tom Maki, UW-Green Bay Vice Chancellor for Business and Finance

Les Raduenz, UW-Green Bay Director of Facilities Management

Dean Rodeheaver, UW-Green Bay Assistant Chancellor for Planning and Budget

Paul Pinkston, UW-Green Bay Planning Analyst for Facilities Management

The consultant team greatly acknowledges the participation and dedication of the many individuals and groups whose efforts helped to shape The University of Wisconsin-Green Bay Master Plan. In particular, the work of the University of Wisconsin-Green Bay Master Plan Steering Committee was critical to the successful

Acknowledgements

completion of the plan.

LANDSCAPE ARCHITECTS



Ken Saiki Design Inc, Madison WI Ken Saiki Rebecca Flood Ben Shirtcliff



Berners-Schober Associates, Green Bay WI Ian Griffiths, R.I.B.A., P.E., LEEDTM Accredited Professional Joeseph Dettlaff, P.E. Michael Leibham, P.E.

TranSmart Technologies, Inc., Madison WI Seth Johnson Manfred Enburg, P.E.

# Contents

Letter from Chancellor Bruce Shepard

Introduction	01	Secondary Planning Issues	30
Executive Summary	02	Campus Entry	
Core Planning Themes	05	Pedestrian Spaces Site Specific Studies	
Campus Mission and Vision	06	<b>Recommendations and Implementation</b>	
<b>Campus Master Plan Summary</b> History Rationale Goals Key Components of the Plan	07	Strategies Primary Planning Issues Circulation and Wayfinding Vehicle Circulation Pedestrian Circulation Major Bicycle Routes	31 32
Process Summary	09	Secondary Bicycle Routes	
An electric of Electric Community	09	Transit Circulation	
Analysis of Existing Campus Master Planning Area Existing Property and Use Circulation and Wayfinding Parking Building Coverage Open Space and Recreation Resources	10	Sustainability Parking Building Opportunities Context and Community Sustainability Secondary Planning Issues	40
The Campus Spatial Diagram	14	Corrin Memorial Arboretum Campus Entry	
Campus Planning Principles	15	Pedestrian Spaces Site Specific Studies	
The Campus Master Plan	16	Housing Quad Campus Quad	
Physical Planning Elements Primary Planning Issues Circulation and Wayfinding Parking Building Opportunities	20 20	Retail Opportunity Additional Campus Resources Shorewood Golf Course Bayshore Downtown Learning Center Non-contiguous Landholdings	47
Sustainability		Conclusion	49
		Appendices	

# Illustrations

Drawings		Photographs
Figure Ground Study	06	The University Union and Student Services
Schematic Plan Concept	06	Campus Entry
Comprehensive Development Plan	07	View from Main Entrance Drive
Existing Landholdings	10	Existing Signage
Existing Vehicular Circulation	10	University Union Entry Feature
Perceived vs. Actual Distance	11	MAC Hall Stairwell Feature
Existing Pedestrian Circulation	11	Lab Sciences Parking Lot
Existing Buildings and Parking	12	Parking Lot Buffer Strips
Existing Conditions	13	Mary Ann Cofrin (MAC) Hall
Campus Spatial Diagram	14	Lenfestey and Walter Hall Corridor
Campus Master Plan	16	Weidner Center for the Performing Arts
Campus Master Plan Enlargement	17	Existing Bus Stop
Master Plan Fundamental Framework	18	Open Systems Approach
Master Plan Vehicular Circulation	21	Sustainable Systems Research
Master Plan Parking	22	Inner Loop Road
Master Plan Housing Expansion	25	Arterial Roadways
Master Plan Academic Building Expansion	25	Gateway Trail
Master Plan Context and Community	27	Rooftop Terrace
City of Green Bay Smart Growth Detail	27	The Minnesota Landscape Arboretum
Future Pedestrian Connections	27	Winter Garden at MAC Hall
Major Bicycle Routes	34	Cofrin Arboretum Gateway
Secondary Bicycle Routes	34	Prototype Retail
Pedestrian Mall	34	
Transit Circulation	35	
Buffer Strip Diagram	36	Tables
Cofrin Arboretum	40	Barking Inventory
Campus Entry	42	Fundamental Framework Parking
Campus Entry Detail	43	Purluamental Framework Faiking
Existing Housing Quad	44	Faiking Expansion
Proposed Housing Quad	44	
Campus Quad	45	
Campus Quad Detail	45	
Retail Relationship to Campus	46	
Retail Opportunity Detail	46	
Non-Contiguous Landholdings	48	

Dear Friend of UW-Green Bay,

Thank you for your interest in the University of Wisconsin-Green Bay's new Master Plan.

This new Master Plan, or comprehensive development plan, is the first revision of the founding plan for the campus. That document, published in November 1968, expressed the fundamental instruction, research, and public service missions of the institution in physical form. Even more ingenious was the way the plan articulated the environment needed to support UW-Green Bay's commitment to connecting learning to life, a unique interdisciplinary approach ever more critical to the continuing viability of a metropolitan area and a region undergoing major changes.

While the original comprehensive development plan provided a general conceptual scheme, it ceased to provide sufficient guidance. Many of the assumptions on which it was based have changed, including fundamental assumptions about how large the campus would become. Since we are facing decisions about critical issues like sites for new facilities and enrollment growth, and since the environment around us has changed significantly in the past 35 years, it is time to reconsider our Master Plan.

The goal of this Master Plan is to provide guidance for the future. That is, the plan provides criteria for decision-making relevant to such physical elements as campus identity, land use, pedestrian and vehicular circulation, aesthetics, sustainability, landscaping, infrastructure/utilities, and so on. The Master Plan does not address such issues as the precise locations of future buildings or additions, space use within buildings, or similar specifics, nor do we want it to.

As important as the plan is, the planning is even more important. I am extremely grateful to the many suggestions faculty, staff, and students provided. And I am even more grateful that members of our local community participated fully in this process. When I first came to this campus, I heard from all of those groups and I have continued to tap their wealth of knowledge. In this plan, then, their dreams and hopes for Green Bay's University of Wisconsin find physical expression.

Foremost is the desire of the campus and community to see Green Bay's University of Wisconsin grow. The plan lays out the necessary components for a campus of 7,500 students. The plan also seeks to resolve longstanding issues of navigability, identifying ways to make it easier to get on and around the campus. And the plan illustrates ways in which the critical pastoral 'green-ness" of the campus can and should be maintained, since that was a value held by virtually all participants in the planning process.

Just one final word as you prepare to read this document. I consider planning to be ongoing — our aspirations can't be captured in episodes of intense activity every few years (or decades). Your comments and suggestions for your University are always welcome.

Bruce Shepard, Chancellor

Bune Shepard

## Introduction

Over the course of the past year, a new Campus Master Plan has been prepared for the University of Wisconsin–Green Bay. The Plan accurately reflects goals and objectives identified by the campus community. The Master Plan presented here serves as a detailed framework designed to guide the institution in future decisions, especially about the carrying capacity of the campus.

This Master Plan Document was developed in conjunction with UW-Green Bay, University of Wisconsin System Administration and the State of Wisconsin Division of State Facilities. The Master Plan was initiated in March 2004 by a process of participation and consensus building with both on and off-campus constituents. Participants in the Master Plan development process included representatives from the University of Wisconsin–Green Bay administrative and support staff, faculty, facilities management, and student body; the City of Green Bay, Town of Scott, and Brown County; representatives of key university support groups; neighbors and adjacent landowners including University Village Housing Inc (UVHI); University of Wisconsin System Administration; and the State of Wisconsin Division of State Facilities.

Dean Rodeheaver, Assistant Chancellor for Planning and Budget at UW-Green Bay provided project coordination and invaluable on-going assistance. Joe Sokal served as Project Manager from the State of Wisconsin, Department of Administration Division of State Facilities (DSF) . Maura Donnelly and Jim Albers provided input from the University of Wisconsin System Administration (UWSA). An ad hoc Campus Master Planning Committee also participated in guiding the development process and review of the Master Plan. Planning Committee members are:

Tom Maki – UW-Green Bay, Vice Chancellor for Business and Finance

Dean Rodeheaver – UW-Green Bay, Assistant Chancellor for Planning and Budget

Sue Hammersmith – UW-Green Bay, Provost

- Les Raduenz UW-Green Bay, Director of Facilities Management
- Paul Pinkston UW-Green Bay, Planning Analyst for Facilities Management

Chancellor Bruce Shepard and the administrative staff of UW-Green Bay deserve special recognition for their support and encouragement of the master planning process. For all those not specifically mentioned who participated in the input sessions, campus presentations, and development of this Master Plan, your time, thoughtfulness, and feedback are greatly appreciated and valued.

(Images Top to Bottom:)

**The University Union and Student Services** A view from the rooftop of Cofrin Memorial Library.

**Campus Entry** Weidner Center for Performing Arts and Studio Arts frame the Shorewood Golf Course.

**View from Main Entrance Drive** Open space greets the visitor at the entrance to campus.







## **Executive Summary**

The 2005 University of Wisconsin–Green Bay Campus Master Plan was developed over the course of one year and is the direct result of extensive conversations with diverse constituent groups. This Executive Summary outlines the main elements of the campus Master Plan. Additional details about primary and secondary planning and design, site specific studies, and problem-solving strategies follow.

This master plan uses the concept of responsible carrying capacity, or the ways in which a campus can address change in growth and physical development, to address key components of the plan. For this reason, the master planning consultants feel it is crucial to preserve the process and benchmarks established in this Master Plan because of the potential for change in the physical needs of the campus. Many ideas were generated during the master planning process that may be valid for future planning. Therefore, this executive summary serves as a synopsis of Master Plan findings for quick reference. It should not be used as a standalone document for planning purposes.

Primary Planning Issues and Recommendations:

Circulation and Wayfinding – While there is a strong desire to maintain the park-like quality of the campus, roadway configurations, lack of visual connection to the campus core, and multiple entry points make it difficult to navigate the campus.

**Recommendations:** 

- Create the Inner Loop Road
- Design and implement a welcoming entry
- De-emphasize secondary entrance points
- Create safe, logical intersections
- Establish circulation pattern: drive, park, walk
- Create lantern-like features at all campus core
- buildings, visible from the Inner Loop Road

Parking – While there is an abundance of parking and a desire to keep parking lots out of the campus core, existing parking lots are frequently filled to capacity. It is difficult for campus visitors to find parking close to their destination.

Recommendations:

- · Introduce buffer strips to all parking lots
- Incorporate additional strategies to address concerns about the size of parking lots and to control heat island effects and storm-water runoff.
- Consider coupling physical and operational measures to regulate parking use and distribution
- Increase parking fees to fund improvements
- Use existing lots to expand parking, if necesary

Building Opportunities – While the campus has excess physical capacity in terms of land and much of the infrastructure, increased enrollment, program expansion or updated building space may require expansion of academic and residential facilities. Recommendations:

- Maintain a concourse connection to future academic buildings within the academic core
  - Create pedestrian-friendly, interactive concourse spaces
  - Include courtyards, glass hallways, and other daylighting opportunities in the design and construction of new buildings
- Include lantern-like entry features within the architecture of all new buildings
- Provide for potential expansion of residential and academic building space

Context/Community – While the campus seeks to enhance its tradition of connecting to the community, there is also a strong desire to maintain its identity and boundary. Recommendations:

- Promote use of city transit options
- Build multimodal transportation routes to and from campus and within campus boundary
  - Coordinate with the City of Green Bay, Brown County, and the Wisconsin Department of Transportation

• Continue to invite the public to enjoy campus amenities

- Encourage use of the arboretum as a unique educational and recreational space
- Promote Weidner Center for Performing Arts and Kress Events Center
- Continue tradition of "Connecting Learning to Life"
- Create partnerships with the City of Green Bay and private developers to encourage adjacent development that supports campus needs and responds to campus customers

Sustainability – While sustainable campus design and growth is valuable it must continually be evaluated against UW-Green Bay's specific needs and constraints.

#### **Recommendations:**

- Establish a Sustainable Development Policy with defined action plans and clear targets for all departments
- Create campus-wide sustainability committee
- Create a comprehensive "Best Management
- Practices" (BMP) guideline for the campus
- Orient buildings for solar access
- Enhance and promote multimodal transportation options in and around campus
- Incorporate recommendations from separate stormwater management study

## Secondary Planning Issues and Recommendations:

Arboretum – While the Cofrin Memorial Arboretum is an important element of the campus identity and provides a valuable research and recreational function, it forms a physical and perceived barrier between campus and community.

**Recommendations:** 

• Continue to preserve and maintain existing arboretum land holdings

• Continue to make the arboretum accessible to non-campus community users

• Encourage the use of the Cofrin Memorial Arboretum Land and Resource Management Plan, drafted by the Cofrin Center for Biodiversity, in management of the arboretum

Campus Entry – While UW-Green Bay seeks to open its doors to community users, prospective students, and other visitors, the campus lacks an obvious point of arrival and key destination points are visually and/or physically inaccessible.

Recommendations:

- Create a gateway into the academic core and a destination point for visitors
- Provide a pedestrian connection to key destination points such as Student Services, University Union, and Cofrin Library
- Preserve space for potential terrace feature with food service at grade in the campus quad
- Design and implement the quad as a "traditional" campus gathering space
- Link the Weidner Center and Studio Arts to the entry plaza

Pedestrian Spaces – While the UW–Green Bay campus wishes to promote safe, inviting spaces for students, faculty, staff, prospective students, and other visitors, it lacks some of the basic physical planning elements familiar to campuses worldwide.

Recommendations:

- Create a campus entry that allows visual access to many major buildings within the academic core and provide visitor parking at the entry feature
- Create a campus quad that becomes a social, active space at the heart of campus
- Continue to promote the use of courtyards and windowed hallways adjacent to concourse connections

Site Specific Studies – While the Master Plan seeks to focus on broad issues of campus growth and development, site specific studies offer more detailed conceptual developments of smaller projects that could improve the experience of the UW–Green Bay user. Recommendations:

- Develop a small retail area on or immediately adjacent to the northeast corner of campus near undergraduate student housing
- Develop housing quads as pedestrian oriented spaces rather than automobile-dominated drop-off zones
  - Convert existing housing drop-off zones into pedestrian quads when improvements become necessary
- Provide pedestrian walks wide enough to accommodate emergency and event access

## **Core Planning Themes**

The master planning process illuminated several components of the University of Wisconsin-Green Bay's campus identity that have shaped and will continue to shape the institution's physical development. These "core themes" may, in some ways, be similar to those of other college and university campuses. But they find unique expression at UW-Green Bay and are important in setting the context for the master planning elements described in this document. In a sense, they are the focus of dialogue about what UW-Green Bay is and will be.

## The Environmental Ethic

The University of Wisconsin-Green Bay originally engaged in a novel approach to campus planning that married academic programs, residential life, and the physical campus environment. The program areas focused on environmental research and teaching and the campus was conceived as a holistic university community, with students spending much of their time on campus. The university was heralded for its environmental ethic.

Today, college campuses around the country are grappling with their role in a broader sustainability movement, ranging from purchasing and contracts to embracing social justice and equity to stewardship of the environment. At UW-Green Bay, while many academic programs maintain an environmental emphasis, it no longer provides the integration across programs and operations that it once did. Sustainable design guidelines have been and are being used on new construction and the campus arboretum certainly employs sustainable strategies. For most on campus, though, the environmental ethic finds clearest expression in a commitment to maintaining a green, pastoral campus. Most immediately, this commitment competes with the social and physical realties of a dependence on automobiles at UW-Green Bay. More students are bringing cars to campus than ever before and the campus continues to provide, at a nominal fee, parking spaces as desired. At the time of this Master Plan, convenient parking and the ability of students to have cars on campus is a positive influence on recruiting. Alternative transit options are limited, as discussed herein. As a result, new projects typically include paving over more of the institution's highly valued green spaces. This issue is addressed at length in this document.

## The Campus Concourse

All constituencies interviewed in this planning process agreed: the concourse system is a major campus asset and must be developed. As a fundamental physical realization of the original master plan, the concourse system links academic buildings to the Cofrin Library and University Union. One of its objectives was to create spaces to foster interaction between students and faculty on a daily basis. It is convenient for users, particularly because of the cold northern climate in which the campus is located, and forms an internal service corridor, thereby eliminating the need for external service access that other campuses struggle to find.

Members of the campus community acknowledge that this asset has its down sides. New designs for buildings, shared spaces, and pathways need to keep these in mind. The concourse restricts sight of the outside environment, reducing orientation and wayfinding cues, and hides campus activity even on a beautiful day. Physically and psychologically, it separates unconnected destinations from each other. It defines a central campus exterior space between Cofrin Library, University Union, Student Services, and Mary Ann Cofrin Hall that is difficult to reach, particularly for visitors, and is an underutilized space in the campus core.

Finally, the additional cost of the interconnect should be included in new project requests.

### Size

UW-Green Bay's 1968 Comprehensive Development Plan laid out the land mass, buildings, and infrastructure for an eventual population of 20,000 students. That enrollment has never been realized, a casualty of the merger of two systems of higher education in the state and budget constraints. The ultimate size of the institution, a longstanding issue at UW-Green Bay, remains on the minds of most of its constituents and is an unresolved issue at the time of publication of this Master Plan.

The campus clearly possesses the land mass and the infrastructure to support growth. Admissions have closed earlier than almost all the other UW campuses for several years. Northeast Wisconsin region is one of the fastest growing regions in the state. The 2005 Master Plan accommodates straight-line projections of growth from 5,500 students to 7,500 based on existing practices. Leaders of the Green Bay community have indicated their strong desire for the university to grow, however the ultimate enrollment, student mix, and timeline for growth have not been resolved by the campus.

# **Campus Mission and Vision**

The University of Wisconsin-Green Bay shares the mission of the University of Wisconsin System:

To develop human resources, to discover and disseminate knowledge, to extend knowledge and its application beyond the boundaries of its campuses, and to serve and stimulate society by developing in students heightened intellectual, cultural, and humane sensitivities; scientific, professional, and technological expertise; and a sense of value and purpose. Inherent in this mission are methods of instruction, research, extended education, and public service designed to educate people and improve the human condition. Basic to every purpose of the System is the search for truth. The University of Wisconsin-Green Bay is committed to a distinctive academic plan characterized by a strong interdisciplinary, problem-focused liberal education that integrates disciplinary and professional programs appropriate to a comprehensive institution. The University prepares students to evaluate critically and to address the complex issues of their professions and of the human experience.

Environmental research and applied ecological sciences were the focus of the institution's educational philosophy at its inception. UW-Green Bay continues to market a tradition of being an environmentally-focused campus with a strong commitment to ecological research. The Cofrin Arboretum stands as perhaps the greatest physical example of this concept. Mary Ann Cofrin (MAC) Hall also serves as an example of how UW-Green Bay's environmentally focused tradition is being translated into the design of its newest campus facilities.

The prevailing culture at UW-Green Bay reflects a belief in connecting learning to life. Students routinely seek opportunities beyond their academic requirementsthroughtutoring, internships, laboratory research and other programs. A campus concourse system fosters this life-learning philosophy, encouraging social interaction by physically connecting the classroom core through a series of passageways.



#### Schematic Plan Concept

(Above) Much like the Campus Spatial Diagram on page 12, this diagram from the 1968 Plan explores the larger campus relationships and connections.

#### Figure Ground Study

(Left) The academic core of UW-Green Bay as a figure-ground drawing was used in the master planning process to compare the campus spatially to campuses of similar land area, student population, and spatial orientation.



UW-Green Bay Campus Master Plan

## **Campus Master Plan Summary**

## History

"It is seldom that there arises an opportunity to plan a new institution of higher learning literally from the ground up. It is doubly challenging to interpret a new concept in academic planning and organization."

The opening paragraph of the 1968 Comprehensive Development Plan for the University of Wisconsin– Green Bay references the context within which the original master planning team developed the physical, political, environmental, and academic foundation of the University.

An expression of the environmental and social crises of the 1960s, the 1968 Comprehensive Development Plan combined physical planning with formulation of the academic structure and anticipated an ultimate population of 20,000 students. The concept of separate but interconnected theme colleges and the institutional foundation of the campus core was physically applied to a parcel of land northeast of downtown Green Bay. The academic vision was based on exploring personal values, creating opportunities for students to interact with each other as well as the environment, fostering ecological stewardship and promoting environmental research. The Comprehensive Development Plan called for conceptual and physical elements such as theme colleges, learning streets, and people pockets, all focused on bringing students, faculty, and staff in proximity for informal, chance encounters. These planned spaces occur throughout interior pedestrian corridors in the concourse system, but rarely otherwise on campus. Ground-breaking for the first buildings--Laboratory Sciences, Environmental Sciences, Instructional Services and the Cofrin Library--took place in early 1968.

The initial physical development patterns of the campus reflect to a high degree the integrity of the 1968 Comprehensive Development Plan, particularly in the academic core. Few of the planned developments or residence communities outside the core campus exist today since enrollment has only reached one-quarter of the 20,000 students envisioned. The 1968 Comprehensive Development Plan was never fully realized in both student population and physical build-out.



#### Comprehensive Development Plan

The original Master Plan for UW–Green Bay as depicted in 1968 by Daverman Associates, Inc, of Grand Rapids, Michigan, is based on physical growth of the campus to accommodate 20,000 students and includes unique elements such as a Planetarium, Climatron, and Conference Center.

## Rationale

The rationale for creating a new Master Plan involves renewing the vision of a vital, dynamic campus that connects learning to life and the college to the community. Thirty-seven years after its founding, the University of Wisconsin-Green Bay wisely revisits the principles established by the original Comprehensive Development Plan to revitalize and update strategies for the use of space, allocation of resources, and enhancing the institution's image. The planning horizon for this work is ten years.

The 2005 Master Plan addresses many issues created by the 1968 Comprehensive Development Plan. The fundamental character of UW-Green Bay as an *exurban* campus, defined loosely as low-density land use beyond the urban fringe, necessarily distances students and staff from many amenities of an urban setting. The pastoral setting and lack of aggressive development pressure on adjacent land implies remoteness from the City of Green Bay. The university's sports, art, and green-space complexes draw the communities together, but a sense of separateness persists.

Furthermore, one major consequence of this distance between city and campus is the enormous reliance on car commuting. A high percentage of students, faculty, and staff depend daily on their automobiles, a situation difficult to supplant with public transportation given the population density of the campus and surrounding areas.

The recent master planning process identified primary issues faced by the campus community and the UW System. In addition to these issues, planners were challenged to plan for a campus that anticipates an almost 50 percent increase in enrollment. The nature of this growth remains a critical issue to be resolved. The institution's constituents have indicated a desire to take the next step in development and move toward a comprehensive array of educational, recreational, social, entertainment, retail, and service opportunities on or near campus. However, it is unlikely land in the City of Green Bay and Town of Scott immediately adjacent to the campus will be developed to support the campus sufficiently. This would include housing for students, faculty and staff; retail and service businesses; and social and entertainment opportunities that campus constituents continually seek. Without these kinds of developments, the campus will remain a car-dependent institution which has implications well beyond the planning horizon for this document.

Goals

- Establish a plan for future development for use by city officials, students, faculty, and staff
- Identify potential for campus physical growth within the context of indeterminate population growth.
- Identify campus improvements in a "growth" scenario
- Enhance pedestrian and vehicular circulation and wayfinding
- Foster continued interaction between the UW-Green Bay campus and the Green Bay community
- Reach consensus on issues important to the future development of the campus
- Initiate a participatory, inclusive process to bring together diverse stakeholders

## Key Components of the Plan

- Improved circulation system for vehicles and pedestrians
- Efficient development of the campus core
- Efficient expansion of on-campus housing
- Preservation of quality campus open spaces
- Addition of traditional elements and spaces to support the collegiate experience
- Use of existing infrastructure resources whenever, wherever possible
- Increased parking capacity on campus
- Increased connections between campus and the surrounding community
- Promotion of sustainability in buildings and utilities
- Development of land use planning to accommodate future multimodal transportation expansion

## **Process Summary**

The process used to develop the Master Plan required a dialogue between the Plan consultants and a broad spectrum of people on campus and in the larger community. Through direct interviews, surveys, an interactive website, and informational meetings, those involved helped shape the direction of the Plan. The consultants also held working sessions with the ad hoc Master Plan Steering Committee, and conducted planning and presentation workshops with the campus and non-campus communities. The collective vision that emerged through consensus building is integral to forming and following this Master Plan.

Any university faces changes and challenges in planning issues. In particular, at UW-Green Bay the exact nature of enrollment growth (student mix, number of students, instructional delivery, and related questions) has not been determined. As such, any changes in planning parameters might benefit from examining a midpoint in the planning process rather than starting over. The three conceptual alternatives presented early in the process and included in Appendix A might be a good starting point for examining enrollment assumptions and their impact on the Master Plan once there is a fully vetted enrollment plan to supplement this 2005 Master Plan. The master planning process can not be stressed enough, for it is the process and continued contact with the ideas contained therein that will ensure the Master Plan's long-term value.

## Master Planning Timeline

#### July 2003

 Request for Proposals, UW- Green Bay Campus Master Plan

#### August 2003

Consultants selected

#### February 2004

- Master planning process initiated
- Initial campus visit by consultants
- Data collection
- Synthesis and analysis of base map information

#### March 2004

- Two-day on-campus listening sessions
  - Informal interviews with campus and non-campus staff
- Open fora for community input
- On-campus data collection and site walks

### April 2004

- Synthesis of input from listening sessions
- Meeting with Chancellor Shepard
- Formulation of conceptual alternative development schemes

### May 2004

- Master Plan Steering Committee meeting
- Conceptual alternatives campus-wide presentation
- · On-campus data collection and site walks

#### Summer 2004

- Consultants continue to refine conceptual preliminary Master Plan
- Master planning feedback survey conducted
  - Intended to elicit more comments from the conceptual alternatives presentation
- D2L interactive website set up for posting comments and discussion of the Master Plan

#### August 2004

• Master Plan Steering Committee meeting to "reawaken" the master planning process

### October 2004

- Master Plan Steering Committee meeting
- Campus wide Preliminary Conceptual Master Plan
  Presentation

## November 2004

- Master Plan Steering Committee meeting
- Campus wide Preliminary Master Plan and Site Specific Studies Presentation

## Winter 2004/2005

- Revisions to Preliminary Master Plan
- Preliminary Master Plan Report
- Implementation Plan

## Spring 2005

Revisions to Master Plan Report

### March 2006

 Submission to University of Wisconsin Green Bay, UW System Administration, Division of State Facilities, City of Green Bay

# Analysis of Existing Campus

## Master Planning Area

The University of Wisconsin-Green Bay is situated at the base of the Door County Peninsula in Wisconsin. Glacial topography dominates the landscape and water resources define, both physically and intrinsically, the campus and surrounding area. The typical midwestern climate dictates warm summers and cold, snowy winters with multiple freeze-thaw cycles. Soils consist generally of glacial till of a variable character that requires soil to be evaluated on a site-by-site basis for construction feasibility and infiltration capacity.

The 680-acre UW-Green Bay campus is located northeast of the City of Green Bay. It is bounded by Nicolet Drive and the Bay of Green Bay on the West, Highway 54/57 on the South, Bay Settlement Road on the East, and Shorewood Drive/C.T.H. I on the North. The planning area also includes landholdings by non-campus entities like the City of Green Bay, University Village Housing Incorporated (UVHI), and the Ecumenical Center. A brief description of the non-campus land owners is included as Appendix C: Non-Campus Entities.

## Existing Property and Use

## Circulation and Wayfinding

The main entrance to the UW–Green Bay campus is off of Nicolet Drive on the Western edge of the campus. Secondary entrances are located both to the South (Nicolet Entrance) and North (Scottwood Entrance) of the main entrance. Visitors to campus often arrive at the campus via one of the secondary entrances, which routes them around the perimeter of campus rather than to the information and parking booth located at Main Entrance Drive. South Circle Drive serves as a primary feeder to the campus. Construction of the interchange at Highway 54/57 and Bay Settlement Road has the potential to increase the use of Bay Settlement Entrance and Sports Center Drive on the eastern edge of campus.



**Existing Landholdings** Parcels of land within the planning area for UW–Green Bay are owned by outside entities such as the Ecumenical Center, UVHI, and the City of Green Bay. The extent and location of the Cofrin Memorial Arboretum is also depicted.



**Existing Vehicular Circulation** Campus visitors often express a feeling of confusion and frustration when trying to navigate the existing roadway networks on the campus. Signage to campus often funnels people into campus too soon and they never reach Main Entrance Drive or the welcome booth for directions.

Existing signage at vehicular entry points to the campus and pedestrian signage is the product of a 1998 recommendation study by Poblocki and Sons from West Allis, WI. Signage on the UW–Green Bay campus is at capacity in terms of location and effectiveness and the campus cannot solve wayfinding issues with the addition of more signs.

One of the critical issues is the lack of visual contact with the campus academic core, both from major entry points to campus and from major circulation routes within campus. Roadway configurations, which often route visitors from the visitor information booth at the main entrance to the perimeter of campus to reach destinations such as the University Union and sports/fitness complex, compound this planning issue.

Pedestrian circulation, particularly at night, is affected by the horizontal forms that dominate the architectural repitoire of campus buildings. Dimly lit entrances and facades create an environment that contributes to the perception of the academic core as spread-out and distant from key areas such as the student housing village and surrounding parking lots. As the diagram below depicts, the walking distance from the Cofrin Library to most major campus destinations, including parking lots, is within a five-minute walk.



**Perceived vs. Actual Distance** The diagram depicting the walking distance across campus demonstrates that the actual distance is not as great as perceived by users. Exterior pedestrian circulation from one end of campus to the other, however, is inhibited by the concourse system, which re-routes direct pedestrian circulation around the heart of campus via rooftop terraces or other pathways.



**Existing Pedestrian Circulation** Pedestrian circulation networks are somewhat well established and there are a number of paths that link the campus directly to the Cofrin Memorial Arboretum. The concourse system serves as an underground pedestrian system linking all of the existing academic core buildings.

#### Parking

The University of Wisconsin–Green Bay has 11 major parking lots on campus, two of which are designated event center lots (Weidner Center and Sports Center) which are utilized by the campus and community during non-event periods. Altogether, the lots contain a total of 4,326 individual parking stalls.

A parking lot study conducted by John Baumgart, former parking manager on the UW–Green Bay campus, surveyed capacity in each of the 11 parking lots (totaling 4,326 stalls) at one-hour increments for ten hours each day over the course of one week. The findings demonstrate that aside from the event-center lots and not including the Shorewood Golf Course, the campus lots are 91 percent full at peak times throughout the week.

## Buildings

The University of Wisconsin-Green Bay campus contains 14 academic buildings. The University also owns 9 housing units, the Residential Life Center building, and the Housing Service Center building in the existing housing village. UVHI owns the other 16 residential buildings. Among the campus buildings are community assets like the Cofrin Library and the Weidner Center for the Performing Arts. The campus is about to begin construction on a major addition and renovation to the Kress Events Center, which will include a 4,000 seat facility.

All existing campus academic buildings, as well as the Cofrin Library and University Union, are linked through the underground concourse system. Established at the inception of campus and continued with each academic building addition, the concourse system served as one means by which to foster engagement of students, faculty, and staff through informal encounters. The physical implications of an underground tunnel system are far-reaching but the campus community, by and large, maintains a strong desire to continue the concourse tradition.

Parking Lot	Number of Stalls	Stalls Occupied at Peak	Percent Occupied at Peak
Lab Sciences	631	505	80%
Studio Arts	595	536	90%
Wood Hall	552	497	90%
Sports Center	447	443	99%
Apartment Housing	238	238	100%
Main Housing	525	525	100%
East Housing	229	204	89%
Visitor Parking	75	57	75%
Weidner Center	792	294	37%
(Non-Event)			
Valet Parking-	123	74	60%
(Non-Event)			

**Parking Inventory** Using data from a parking lot survey conducted on campus in fall of 2004, the table depicts campus parking lots that are at or near capacity during daytime operating hours. Parking lot names, locations, and number of stalls are depicted in illustration, "Existing Buildings and Parking", this page.



**Existing Buildings and Parking** The build-out pattern closely resembles the core development for the campus based on the Comprehensive Development Plan from 1968.

#### **Open Space and Recreation Resources**

The University of Wisconsin–Green Bay contains the 260-acre Cofrin Memorial Arboretum, an exceptional educational space and community recreation opportunity. This greenbelt around the campus perimeter is of unique landscape character and features restoration plots and examples of native plantings. It creates a desired perimeter to the UW-Green Bay campus and gives definition to the extent and location of campus. However, these defining characteristics also create the perception of isolation and remoteness in relationship to developing land at the campus boundary.

Numerous sports fields, a softball diamond, and a soccer facility are located in the eastern portion of campus. These campus amenities serve an important recreation function both to the campus and the non-campus community.



**Existing Conditions** Existing resources on campus include parking, building locations, roadway and pedestrian circulation networks, and points of interest or important natural resources.

## The Campus Spatial Diagram

**Campus Spatial Diagram** The goal of this graphic depiction of the campus as a series of elements is to elicit feedback on the relationships of one element to another and their location within the greater context of the UW–Green Bay campus.



UW-Green Bay Campus Master Plan

# **Campus Planning Principles**

Formulation of the 2005 Campus Master Plan was guided, in large part, by input from the campus community and a Campus Master Plan Steering Committee. The Plan represents the input and ideas contributed at each stage in the development of the physical drawings. It is also based on assumption of straight-line growth following the current operational standards of the campus and the University of Wisconsin System. University academic and operational policies can be coupled with the Plan as a cohesive planning effort. In many cases, the Plan anticipates solutions that can be applied to issues and regulations in the early stages of development. These may come to fruition during the useful life of this document.

The general principles guiding this master planning process are:

#### Enrollment Growth is Possible

The University of Wisconsin-Green Bay campus has not realized the 20,000 student enrollment projected by the 1968 Comprehensive Development Plan. Today, approximately 5,500 students are enrolled on campus.

The issue of growth has been shaped by the merger of two Wisconsin systems of higher education and the subsequent need for the University of Wisconsin System to reduce and manage its growth due to availability of resources. UW-Green Bay continues to exceed its enrollment target year after year.

The Master Plan examines the potential for the university to grow based on historic and continued demand for the quality of education and environment it offers. The physical plan described in this scenario is based on the following straight-line projections and assumptions, outlined in more detail on page (3), Appendix A: The Master Planning Process

- The majority of the enrollment growth will occur among traditional and/or on-campus students
- Enrollment growth will occur incrementally
- UW-Green Bay will continue to allocate parking assignment and revenue as it currently does
- UW-Green Bay will strive to provide on-campus housing options for 40 percent of students

The above assumptions are subject to change as the campus continues to develop and evolve its enrollment plan. The impact of a fully-developed enrollment plan on the master plan should be evaluated.

#### Campus has Room to Expand

The University of Wisconsin-Green Bay campus has sufficient physical capacity for growth of the student population. The institution holds land available for expansion of buildings, both academic and residential, as well as expanded circulation networks and recreation spaces. The Master Plan describes new buildings and expanded parking facilities based on the current operational standards of the campus.

During the master planning process, participants were presented with schematic concepts that depicted options for campus density. Increased density of buildings minimizes infrastructure costs, however it changes the character of the campus landscape. The Campus Spatial Diagram, page 14, provided a diagrammatic framework for discussion of conceptual relationships between different elements of the campus landscape.

#### Sustainable Growth is Essential

Issues of environmental as well as operational sustainability were at the forefront of the planning effort, from siting conceptual building footprints and maximizing solar orientation to recommending an increase in multimodal transportation options. These issues should continue to play an active role in any discussion or design for projects on the UW–Green Bay campus.

Greater Integration with the City will Reduce Isolation UW–Green Bay is surrounded almost entirely by lowdensity residential developments interspersed with commercial or industrial clusters. Its location outside of the City of Green Bay inherently isolates the campus from the urban fabric of the city.

Depending on the nature of growth, it would be prudent for the university to consider expanding its facilities in downtown locations or identifying other ways to achieve greater integration with the larger community. A survey conducted by UW-Green Bay identified the "core service area", or area from which most commuter students originate and compared these locations to Green Bay Metro full bus service routes. This study is included in the Master Plan as Appendix D: Demographic Survey.

# The Campus Master Plan

EXISTING BUILDINGS

**Campus Master Plan** The Plan provides a physical representation of potential campus growth over the next ten years based on goals and objectives identified through an interactive process with the campus community.







## The Campus Master Plan - Fundamental Framework

Fundamental Framework The Campus Master Plan contains recommendations about circulation, wayfinding and navigation, campus spaces, and the visitor experience that are important regardless of the potential for growth. These elements, such as the

While the Campus Master Plan is based on growth of the campus to 7,500 students, not all elements of the plan are contingent on such growth. Thus, implementation of the plan includes two components: those changes that would be made to address master planning issues regardless of size (illustration, page 18); those changes that are necessary to support a larger institution (illustration, page 16).

It is important to recognize that the conditions and opportunities, which have affected timing of the following list of priorities, may change.

#### Implementation to meet Existing Needs

Year 1-6 priorities:

- Complete southeast segment of the Inner Loop Road between the new Kress Events Center parking lot and the Laboratory Sciences parking lot
- Start planning a roundabout at the Nicolet Entrance with the City of Green Bay and Brown County
- Develop a roundabout at the intersection of Circle Drive and Sports Center Drive after the completion of the Kress Events Center expansion
- Re-route Circle Drive to the outside perimeter of the Studio Arts parking lot
- Work with the city transit authority to improve bus routes to campus
- Start planning retail development at the northeast corner of the campus
- Start planning non-traditional housing on the southwest corner of campus

LOT EXISTING TREATMENT +/- STALLS TOTAL Reconfigured, footprint Weidner Center + 0 Stalls 915 Stalls 792 Stalls decreased Weidner Center Removed, stalls combine 0 Stalls Valet Lot 123 Stalls with Weidner Ctr. Lot 123 Stalls Reconfigured, footprint Wood Hall 552 Stalls + 59 Stalls 611 Stalls nearly the same Reconfigured, footprint + 31 Stalls 662 Stalls Lab Sciences 631 Stalls nearly the same Reconfigured Studio Arts 595 Stalls 642 Stalls +47 Stalls Expanded to east and Cofrin Hall 447 Stalls + 80 Stalls 527 Stalls south **Kress** Center Parking Lot Added Does Not Exist + 485 Stalls 485 Stalls Shorewood Golf 119 Stalls To remain as is + 0 Stalls 119 Stalls Course Visitor Parking +187 Stalls 187 Stalls Does Not Exist Parking Lot Added **Campus Entry** +0 Stalls 75 Stalls **Visitor Parking** 75 Stalls To remain as is Parking Lot Removed 0 Stalls **Existing Housing** 525 Stalls 525 Stalls Expanded to north and East Housing Lot 229 Stalls +772 Stalls 1001 Stalls south Parking Lot Removed 0 Stalls Apartment 238 Stalls 238 Stalls

Overall 775 Stalls Added to Campus. 4,326 Stalls Exist for a Grand Total of 5,101 Stalls. 485 to 1,012 Stalls are Sports Center Expansion

**Fundamental Framework Parking** On-campus parking count in the Fundamental Framework plan is increased only in already developing areas of campus such as the student housing village.

Year 7-12 priorities:

- Construct the roundabout at the Nicolet Entrance
- Complete the southwest segment of the Inner Loop Road between the welcome booth and the Laboratory Sciences parking lot
- Alter signage at the Nicolet Entrance
- Develop the retail facilities at the northeast corner of campus housing

Year 13-18 priorities:

- Complete the remaining segments of the Inner Loop
   Road
- Plan and construct the campus quad/entry. Remove the concourse link between Student Services and Cofrin Library. Create a pedestrian mall with limited vehicle access between the Weidner Center and Theatre Hall

Implementation to meet Campus Growth

Near Term:

- Obtain approval for campus expansion from the Board of Regents
- Based on approval and academic need, construct projects necessary to support new enrollment and staffing; start with expansion of existing buildings where possible and add new space in locations as identified
- Begin parking lot expansion at locations adjacent to new construction using guidelines included in the master plan
- Relocate housing parking lot to periphery of the housing complex
- Identify housing demand and begin construction at new location on existing parking lot

# **Physical Planning Elements**

## Primary Planning Issues

## Circulation and Wayfinding

An overarching issue was the concept of wayfinding, or the ability to navigate and find a destination easily and logically. It is inevitable that users of a new, unfamiliar space will encounter navigational challenges. However, participants in the initial planning sessions stated their concern regarding the overwhelming number of visitors and prospective students who currently are unable to find a particular building or location within the campus. Non-campus residents described the campus as a maze of sorts, which could be penetrated for specific events at large venues like the Weidner Center or Kress Events Center, but which was otherwise un-navigable.

Directing visitors from the surrounding network of roadways to the campus boundary is the first challenge in the sequence of arrival to campus. By removing or de-emphasizing signage at secondary access points and enhancing the emphasis of Main Entrance Drive as the primary entrance to campus, visitors perceive a singular "front door" into the campus. The focus of this approach is on first time and infrequent visitors; familiar campus users are encouraged to continue to use the secondary entrance points to and from campus.

The Master Plan uses the concept of the Inner Loop Road to address vehicular circulation and wayfinding within the campus boundaries. This circulation system, used primarily by visitors, emergency, and service vehicles, is intended to be a low-speed access road for travel to specific destinations. It allows users to maintain visual contact with the campus core and academic buildings, while navigating to their end location. Arterial roads intersect the Inner Loop Road at t-intersections, with a choice of right or left turns. Pedestrian circulation uses the existing infrastructure of pedestrian walkways, maintains and continues pedestrian concourse connections to future buildings, and creates a finer mesh of sidewalk networks within the housing village. A Main Street-like pedestrian corridor between the housing village and campus core is also outlined in the Master Plan. Pedestrian/vehicular conflicts can be minimized by pavement markings, raised cross walks, and signage.

Subtle wayfinding devices can be used to guide pedestrians through the campus. Varying landscape character near particular buildings or in certain areas can create definition and differentiation of space. Lantern-likearchitecturalfeaturesguidepedestriansto specific buildings, particularly to building entrance/ exit points and can be added to existing buildings or incorporated into new building projects. Some of these lantern-like beacons may be seen from the Inner Loop Road, similarly guiding the vehicular visitor to a destination.



**Existing Signage** An example of a wayfinding tool on the UW – Green Bay campus.



**University Union Entry Feature** An example of a lantern-like beacon on University Union is effective because of its location at a major entry point to the building. Transparent materials give it a beacon-like character at night and the size and form dominates over the other architectural elements of the building.



**MAC Hall Stairwell Feature** A smaller but effective lanternlike beacon on the east façade of MAC Hall is achieved by the design of a stairwell on the right side of the entryway to the Winter Garden.

## Physical Planning Elements



through continued visual contact.

## Parking

As an ex-urban campus, UW–Green Bay currently faces a dependence on automobile transportation to and from campus as well as within the campus boundaries. This fact results in a disproportionate number of parking lots compared with an urban campus that has a network of surrounding streets to further accommodate parking and ramp structures which decrease the parking lot footprint. Students and faculty at urban campuses also access private, offcampus housing options within walking and bicycling distances to the campus. Parking location, expansion, and management arose as one of the major issues in the master planning input sessions.

An Auxiliary Operations 2003-04 Annual Parking Rate document reports that the University of Wisconsin– Green Bay has the lowest parking rate system-wide at \$68 per year for students, faculty and staff. There is no designation or regulation of lots or stalls and the parking located on campus is on a first-come-firstserved basis, with the exception of the visitor parking lots, which are permit-only or metered parking.

To accomodate potential growth, the straight-line projection for parking indicates the campus needs to add 1,646 non-event stalls for a total of 4,938 stalls. It also needs to accommodate an additional 1,500 stalls for the Kress Events Center project and an additional 680 residential parking stalls to provide a parking space for each resident student in the expanded housing village scenario.

To accommodate potential growth, the master plan indicates expanding at-grade parking lots. The option for multi-level parking was discussed early in the planning process. However, the benefits of reduced footprint and increased parking capacity do not, at this time, outweigh the budgetary challenges and visual statement that these structures would create. Therefore, parking lots are re-configured or expanded from existing at-grade lots whenever and wherever possible to minimize the pavement footprint. Parking expansion is allocated to areas where future building could occur.

The *who* and *when* questions of growth have a large impact on parking. For example, if the University decides to grow by attracting non-traditional students who attend courses in the evenings and on the weekends, the existing parking capacity may be adequate to accommodate some of that academic expansion.

Automobile dependence will also influence parking expansion. If multimodal or public transportation options become a viable alternative to driving to and from campus in the near future, UW-Green Bay may not need to expand parking to the extent depicted in the Master Plan. This shift in focus would produce other issues, such as bicycle parking management and storage facilities for these alternatives, which would have to be addressed on a design and operational level by the campus.



**Master Plan Parking** The Master Plan recommends expanding parking by utilizing existing parking lots whenever and wherever possible to add stalls to campus. Two new lots are added adjacent to the existing housing village and adjacent to the Kress Events Center to accommodate expansion of those facilities.

### **Physical Planning Elements**

Parking lot runoff creates unique stormwater management issues which are at the forefront of the current regulatory environment and will continue to evolve in the near future. The Master Plan recommends the installation of planted buffer strips in all parking lots across campus. Serving multiple purposes, the buffer strips act not only as a method of stormwater infiltration, but they reduce the urban heat island effect, increase the visual appeal of lots, and keep UW-Green Bay astride with other environmentally sensitive institutions across the country that are dealing with similar issues. Buffer strips could be added to existing parking lots when they are scheduled to be re-paved and included as an integral component to any new parking lot.

Due to the physical location of UW-Green Bay and its unique geography, climate, and environment, the capacity at which the buffer strips can infiltrate stormwater must be determined on an individual project basis when more specific site conditions, such as soil infiltration capacity and bedrock location, are determined.

As a result of adding buffer strips to parking lots, UW-Green Bay will face varied operational issues such as seasonal maintenance, snow storage in winter, and budgetary constraints. The aforementioned regulatory, site-specific, and operational issues will be equally challenging and rewarding as UW-Green Bay continues its mission as an environmentally focused campus.



Lab Sciences Parking Lot Seen from the Facilities and Maintenance building looking north with Lab Sciences and the Cofrin Library in the background, the existing lot could be improved by adding buffer strips and shade tree plantings as well as pedestrian walkways.



**Parking Lot Buffer Strips** These can be an aesthetic enhancement to any parking lot. Buffer strips can be constructed with curb and gutter, which often contain stone rip rap strips where curb cuts are located to slow the velocity of water into the area. Others are constructed with an at-grade curb strip, as depicted above. Photo courtesy of the Minnesota Erosion Control Association, www.mnerosion.org/meca\_lid\_mnpls.htm

LOT	EXISTING	TREATMENT	+/- STALLS	TOTAL 1084 Stalls
Weidner Center	792 Stalls	Reconfigured, footprint decreased	+ 292 Stalls	
Weidner Center Valet Lot	123 Stalls	Removed, stalls combined with Weidner Ctr. Lot	- 123 Stalls	0 Stalls
Wood Hall	552 Stalls	Reconfigured, expanded to south	+ 611 Stalls	1163 Stalls
Lab Sciences	631 Stalls	Expanded to west	+ 227 Stalls	858 Stalls
Studio Arts	595 Stalls	Reconfigured	+47 Stalls	642 Stalls
Cofrin Hall	447 Stalls	Expanded to east and south	+ 80 Stalls	527 Stalls
Kress Events Center	Does Not Exist	Parking Lot Added	+ 485 Stalls	485 Stalls
Shorewood Golf Course	119 Stalls	To remain as is	+ 0 Stalls	119 Stalls
Visitor Parking Campus Entry	Does Not Exist	Parking Lot Added	+187 Stalls	187 Stalls
Visitor Parking	75 Stalls	To remain as is	+0 Stalls	75 Stalls
Existing Housing	525 Stalls	Parking Lot Removed	- 525 Stalls	0 Stalls
East Housing Lot	229 Stalls	Expanded to north and south	+772 Stalls	1001 Stalls
Apartment	238 Stalls	Parking Lot Removed	- 238 Stalls	0 Stalls

Overall 1,815 Stalls Added to Campus. 4,326 Stalls Exist for a Grand Total of 6,141 Stalls. 485 to 1,012 Stalls are Sports Center Expansion **Parking Expansion** Based on a parking survey conducted on campus in the fall of 2004 and the straight-line assumptions of growth and operational policies, the campus must add a significant amount of additional parking on campus to accommodate currently projected growth.

## **Building Opportunities**

With the construction of Mary Ann Cofrin Hall in 2001, the University of Wisconsin–Green Bay added a state-of-the-art teaching and lecture facility to the repertoire of academic core buildings dating from the 1970s and early 1980s. With its large panels of glass, light-colored façade material, and linear form, the building stands in contrast to the dark, dimly lit forms that define the majority of the campus' architecture. In general, however, there is no specific architectural style or genre for campus buildings.

Two buildings are in various stages of planning for expansion, notably the Kress Events Center and the University Union. The design development for the Kress Events Center is occurring simultaneously with the Master Plan update.

The existing University Union building is in the conceptual stages of planning for an addition. While the current scope of the project will not necessitate additional utility capacity, future expansion may require the University to formulate a strategy to connect a spur from an existing tunnel or lay new tunnel to reach the University Union. It is desirable for any major utility project to occur to the west of the University Union through the proposed campus quad. This would remove the existing concourse connection between Cofrin Library and Student Services and open up the quad not only for pedestrians, but for a utility spur as well.

The number of classrooms, laboratories, and office spaces will be impacted by future decisions on the specifics of campus growth. The master plan explores academic building expansion locations that support the concept of connectivity and maintain a physical connection to the concourse system. Based on the Campus Spatial Diagram, all buildings within the academic core are defined by their connection to the concourse system. The campus must continue to weigh its commitment to the concourse system against rising maintenance and construction costs. Proposed buildings are sited in an east-west orientation to take advantage of solar access. These buildings occur both as separate entities and as expansions to existing buildings; Student Services and Instructional Services invite vertical expansion while MAC Hall invites horizontal expansion. All academic buildings should be located along utility corridors and remain inside the Inner Loop Road, or within the campus core area as defined and depicted by the Campus Spatial Diagram.

UW-Green Bay currently has 25 residential units varying in nature from typical dorms to apartment suite-style living. Currently 37 percent of students live on campus and there is a waiting list for this valued resource. The University hopes to increase on-campus housing options to accommodate 40 percent of its enrolled population.

Based on the straight-line projection for housing, the campus may add 1,965 beds. All housing expansion should occur in the campus mid-zone as defined by the Campus Spatial Diagram. Housing expansion depicted in the master plan is based on the most recent housing which provide approximately 313 GSF/bed. Housing is proposed in two locations to accommodate both traditional and non-traditional student residents and other, emerging types of campus housing.

Undergraduate housing expansion is located adjacent to the existing residential housing village to increase the density and feeling of a housing community. Concentrating undergraduate housing also recognizes the personnel and management limits of campus housing resources. Construction of housing in this area will require the cooperation and continued communication between UW-Green Bay and University Village Housing Incorporated (UVHI).

The master plan explores the option of a non-traditional student housing pod in the southwest section of campus. If the campus decides to increase its graduate or non-traditional student population, it may require a different type of housing that accommodates married students or students with families who require less support and fewer student services.



**Mary Ann Cofrin (MAC) Hall** The newest building to be added to the campus core serves as a primary teaching and lecture facility and connects to the concourse system through windowed hallways.



Lenfestey and Walter Hall Corridor Students use the spaces between to navigate campus. Josephine Lenfestey Hall is in the background.

## Physical Planning Elements



## Context and Community

There is a symbiotic relationship between the University of Wisconsin–Green Bay and the surrounding community. The campus relies on Green Bay to provide goods and services, while the campus provides the community with a cultural resource, learning opportunities, and the economic benefit of students, staff, and faculty.

The City of Green Bay recently prepared a Smart Growth Plan to satisfy the requirements of the Wisconsin Smart Growth 2022 Regulation and to develop long-term strategies for land use, development, and growth. Components that affect master planning for the UW–Green Bay campus are:

- An emphasis on expanding and enhancing on-street and greenway bicycle connections.
- Reaching annexations and boundary agreements whenever possible to help the community grow wisely and efficiently adjacent to the UW-Green Bay campus.
- Adoption of an ordinance that will prevent soil erosion and protect the appearance of natural geologic features such as the Niagara Escarpment.

The land around the campus continues to develop with adjacent residential neighborhoods. The Red Smith Neighborhood to the north is one example. The April, 2003, Green Bay Smart Growth Plan depicts land use surrounding the campus which includes a business/light industrial park, planned neighborhood developments, and small pockets of retail. The City's plan describes the amenities that the campus has to offer the community, like the Cofrin Arboretum and the Weidner Center, but states that "unfortunately the campus is disconnected from the rest of the community by its location, auto orientation, and inward focused layout." (*City of Green Bay Comprehensive Plan Update—Smart Growth 2022, p. 4-25*).



The Master Plan addresses the issues of community connections through increased multimodal transportation systems and linkages whether implemented in the short term or set aside for future development.

The Green Bay Metro bus system is currently limited in its effectiveness to decrease automobile dependence due to the low frequency and extent of service. Increasing service options to the campus (i.e. satellite parking, shuttle busses for events, increased campus network) needs further discussion and study as well as joint planning efforts between the City of Green Bay, UW-Green Bay, and Green Bay Metro.

The institution may provide incentive for a small retailtype development in a strategic location adjacent to or on the UW-Green Bay campus. This Plan seeks to energize areas on the periphery of campus immediately adjacent to existing and proposed neighborhoods.

By clarifying the circulation patterns on campus, UW–Green Bay becomes a more inviting place for community users.



(Left to Right)

#### Weidner Center for the Performing Arts

This is one venue through which UW–Green Bay reaches out to community members and invites them to visit the campus.

#### **Existing Bus Stop**

These campus stops leave room for improvement. Sheltered stops with route schedules would enhance the visibility of multimodal transportation options on campus.
### **Physical Planning Elements**



**Master Plan Context and Community** The City of Green Bay Smart Growth 2022 plan depicts land use in the City of Green Bay.



**City of Green Bay Smart Growth Detail** Close-up of the area immediately adjacent to the University of Wisconsin – Green Bay campus. The white background denotes land under the Town of Scott jurisdiction.



**Future Pedestrian Connections** Land should be set aside along arterial roadways to the campus Inner Loop Road from surrounding access roads. This easement would accommodate future development of bicycle and pedestrian connections between the campus and surrounding community.

### Sustainability

The term sustainability is synonymous with terms like "high performance buildings," "holistic design," "green buildings," and "whole building design". There is, however, no true industry standard of sustainability and sustainability does not refer to just buildings. Sustainability is generally defined as meeting the needs of today without compromising the ability of future generations to meet their needs; it generally encompasses three areas of design and construction: environmental responsibility, energy conservation, and improved human health and performance.

Academic institutions can play a profound role in advancing the acceptance of sustainable thoughts and actions. UW-Green Bay, like other colleges and universities, has tremendous potential to increase peoples' understanding of sustainability, through traditional educational offerings but also through its actions, policies, and plans for the built environment. The campus already practices many approaches to sustainability, some in an exemplary manner. Use of renewable energy at MAC Hall, and restoration and conservation work at the arboretum represent a strong commitment to environmental awareness.

The University of Wisconsin–Green Bay campus, UW System Administration and Department of State Facilities has long promoted design and construction practices that exceed the minimum standards required by building and energy codes in the state.

Plans to construct new buildings on campus offer many opportunities to apply ecological design principles. The design of MAC Hall serves as an example of how a building form generated in response to solar orientation and daylighting creates successful outdoor spaces that promote sound campus planning concepts. Moreover, in the face of growing environmental hazards, increasingly scarce and costly resources, and a community bias toward protecting the earth and its inhabitants, it is shortsighted to do otherwise. Recognition of efforts like the "Leadership in Energy and Environmental Design" (LEED) program developed through the United States Green Building Council (USGBC) contributes to a national trend that demands buildings with efficient energy and mechanical systems that also satisfy the need for adaptability and accessibility.

While some of the issues, opportunities, and constraints are unique to UW-Green Bay because of the specific climate, geography, and social culture of the Green Bay region, it can rely on some of the overarching principles developed by organization and agencies as a starting point for discussions and action. Resources such as University Leaders for a Sustainable Future (ULS) offer opportunities specifically for campuses and universities to continue learning about sustainability in the unique context that exists at institutions of higher learning.

Other university campuses can also serve as models. One such example is Penn State, which has instituted campus-wide sustainability practices and policies called "Blue, White, and Green". The major components of this plan focus on recycling, re-use, and research on sustainable systems. They connect the campus to community through shared operations and recycling resources.

The Master Plan explores sustainability through each individual element of the campus plan and the integration of individual parts into a cohesive whole. Simplification of the wayfinding and navigation system has the potential to reduce unnecessary drive time through campus and aid in clear public transportation routes within the campus boundaries. Building opportunities are conceptually located near existing utility tunnels and are often placed as additions to existing buildings to reduce the materials and resources necessary for construction. The density of the inner core of campus is increased, containing the footprint of the academic buildings to a core location. Parking is expanded by reconfiguring lots and buffer strips are presented as one method of mitigating the urban heat island, potentially reducing stormwater run-off, and increasing the "green" appearance of campus.

The concept of sustainability can extend beyond the physical implications of this Master Plan and can include a wholistic approach to classroom planning and management, student academic programming, areas of research and education, and continuation of the mission statement of the university, which is based on the connection of academics to real-life.



**Open Systems Approach** Rather than piping stormwater underground, above-ground or "open" stormwater systems allow for increased infiltration and evaporation of water. These types of visually prominent areas can become the focus of research efforts or a single opportunity to educate about one facet of environmental stewardship and sustainable design. Photo courtesy of Friends of the Rappahannock, for.communitypoint.org/lid\_ gallery.html

### Sustainability



**Sustainable Systems Research** Located on the Carnegie Mellon University campus in Washington D.C., this solar building, complete with a green roof, provides a dynamic research opportunity and chance for students and faculty to apply principles of sustainable design to a real-world project. Photo courtesy of Green Roofs for Healthy Cities, www.greenroofs.org

### Secondary Planning Issues and Goals

Cofrin Memorial Arboretum

- Goal One: Incorporate the Cofrin Memorial Arboretum Management Plan into the Master Plan document.
- Goal Two: Preserve and enhance the Cofrin Memorial Arboretum as an educational and recreational jewel.
- Goal Three: Continue to market the Cofrin Memorial Arboretum's positive impact on the lives of UW-Green Bay campus users and greater Green Bay community members.

**Campus Entry** 

- Goal One: Create a "gateway" for visitors to the heart of campus.
- Goal Two: Link Weidner Center and the Studio Arts building through a shared plaza to accentuate the actual connection and interplay between the programs.
- Goal Three: Explore additional visitor parking with direct access to resources such as the Cofrin Library.

- **Pedestrian Spaces** 
  - Goal One: Increase additional opportunities for interior and exterior pedestrian circulation on campus.
  - Goal Two: Create campus "traditional" spaces such as quadrangles for both the academic and housing areas. These become the memorable places of a campus where former students return fondly after leaving college.
  - Goal Three: Foster the creation of spaces, like the Winter Garden at MAC Hall, that become pockets of activity on campus.
  - Goal Four: Maintain concourse connections whenever, wherever possible within the overarching Master Plan Principles.
- Site Specific Studies
  - Goal One: Explore opportunities to enhance underutilized spaces on campus.
  - Goal Two: Introduce the possibility of a small, private retail center to energize campus life and provide a close-to-home option for students, faculty, and staff to meet their basic shopping needs.

# **Recommendations and Implementation Strategies**

The University of Wisconsin–Green Bay Master Plan recommendations are divided into four sections. Primary Planning Issues are addressed in a series of recommendations and strategies for implementation. Secondary Design Components cover recommendations for other important features and elements of the Master Plan. Site Specific Studies provide a conceptual exploration of site-scale design areas, often of some critical function, as defined by campus workshop presentations and contain recommendations related to character, scale, and location of these areas. Additional Campus Resources, focusing on the Shorewood Golf Course, Bayshore, and other noncontiguous UW-Green Bay landholdings, comprise the final section of recommendations.

Master Plan recommendations are made to guide the decision-making process surrounding future campus growth and building expansion. The recommendations take into account: the Master Plan Principles; continued feedback from the campus and community; solutions to anticipated issues and problems; regulatory measures from the Wisconsin State Legislature, such as Smart Growth 2022 planning, stormwater mitigation planning, and Green Building/Leadership in Energy and Environmental Development (LEED) guidelines. The ideas presented are limited by what was identifiable during the development of this Master Plan. The leadership of UW-Green Bay and campus planners must continue the process by weighing recommendations of the Plan against the evolving issues and changing public needs. This is achieved, in part, by continuing the dialogue among campus, non-campus, and administrative stakeholders initiated by this planning process.

The master planning process relied on the input of diverse participants, but remains predicated on straight-line growth assumptions. The resulting illustrations paint one possible picture of the campus based on this model and as such depicts what a campus could be, not necessarily what it will be. The power of this Master Plan lies in its ability to physically demonstrate the impact of various decisions on the physical layout and landscape of this place.

## **Primary Planning Issues**

### Circulation And Wayfinding

Connectivity is an important element in the development of the campus Master Plan. The movement of foot and vehicular traffic on campus and between campus and community must flow logically and easily. The planning process brought to light a strong preference for alternative transportation connections to help meet this standard. These include dedicated bicycle lanes, increased city transit services, and more sidewalks. The Plan explores a hierarchy of pedestrian spaces and circulation systems that can be used to minimize conflicts and maximize multimodal transportation options.

### Vehicular Circulation

**Recommendations:** 

- Emphasize main entrance on campus maps and with signage
  - Remove UW-Green Bay signs from the Nicolet Drive Entrance and enhance signage at the main entrance
  - Encourage users familiar with campus to use the secondary ingress/egress points on a daily basis and route event traffic in and out of these secondary points
- Establish the Inner Loop Road as the primary wayfinding and circulation route for unfamiliar campus users and access for service and emergency vehicles
  - Design for and post 25 mph speed limit
  - Inner Loop Road is 24'-0" wide, accommodates two lanes of traffic
  - Roadway has curb and gutter
  - Street terrace on either side of road is 8'-0"
  - Terrace planted with zone-hardy street trees spaced approximately 40'-0" on center
  - Locate 8'-0" sidewalk on the inner and/or outer side of the roadway depending on optimal

pedestrian connections to campus buildings

- Locate a separate 8'-0" bicycle lane adjacent to the sidewalk
- Seek to maintain a minimum 12'-0" landscape buffer between the outer sidewalk and any parking lot
- Locate traffic tables wherever major pedestrian/ vehicular intersections occur (approximately every 350'-400') along the Inner Loop Road
- Discourage cross campus traffic on the Inner Loop Road through regulatory and operational measures
- Maintain Circle Drive as a primary campus user circulation system
  - Design for and post 35 mph speed limit
  - Continue the rural, pastoral character
  - Do not implement curb and gutter
- Ensure all roadway intersections occur at perpendiculars for safety and wayfinding
- Locate a small, urban roundabout at the intersection of Circle Drive and Sports Center Drive

Implementation:

- Construct the Inner Loop Road
  - Realign existing segments adjacent to parking areas when lots comes on-line for repair
  - Construct segments as a portion of building projects in proximity to a specific segment
  - Realign intersections for safety and wayfinding purposes
- Construct roundabout at intersection of Circle Drive
  and Sports Center Drive
- Coordinate roundabout construction at Nicolet Entrance with City of Green Bay and Wisconsin Department of Transportation



**Inner Loop Road** The character of this roadway is pedestrian in nature, and has a more urban feel. It promotes slower speeds by using traffic tables, cross walks, and other traffic calming measures.



Arterial Roadway The character of roadways at the perimeter of campus is best depicted by a beautiful stone wall and native plantings along Sports Center Drive. These roadways are transit-oriented with higher travel speeds and naturalized plantings. Land along arterial roadways can be set aside for future bicycle lanes.

### Pedestrian Circulation

### Recommendations:

- Construct sidewalks along the Inner Loop Road
  - Sidewalks are 8'-0" wide with 8'-0" wide terrace separating them from the street
  - Sidewalks are paved
  - Use colored paving materials where appropriate, particularly at conflict points between pedestrian, bicycle, and vehicle traffic
  - Provide traffic table crosswalks at major pedestrian/vehicular intersections
  - Seek to maintain a minimum of 12'-0" setback from the edge of the sidewalk to the parking lot to create a buffer from vehicular traffic
  - Enhance setbacks with plantings and/or land forms
  - Use pole top fixtures with metal halide or high pressure sodium bulbs and cut-off type luminaries for pathway lighting to meet energy conservation and comply with International Dark-Sky Association Standards
  - Provide seating (benches, seat walls) along major pedestrian routes
- Maintain or construct 8'-0" (minimum) sidewalks along major pathways into the academic core from the campus mid-zone
- Create a pedestrian mall through the center of the existing housing village that connects to potential retail development in the northeast corner

### Implementation:

- Construct terrace and sidewalks incrementally as part of the Inner Loop Road project
- Replace or add new fixtures to comply with International Dark-Sky Association Standards
- Create program to finance street tree planting

### Major Bicycle Routes

Recommendations:

- Install primary bicycle routes along major ingress/ egress points
  - Mark paths on roadway with 5'-0" minimum width
  - Create easement along major access roads to campus for future development of separated bicycle path if use warrants
- Create the primary inner-campus bicycle route via the Inner Loop Road
  - Make pathways parallel to pedestrian sidewalks 8'-0" wide
  - Separate pathways from pedestrian sidewalks using bollards or landscaping buffers
  - Locate pathways that accommodate two-way bicycle traffic along the outer edge of the Inner Loop Road
  - Use pavement materials and lighting consistent with the design guidelines for pedestrian walk-ways along the Inner Loop Road.
  - Provide bicycle parking and racks at major entry points to campus as well as outside of major access points to buildings

### Implementation:

- Coordinate multimodal transportation system along roadways with City of Green Bay, Brown County, and Wisconsin Department of Transportation
- Construct bicycle lanes incrementally as part of the Inner Loop Road project
- Replace or add new fixtures along pathways to comply with International Dark-Sky Association Standards
- Research outside funding sources (i.e. private grants) to implement part or all of multimodal program

### Secondary Bicycle Routes

**Recommendations:** 

- Create easements to secure land for future expansion of bicycle system
  - Locate along minor access roads to the Inner Loop Road from the campus perimeter
  - Locate along access points into the academic core from the Inner Loop Road
  - Accommodate two-way bicycle traffic
  - Need not parallel pedestrian sidewalks or be paved with the same materials
  - Pavement material can be compacted limestone screening, compacted gravel, or other porous pavement types and/or eventually be paved with a concrete-type material if use demands
  - Provide adequate lighting with the same standards as the pedestrian walkways

Implementation:

- Reserve land along major ingress/egress roads to campus
- Construct bicycle lanes incrementally as demand warrants
- Research outside funding sources (i.e. private grants) to implement part or all of multimodal program



**Major Bicycle Routes** This plan and section view depicts the widths and locations of bike lanes in relationship to elements such as pedestrian walkways and the Inner Loop Road.

**Secondary Bicycle Routes** Plan and section illustration depicts the placement of easements along arterial roadways to reserve land for development of future bicycle routes between the campus and surrounding community.

**Pedestrian Mall** Plan and section depicts the pedestrian mall which links the undergraduate student housing village to the academic core. Bus shelter should be located on the housing side of the Inner Loop Road as depicted.

### Transit Circulation

Recommendations:

- Locate transit stops along the Inner Loop Road
  - Transit is located equidistant from academic core and student housing
  - Transit loop is added through the housing area
- Encourage use of public transportation by students, faculty, and staff
- Create event-oriented transit schedule for Weidner performances and Kress Events Center events

### Implementation:

- Create incentive or reward for use of public transportation
- Coordinate transportation needs with City of Green Bay

## Landscape Character as a Wayfinding Device

The University of Wisconsin–Green Bay is fortunate to have such a valuable resource as the Cofrin Arboretum within its boundaries. This landscape on the perimeter of campus, with sweeping openings of native grasses, tall stands of oak and birch, and sentinel hawthorns dotting the horizon, gives the area a unique, natural character.

### **Recommendations:**

- Continue existing landscape forms of Cofrin Arboretum through the Cofrin Arboretum gateway
  - Further incorporate into broad, naturalized swaths within the campus core

- Define the campus core as a landscape zone with a different character than the mid-zone or Cofrin Arboretum
  - Use materials more tolerant of urban conditions
  - · Use patterns/materials with a formal character
  - Use mixture of non-native, non-invasive and native plant material
  - Create more manicured look
  - Plant mixed-species lawns

### Implementation:

- Adapt planning and maintenance strategies for plantings and designs suitable to different zones
  - Rework strategies to compensate for changes in staffing, funding, and resources



**Gateway Trail** Naturalized plantings and gravel paths define the periphery of campus and sweep in to the center of campus.



**Rooftop Terrace** The rooftop terrace of the Student Services building is in contrast to the naturalized plantings found throughout campus. These core areas, designed and landscaped in a more urban fashion, help visitors discern spaces and transitions within campus, and are an important aid in wayfinding and navigation.



**Transit Circulation** The proposed transit route enters and exits campus via Main Entrance Drive. It follows the Inner Loop Road in a clockwise fashion, allowing bus shelters to be located on the inside of the roadway. It provides access to major campus destinations and student housing.

### Parking

**Recommendations:** 

- Examine parking lot expansion adjacent to existing lots
- Add buffer strips to existing parking lots and design into all new parking lots
  - Build minimum of 10'-0" wide and running the length of the parking bay
  - Locate at a minimum of every-other parking bay, or as recommended by parking engineers for specific projects
  - Plant with zone hardy trees, shrubs, perennials, and/or seed blends
  - Grade parking lots to drain toward buffer strips IF subsurface soils allow them to act as a filtration and drainage mechanism
  - Design and plan areas within the buffer strips appropriately to serve as snow storage basins
  - Coordinate specific design with a landscape architect or environmental engineer
- Create a new parking lot for the Kress Events Center
  project
- Create additional parking at the main entrance
- Create additional parking at the edge of the student housing village
- Relocate existing Housing Lot to improve circulation patterns and create a site for housing expansion
- Expand parking near Lab Sciences lot if growth occurs in that area of campus
- Expand parking near Wood Hall lot only if academic core or non-traditional housing develop in that portion of campus
- Reconfigure Weidner Center Lot for more efficient allocation of parking
- Remove separate Weidner Center Valet Lot and use a section of the newly configured lot for valet parking
- Reconfigure and expand Studio Arts parking lot

• Preserve visitor parking adjacent to MAC Hall/University Union

Implementation:

- Realign and expand parking when existing lots need resurfacing/repair
- Include parking lot expansion in budget for specific building projects
- Include parking lot expansion at main entrance as part of entry design project
- Add buffer strips to all existing parking lots when the schedule for re-surfacing allows modifications
- Design buffer strips into proposed and future parking lot expansion



The Minnesota Landscape Arboretum This example demonstrates that pedestrian walkways can accommodate foot traffic at designated locations that transect the buffer strips. Photo courtesy of the Minnesota Erosion Control Association, www. mnerosion.org/meca\_lid\_mnpls.htm



**Buffer Strip Diagram** Buffer strips can be incorporated into all proposed parking lots as well as existing parking lots when re-surfaced. These landscape features provide environmental benefits and create more humane looking parking lots.

### **Building Opportunities**

### Recommendations:

- Site academic buildings within the campus core
- Connect buildings to concourse whenever possible
  - Create views from concourse to exterior environment
  - Incorporate courtyards and gathering spaces
  - Incorporate lantern-like features on exterior of building for pedestrian wayfinding
- Site housing outside of the campus core in the campus mid-zone
- Preserve land for potential non-traditional/married student housing pod or village
- Conduct study to examine the useful life of existing on-campus housing stock
- Construct undergraduate housing expansion within the existing student housing village
- Create the opportunity for private development or public/private joint venture of a service/retail amenity located in proximity to existing housing village



- Gather and assess data on existing housing stock
- Coordinate construction of new housing structures with University Village Housing Inc., (UVHI)
- Construct new academic buildings as separate projects
  - Gather site-specific data on building sites
  - Evaluate sites against recommendations in Master Plan
  - Include budget line items for building support facilities such as utilities, roadway, and parking improvements

### Context And Community:

### **Recommendations:**

- Work with City of Green Bay and Brown County to develop City and County-wide bicycle and pedestrian greenway connections to and through the UW-Green Bay campus
- Support City of Green Bay and Brown County in preservation of valuable natural and geologic resources such as the Niagra Escarpment and Bayshore Floodplain
- Coordinate public transportation with City of Green Bay Transportation Planners
  - Explore creative ways to increase service and ridership between the UW-Green Bay campus and major area destinations i.e. subsidization of buss pass cost
  - Explore "Park and Ride" option
  - Explore shuttle service for scheduled campus events at Kress Events Center and Weidner Center for the Performing Arts
  - Explore shuttle service for conferences or other large events
- Continue to market the value of community assets such as the Weidner Center, Cofrin Library, and Kress Events Center

### Implementation:

 Continue an open dialogue with the City of Green Bay and Brown County regarding issues of community connections, shared resources, and networking opportunities



Winter Garden at MAC Hall This courtyard serves as a model of how to visually connect interior and exterior spaces. The Garden seems to extend right out of the building through the use of elements like a pergola structure and large windows.

### Sustainability

### **Recommendations:**

- Develop a Sustainable Development Policy with defined action plans and clear targets for all departments
- Create campus-wide sustainability committee on the model used by campuses like the University of British Columbia, UW-Stevens Point or Penn State
- Create a comprehensive Best Management Practices (BMP) guideline, to serve as a supplement to this 2005 Master Plan to address the following general points (from USGBC LEED Rating System) and any others specific to UW-Green Bay:
  - Land/Sustainable Sites
    - · Erosion and sediment control
    - Site selection
    - · Building and site synergies
    - Increased development density, where appropriate
    - Brownfield redevelopment or adaptive reuse
    - Pedestrian and bicycle friendly environment
    - Alternative transportation options
    - Optimized land use reduced site and footprint disturbance footprint
    - Parking solutions
    - Open space and habitat protection and restoration
    - Storm water management and on-site treatment
    - Minimized heat island effect, especially from parking lots
    - Reduced irrigation practices
    - Landscaping with native and non-invasive species
    - Light pollution control through site fixture selection
  - Energy and Atmosphere
  - Building orientation, form and massing opportunities

- Optimized energy performance
- Fundamental building system commissioning
- Whole building commissioning
- CFC Reduction in HVAC and R Equipment
- Alternative renewable energy sources
- Minimized ozone-depleting chemicals
- Daylight harvesting
- Measurement and verification of building systems
- Promotion of life cycle cost analysis comparisons
- Energy Star equipment use
- Maximized energy conservation and promotion of Green Power
- Energy use modeling based on climatic data and occupancy characteristics
- Energy use sub metering and monitoring
- Natural/cross ventilation strategies, where applicable
- Reduced heat island effect from roofs
- Water
  - Use of native plantings
  - Rainwater harvest rainwater for irrigation purposes
  - Open running water as a physical and aesthetic amenity for outer areas of drainage system as an alternative to piping underground
  - Reduced water usage through low-flow fixtures and metered faucets
  - Innovative waste-water technologies
- · Material resources and waste disposal
  - Campus-wide accessible storage/collection areas for recyclables
  - Adaptive reuse of campus buildings
  - Construction waste management with a minimum 75 percent landfill diversion rate
  - Material selection for durability

- · Materials specification with end use in mind
- Materials reduction
- Resource reuse consider salvaged materials
- High recycled content material use
- Local and regional materials use-avoid excessive transportation
- Emphasize re-use instead of building new
- Indoor Environmental Quality
  - Minimum Indoor Air Quality indicator standards, over and above OSHA Standards
  - Thermal, acoustic, and visual comfort
  - Enforced tobacco smoke policies, perhaps above and beyond current state requirements
  - Indoor chemical and pollutants source control
  - Print and copy rooms isolation with exhaust
  - Carbon dioxide monitoring
  - Increased staff control of systems
  - Ventilation effectiveness
  - Pre-, post- and construction Indoor Air Quality (IAQ) management plans
  - Low Volatile Organic Compounds (VOC) emitting materials
  - Permanent entryway systems, grills, grates walk-off mats
  - Building flush-out period prior to occupancy

Implementation:

- Establish a campus sustainability committee whose charge might include:
- Developing Sustainable Development Policy with defined action plans and clear targets for all departments on the UW–Green Bay campus
- Creating a comprehensive Best Management Practices (BMP) guideline specific to the UW-Green Bay campus

## Secondary Planning Issues

### Cofrin Memorial Arboretum

The John P. and Austin Cofrin Memorial Arboretum, a 260-acre greenbelt that encompasses the campus and serves as the boundary between campus and community for most of the perimeter, was formally designated in 1975 and has continued to grow.

Some of the land within the Cofrin Arboretum was purchased with funds from the Land and Water Conservation program (LAWCON). Other land was gifted by The Nature Conservancy or other restricted donations. Numerous utility easements, both public and private, are also located within the Cofrin Arboretum. These restrictions are discussed on page 45 of this Master Plan document.

The Cofrin Memorial Arboretum Land and Resource Management Plan, drafted by the Cofrin Center for Biodiversity, is in the initial stages of planning and development. Recommendations:

- Maintain arboretum in its current configuration and extent within the campus
- Continue to market the arboretum as a unique asset to campus
- Preserve the Cofrin Arboretum Gateway
- Arboretum should remain under the stewardship of Cofrin Center for Biodiversity
- Manage arboretum using the 2005 Cofrin Memorial Arboretum Land and Resources Management Plan, or most current version

Implementation:

 Create, adopt, and implement Cofrin Memorial Arboretum Land and Resource Management Plan



**Cofrin Arboretum Gateway** A map and entry feature provides visitors with a view of the entire campus and defines major buildings as well as the extent of the Cofrin Memorial Arboretum.

### **Pedestrian Spaces**

Pedestrian circulation on the University of Wisconsin–Green Bay campus is unique. Its defining characteristic is the presence of the concourse system, which connects the core academic buildings and the Cofrin Library to each other through a series of underground passageways and above-ground corridors. The concourse is exposed in places to reveal doorways, windowed hallways, and courtyards. In other places, the lack of visual cues to the outside makes it difficult to navigate for the unfamiliar user.

Use of an underground concourse system to connect buildings is historically rooted in the fundamental principles of this campus, but presents a unique challenge to planning pedestrian spaces and connectivity to the outside environment.

The campus continues its commitment, both financially and physically, to the concourse system. The most recent building project on campus, Mary Ann Cofrin Hall (MAC Hall), successfully connects the University Union with the Cofrin Library through a lower-level corridor. MAC Hall contains a model courtyard space that combines elements of visual, audio, and sensory interest in a multi-seasonal climate. When the weather does not invite students outdoors to interact with the natural surroundings, they often congregate along the window space overlooking the courtyard, drawn to the light and the diversion from walls and doors. Components of a courtyard, terrace, or garden should be integral to any UW-Green Bay building connected by the concourse in the future. **Recommendations:** 

- Include courtyards in the design of any new building on campus
  - Make courtyards visually accessible from the interior of the surrounding building corridors
  - Include spaces for passive, solitary activities (i.e. reading, studying) as well as social, interactive activities
  - Create solar access to the courtyard, a primary component of successful outdoor spaces in northern climates
  - Incorporate calming elements into all courtyards; a water feature, apparent use of colors and textures, etc
  - Provide safe lighting at night that blends with the surrounding building
  - Make courtyard accessible directly from the building and from ground level between buildings or wings of a building
  - Provide seating areas, both formal and informal, movable and fixed
- Incorporate courtyards into existing buildings and concourse connections as renovations, repairs, and additions occur

Implementation:

- Include landscape design of courtyard spaces as an integral part of any new building project
- Include landscape design of courtyard spaces as an integral part of any renovation, repair, or addition to existing academic buildings
- Solicit private funding sources for courtyards, if necessary

### Campus Entry

The approach to any campus creates a lasting first impression, a feeling of welcome or confusion that is critical for potential students who often make a decision about an institution within minutes of their arrival. A positive sense of arrival is missing on the University of Wisconsin-Green Bay campus.

Recommendations that emerged from the master planning process suggest UW-Green Bay has an opportunity to develop an entry sequence and arrival point that welcomes users--whether visitors to campus, prospective students, or returning alumni. The Plan explores the site-scale design of an entry concept that includes a traditional campus quad and a student gathering area.

**Recommendations:** 

- Sustain the Main Entry Drive as primary visitor access point to campus
- Reconfigure the entry sequence to campus core from Inner Loop Road
- Provide parking for visitors adjacent to the new entry to serve facilities such as the Cofrin Library, Student Services, and University Union
- Remove section of concourse that connects Cofrin Library to Student Services; re-establish via loggia nearby
- Connect campus entry to the campus quad
- Create a parking plaza between Weidner Center and Studio Arts
  - Form a strong, direct link between the Studio and Performing Arts Buildings and the Weidner Center
  - Include accessible parking stalls on the Student Services side of the parking plaza adjacent to walkways
  - Use pavement colors, materials, and textures to denote circulation patterns
  - Create a visually vibrant, functional space

Implementation:

- Remove concourse link between Cofrin Library and Student Services Building
- Create parking immediately adjacent to the Weidner Center to serve visitors during normal hours of operation and valet parking during Weidner Center events
- Create the Weidner Center parking plaza as part of a separate project or when roadway comes on-line for re-paving



### Campus Entry

The conceptual design of a new entry is the product of numerous conversations about the welcoming potential of campus. The entry beckons as a destination point to visitors and prospective students, creates close-by accessible parking, and connects the entry to the heart of the academic core through a campus quad. The campus entry design also allows for physical expansion of the University Union and connection to existing utilities and infrastructure.



**Campus Entry Detail** The campus entry links the Weidner Center and Studio Arts through a plaza and provides an additional 187 parking spaces at the entrance to campus.

## Site Specific Studies

### Housing Quad

The concept of a housing quad is a means by which the campus community, particularly student residents, reclaim pedestrian spaces previously dominated by and designed for automobiles. These pedestrian quads are located in the "pods" formed by existing and proposed student housing buildings.

**Recommendations:** 

- Remove vehicular circulation loops from the internal space created by housing pods
- Focus on designing pedestrian corridors through and within the sites
- Connect pedestrian corridors with larger pedestrian spaces or central walkways
- Make dual-purpose sidewalks 18'-0" wide, at minimum, to accommodate vehicular traffic for emergency, maintenance, and move-in day purposes
- Make pedestrian-only sidewalks 8'-0" to 10'-0" wide
- Create small, intimate spaces outside major entry points to the buildings; include amenities such as plantings and seating
- Maintain large central open spaces for spontaneous active or passive recreation

Implementation:

- Removevehiculartransportationloopsincrementally
- Coordinate with University Village Housing Inc., for funding and construction purposes where necessary
- Include quad design in any new housing pod development



**Existing Housing Quad** Existing housing pods are vehicularoriented, creating vast expanses of virtually unusable space for pedestrian residents who live in the adjacent buildings.



**Proposed Housing Quad** Re-designed housing quads would favor pedestrian movement and interaction by removing the vehicular loops, creating drop-off zones along roadways, and opening up expanses of lawn and walkways to promote informal gatherings and activities.

### Campus Quad

The best traditional campus spaces lend a defining character or sense of place to a university and often are remembered so fondly by alumni, they become akin to places of pilgrimage. Most major institutions of higher learning have taken special care to construct and preserve these places; from The Quad at UVA and Harvard Yard to the Memorial Union Terrace on the UW-Madison campus. The common tie is that all these spaces are outdoors, a natural draw--more memorable than a building or dorm. UW-Green Bay has an opportunity to develop such a feature by creating a campus guad in the heart of the academic core. Currently separated from campus by building and concourse connections, this space has the potential to become the area where students gather during warm weather, where large groups organize, and where prospective students take their first look at the campus.



**Campus Quad** The position of a pedestrian quad at the center of the campus becomes a symbolic and functional focal point of campus life.

**Recommendations:** 

- Use existing buildings to define the quad space.
- Create logical pedestrian connections between building entry/exit points across the campus quad and use these as the base layer of any design.
- Consider an addition to the University Union as an opportunity to create a focal point within the campus quad
- Reserve ideal location for food service and a seating area immediately adjacent to the University Union expansion in the campus quad
- Remove concourse link between Student Service and Cofrin Library to create an entry gateway and transition between vehicular entry and pedestrian spaces.
- Use pedestrian-scale lighting that enhances the experience of the space rather than serving a purely utilitarian purpose

- Construct a loggia feature to replace existing concourse link from University Union to Cofrin Library
  - Make it permeable for vehicular and pedestrian access into both areas of the quad
  - Use loggia to create a pedestrian connection at the plaza (rooftop terrace) level between University Union and Cofrin Library
  - Design loggia to be enclosed during winter months for comfortable concourse circulation

### Implementation:

- Construct University Union addition to create lantern-like beacon focal point
- Site food service addition at grade level immediately adjacent to proposed quad to create indooroutdoor eating and vending dynamic
- Remove concourse segment
- Construct exterior quadrangle project in sequence
  of phases



**Campus Quad Detail** A design for the campus quad should form strong connections to the proposed campus entry. The space is a pedestrian core at the heart of the campus that welcomes visitors and creates dynamic interior/ exterior movement and interaction. It is the traditional iconic quad of most universities and a design element missing at UW–Green Bay.

### **Retail Opportunity**

Few retail and commercial developments operate conveniently close to the UW-Green Bay campus, according to students surveyed during the master planning process; they cite automobile transportation as their primary means to get around. Students routinely drive rather than bus to shops that carry the movie rentals, groceries, and other items they need. Existing public transportation runs too infrequently and is too time-consuming to be a viable alternative at this point. Such input from campus residents is the impetus to explore adding a small retail development within the campus boundaries and adjacent to land available for future development.

**Recommendations:** 

- Further explore feasibility of retail on campus
- Ensure façade reflects high quality design and materials



**Retail Relationship to Campus** Proposed development is located adjacent to student and single-family housing developments.

- Make buildings and site planning human scale and intimate; buildings not to exceed one and one-half stories
- Create corridors to and from UW-Green Bay Housing that are pedestrian in scale; enhance with plantings and site furnishings (lighting, benches, trash receptacles, etc)
- Locate retail at prominent corner with visual access to parking and buildings from surrounding roadways
- Provide parking at a ratio of 3-4 parking stalls per 1,000 square feet of retail/commercial space
- Screen retail and parking from adjacent university housing
- Lease to tenants that do not compete with University services and include, but are not limited to:
  - Video rental/Music Store
  - Laundromat/Dry Cleaners
  - Second-hand Store
  - Florist/Gift Shop



**Retail Opportunity Detail** A clear need for retail outlets emerged from planning research. In light of proposed zoning and development for the land immediately adjacent to the campus, UW–Green Bay may want to explore the option of developing on-campus retail to serve basic student and staff needs.

Implementation:

Solicit independent developers to propose a private development



**Prototype Retail** An example of new pedestrian-scale retail development.

## Additional Campus Resources

Much of the campus perimeter has been preserved and maintained for open space, recreation, and education as defined by the Campus Spatial Diagram. Aside from the intrinsic value, there is a need to preserve these resources for legal purposes. The campus perimeter contains parcels that are significant in their establishment and ongoing preservation as open space.

Land and Water Conservation Fund (LAWCON) was established by U.S. Congress in 1964 and is a program that makes funds available for the acquisition of land for parks and open space. In Wisconsin, the funds are administered by the Wisconsin Department of Natural Resources. The UW-Green Bay campus contains significant parcels of land within the Cofrin Memorial Arboretum and Communiversity Park which are under LAWCON rules and restrictions.

Other restrictions within the campus perimeter include land purchased by The Nature Conservancy; City of Green Bay utility easements; and private utility easements such as Time Warner Cable TV easement and American Transmission Company Easement. UW-Green Bay has also received other restricted donations for some of this land.

The 2005 Master Plan seeks to preserve the land within which these unique easements and restrictions apply. Future planning efforts should take into consideration the specific location and extent of these areas.

### Shorewood Golf Course

The 9-hole Shorewood Golf Course is the only campus-owned and operated golf course located on a campus in the University of Wisconsin System. As such, it offers a connection to the community, preserves green space and wildlife habitat, has recreational potential, and serves as a distinct boundary between the campus and residential development to the north. It should be maintained as a campus asset and community resource.

### **Recommendations:**

- Continue to maintain the course as a university asset available to the general public
- Market the course as a unique asset to the UW-Green Bay campus

Implementation:

Contain coordination and golf course maintenance
 within Physical Plant Operations

### Bayshore

The 4.2-acre Communiversity Park is bounded on the west by the Bay of Green Bay and separated from the campus on the east by Nicolet Drive. The park contains pathways and educational signage as well as expansive views to the water and the Port of Green Bay. The only university-owned structure in Communiversity Park is the Bayshore Center, a small wood and lannon stone cabin located adjacent to the visitor parking lot. Numerous ordinances and regulations exist to protect Environmentally Sensitive Areas (ESA) and floodplains in this corridor. Any development must be coordinated with Federal Emergency Management Agency (FEMA), Wisconsin Department of Natural Resources (WDNR), Brown County, and the City of Green Bay.

The Brown County Land Use Plan designates the shoreline along the Bay of Green Bay as a valuable natural resource and recommends preserving and showcasing the area. The City of Green Bay provides Best Management Practices for Water Quality Improvement which should be incorporated into any management plan for the bayshore. **Recommendations:** 

- Conduct a separate inventory and create Bayshore Resource Management Plan, similar to the Resource Management Plan for the Cofrin Arboretum
- Maintain the Bayshore Center as a cultural resource

### Implementation:

- Search for private funding sources to encourage research and environmental remediation
- Manage per the Bayshore Resource Management
  Plan

### Downtown Learning Center

UW–Green Bay opened the Downtown Learning Center in August of 2004 as an outreach and extensions venue. Its location in the City of Green Bay adjacent to restaurants and other amenities creates a synergy conducive to conferences, meetings, and retreats.

The rented facility contains a 48-seat classroom and 10-seat conference/meeting room, each with communication media and projection options. The facilities are available free-of-charge for all UW-Green Bay faculty, staff, and students and reserved on a first-comefirst-served basis.

### **Recommendations:**

- Continue to maintain a campus presence in downtown Green Bay by supporting the Downtown Learning Center
- Evaluate the popularity of this satellite venue and consider future expansion of UW-Green Bay facilities in the downtown

### Implementation:

• Develop a creative marketing strategy to increase awareness of the facility and expand potential use

### Non-contiguous Landholdings

UW-Green Bay maintains a group of non-contiguous landholdings used for research and education programs at both the undergraduate and graduate level. The Cofrin Center for Biodiversity manages these facilities, which include:

Point au Sauble: Located along the Bay of Green Bay just three miles north of campus, this 132-acre parcel was purchased by The Nature Conservancy in Wisconsin and donated to the UW Board of Regents in March, 2002. The parcel includes one of the last unmodified estuarine wetlands in Green Bay and Lake Michigan. It is the largest wetland on the east shore of Green Bay.

Toft Point: Toft Point is a 700-acre parcel located in Bailey's Harbor, Wisconsin, about 50 miles northeast of the UW-Green Bay campus in the Door County Peninsula. It was also purchased by The Nature Conservancy and transferred to the UW Board of Regents in 1968. The heavily wooded, undeveloped peninsula extends into Lake Michigan, adjacent to The Ridges Sanctuary.

Peninsula Center Sanctuary: This 160-acre parcel, located near Bailey's Harbor, Door County, Wisconsin, was donated to the UW Board of Regents by Judson E. Fuller in 1971. The property contains oldfield, northern hardwood, and wetland communities.

Kingfisher Farm: Located in Cleveland, Wisconsin, about 60 miles southeast of the UW-Green Bay campus along Lake Michigan, the 59.2-acre parcel was donated to the UW Board of Regents in 1991. The property includes mature hardwood forest, riparian forest, wetlands, oldfields, a prairie restoration, and beach communities.

Recommendations:

- · Retain responsibility for management and preservation of these four distinct and unique parcels of land with UW-Green Bay
- · Continue to use these assets for teaching and research opportunities

Implementation:

Non-Contiguous

Landholdings

tion.

 Create and implement strategic management plans for each individual landholding



# Conclusion

The University of Wisconsin-Green Bay is conducting its Master Plan update at a pivotal time in the development of this campus. The planning effort is concurrent with other far-reaching campus studies being conducted as well as Smart Growth planning by the City of Green Bay and Comprehensive Land Use Planning by Brown County.

The intent of this Master Plan is to provide the framework and design guidelines for future development of the UW–Green Bay campus. The recommendations in this Master Plan respond to conditions that existed during the planning process, from April, 2004 through July, 2005.

While no growth projections are specifically asserted by this master plan, it IS prudent to understand where growth or facility replacement can occur within the physical and cultural environment of the campus.

This plan illustrates a responsible carrying capacity for UW-Green Bay based on a straight-line growth assumption supplemented by participatory tools and input from the campus and the community. The campus master plan portrays not what the campus WILL be in ten years, but rather the potential for future development. More than a snapshot in time, the Plan is formulated to be forward thinking and far-reaching in its impact on the quality of campus life and environment.

This Master Plan update brought to light questions related to policy, operations, and enrollment programming that must be addressed in the future. There are important elements of the master plan that represent positive changes to the campus infrastructure. These issues, improved wayfinding and navigation; preservation of open space and recreation resources; and the creation of campus "places" will have an immediate and direct impact on the feeling and perception of campus.

The 2005 Master Plan creates a vision for the future of the campus. It serves as the physical representation of a year-long conversation between diverse constituent groups. It also lays the framework for those conversations to continue in the face of a constantly changing environment.

## Contents

Introduction	01
Appendix A: The Master Planning Process	02
Base Map Preparation Inventory/Analysis Planning Workshop Exploration of Primary Issues Conceptual Alternatives Completed Circle Concept South Campus Drive Concept Inner Loop Road Concept	02 02 02 02 03
Conceptual Alternatives Survey Campus Spatial Diagram and Conceptual Preliminary Master Plan Preliminary Master Plan and Site Specific Studies Final Plan Appendix A1: Initial Workshop Questions Appendix A2: Master Planning Workshop Participants Appendix A3: Initial Master Planning Workshop Summary Appendix A4: Conceptual Alternatives Survey and Feedback	10 14 16 19 20 24 26
Appendix B: Campus Utilities and	
Infrastructure Inventory Electrical Service Power Distribution Uninterruptible Power Systems Site Roadway, Pathway, and Parking Lighting Central Heating and Cooling Plant	44 44
Chilled Water Recommendations	46
Implementation	48
Appendix C: Non-Campus Entities	50

# Appendix D: Demographic Survey52

# Appendix E: Spatial Standards for Roundabouts 54

# Illustrations

### Drawings

Completed Circle Template	04
Completed Circle Concept	05
South Campus Drive Template	06
South Campus Drive Concept	07
Inner Loop Road Template	80
Inner Loop Road Concept	09
Parking Streets	10
Campus Spatial Diagram	11
Conceptual Master Plan	13
Preliminary Master Plan	15
Demographic Survey	52
Demographic Survey	53
Green Bay Metro Route	53
Urban Compact Roundabout	55
Urban Double Roundabout	55
Additional Roundabout Configurations	56
Photographs	
Cofrin Library Lighting	45
Tables	
Straight-line Projections	03
Vehicle Volume Summary	54
Roundabout Standards	54
	Completed Circle Template Completed Circle Concept South Campus Drive Template South Campus Drive Concept Inner Loop Road Template Inner Loop Road Concept Parking Streets Campus Spatial Diagram Conceptual Master Plan Preliminary Master Plan Demographic Survey Demographic Survey Green Bay Metro Route Urban Compact Roundabout Urban Double Roundabout Urban Double Roundabout Additional Roundabout Configurations <b>Photographs</b> Cofrin Library Lighting <b>Tables</b> Straight-line Projections Vehicle Volume Summary Roundabout Standards

## Introduction

The nature of student growth on the UW-Green Bay Campus has yet to be outlined in an enrollment plan adopted by the UW Board of Regents. The master planning consultants feel it is crucial to preserve the Master Plan process and benchmarks because of the potential for a change in the physical needs of the campus. Furthermore, recommendations related to the three distinct conceptual alternatives that emerged from the planning process may be a useful resource if the institution's growth takes place in a different form or location.

Other resources and tools, such as a Master Plan utilities report and spatial standards for roundabouts also appear in the Appendix. For example, the Master Plan utilities report provides an inventory of existing campus utilities and makes recommendations for future development and growth of campus utilities. It parallels Master Plan Recommendations and Implementation Strategies from the body of the Master Plan document.

Use appendix materials as supplements to the Master Plan. They are intended to enhance decision-makers' understanding of the physical planning, and also to initiate and continue conversations with other planning professionals working on campus.

# Appendix A: The Master Planning Process

### **Base Map Preparation**

Sources for digital and printed reference material and base maps include: digital base map and footprints for all of the campus academic buildings, and aerial photograph from The University of Wisconsin-Green Bay; pre-construction drawing of the proposed interchange of Highway 54/57 and Bay Settlement Road provided by Earth Tech, Inc., of Sheboygan, Wisconsin; roundabout information courtesy of the Brown County Planning Department and the Wisconsin DOT (Roundabouts: An Informational Guide, June 2000); conceptual drawings for the Kress Events Center from Venture Architects. University Union Expansion studies from Miller Wagner Coenen/McMahon, Inc. also were referenced in the planning and analysis stages of the Master Plan.

Field observation data was collected on foot by consultants during daytime and evening site visits as well as the facilities planning and management staff at UW–Green Bay on an ongoing basis. The accuracy of the resulting digital base information meets the requirements for an appropriate master planning tool, but should not be considered accurate or detailed enough for site-specific projects. Complete site surveys should be undertaken to obtain specific site information for future building projects.

### Inventory/Analysis

Base maps were used as an orientation and navigation tool by the consultant team to formulate a working knowledge of the physical campus. Visual analysis of wayfinding, circulation, pedestrian flow, landscape character, and the overall campus feel were documented on drawings. Campus character and existing conditions were recorded photographically.

## Planning Workshop

After synthesizing and analyzing the base materials, a two-day series of campus input sessions was organized. Diverse participants from targeted campus and non-campus constituencies were contacted directly. Two open fora were held so generalized users had an opportunity to share their visions for the campus.

Participants included representatives from the University of Wisconsin–Green Bay administrative and support staff, faculty, facilities management, and student body; representatives from various departments of the City of Green Bay and Brown County; adjacent landowners; Maura Donnelly from the University of Wisconsin, Systems Administration; and Joe Sokal, the project manager from the State of Wisconsin, Division of State Facilities.

A series of leading questions was published prior to the sessions to acquaint participants with the goals of the master planning process and encourage forethought on the issues and opportunities on the UW–Green Bay campus. These questions are included under Appendix A1: Initial Workshop Questions. A complete list of participants is included under Appendix A2: Master Planning Workshop Participants. A summary of workshop findings was distributed following the workshop. This is included under Appendix A3: Initial Master Planning Workshop Summary. The listening sessions served as a forum where those who work, live, and recreate in and around the campus defined the culture and sensibilities of the campus through comments and stories. The sessions also began a dialogue between diverse stakeholders on the campus as well as between the campus and surrounding community. The feedback informed consultants of primary planning issues and secondary design components, which formed the basis of the entire Master Plan.

## Exploration of Primary Planning Issues

Primary planning issues, derived in the beginning of the master planning process, were reiterated at each stage of the process, and continually re-evaluated and re-examined.

## **Conceptual Alternatives**

Following the initial input sessions, three conceptual alternatives were prepared to explore the primary planning issues. The alternative plans incorporated the analysis of base information and campus conditions--reports and documents given to the consultants by the campus--and ongoing discussions with campus staff and the Master Plan Steering Committee.

The first assumption was 50 percent growth in enrollment over a ten-year period. Although growth was given no specific framework as defined by an enrollment master plan, enrollment growth assumes a continuation of status quo in ratio of traditional vs. non-traditional and resident vs. commuter students. Reevaluation should occur when an updated enrollment plan is adopted.

A second basic assumption, that of straight-line growth, was made in order to quantify the growth potential and physical impacts for this Master Plan. The conceptual alternatives of the Master Plan explore relationships and elements using the current operational practices of UW-Green Bay. For example, if the campus continues to operate according to current parking management, the Master Plan illustrates the amount of parking necessary to accommodate a 50 percent increase in campus enrollment.

These two assumptions informed the Plan to a great extent. The straight-line parking assumption recommends an additional 1,646 non-event stalls to campus and approximately 1,500 stalls for the Kress Events Center. It also assumes the need for an additional 1,035 beds and 690 resident parking stalls.

Each conceptual alternative addressed projected expansions and incorporated varied mechanisms to address the primary planning issues.

A follow-up survey to the presentation of the three conceptual alternatives was distributed campus-wide. The survey and its findings are included in Appendix A4: Conceptual Alternatives Survey and Feedback Summary.

### Input Workshop Conclusions

Over the course of two days (March 2.3), the University of Wisconsin-Green Bay Master Planning Team conducted on-campus meetings to elicit feedback about the campus. Participants included UWGB administration, faculty, staff and students; City of Green Bay and Brown County representatives; and concerned citizens and neighbors. The following highlights the major issues and opportunities that arose during the listening sessions.

#### Major Issues:

- Wayfinding and Signage
  Circulation, both Pedestrian and Automobile
- 3. Parking
- 4. Infrastructure Management
- 5. City Growth and Proximity
- 6. City Connections
- 7. General Campus Appearance 8. Campus Tradition and Sacred Spaces, Including the Arboretum
- 9. Recreation Fields and Facilities
- 10. Growth to 7,500 Students, for planning purposes
- 11. Known Building Projects 12. Original Master Plan

### Straight-Line Parking Assessment

Parking Lot	Number of Stalls	Stalls Occupied at Peak	Percent Occupied at Peak
Lab Sciences	631	505	80%
Studio Arts	595	536	90%
Wood Hall	552	497	90%
Sports Center	447	443	99%
Apartment Housing	238	238	100%
Main Housing	525	525	100%
East Housing	229	204	89%
Visitor Parking	75	57	75%
Weidner Center (Non-Event)	792	294	37%
Valet Parking- (Non-Event)	123	74	60%

The existing parking lot survey demonstrates that non-event center parking on campus is 91% full on average. For event parking the Weidner Center Lot is adequate. Sports Center will need to add parking to accomodate the future expansion

Conceptual Alternative	Existing Parking Stalls	Straight-Line Projection for Parking Stalls	Conceptual Alternative Parking Expansion	Total Parking
Existing	3,292	1,646		4,938
Completed Circle		1.646	+/- 1,700	+/- 3,346
South Campus Drive		1,646	+/- 1,470	+/- 3,116
Inner Circle		1.646	+/-1.350	+/- 2,996

ach conceptual alternative provides an approximation for parking expan according to the straight-line assumptions.

### Straight-Line Housing Conclusions

Conceptual Alternative	Existing Beds	Straight-Line Projection for Beds	Conceptual Alternative Bed Expansion	Total Number of Beds
Existing	1,965	1.035		3,000
Completed Circle			1.200 beds	3,165
South Campus Drive			1,035 beds	3,000
Inner Loop			900 beds	2,865

Straight-line Projections Presented at the Conceptual Alternatives stage in the master planning process, the straight-line projections numerically calculate the amount of additional parking and housing that will be needed to accommodate the growth of the campus to 7,500 and explain how these base assumptions were formulated.

### Parking

### ASSUMPTIONS:

- 1. UW Green Bay will continue to provide parking for all students, faculty, staff, and visitors.
- 2. Growth is 50%, for planning purposes, 5,000 to 7,500 students.

### STRAIGHT LINE PREDICTIONS:

- 1. Add 1646 non-event stalls.
- 2. Weidner Center provides adequate parking during events.
- 3. Sports Center will expand to 4,000 seats.

### Housing

### ASSUMPTIONS:

- 1. On-campus housing goal is 40% of enrolled students by 2006-2008.
- 2. Growth is 50%, for planning purposes, 5,000 to 7,500 students.
- 3. Currently UWGB has 22 residence halls accomodating 1,965 beds.
- 4. Local ordinances require one (1) parking stall per 1.5 students.
- 5. No new parking was added to accomodate the most recent addition of three housing buildings.

### STRAIGHT LINE PREDICTIONS: 1. Add 1,035 beds

2. Add 690 stalls for housing to continue to provide 100% parking for resident students.

## Completed Circle Concept

Circulation and Wayfinding:

Construct additional segments of roadway to complete Circle Drive

• Emphasize Main Entrance and de-emphasized or close Nicolet Entrance Parking:

- Expand parking along the perimeter of campus inside Circle Drive
- Incorporate parking streets into housing village access roads
  - Develop a mechanism for establishing a hierarchy of streets and a network of roadways
  - Use as additional flex parking, like the opportunistic spots one finds adjacent to urban campuses
  - Concentrate location of parking streets in the student housing village
  - Serve dual purpose by expand parking without adding parking lots and increasing safety as parking is closer to dorms, more visible from buildings, and more immediately accessible to students
  - Provide overflow parking for events on or near access roads to major event destinations like the Weidner Center and Kress Events Center

Utilities and Infrastructure:

- Locate proposed academic buildings near existing utility tunnel Context and Community:
  - Create second visitor parking lot adjacent to Wood Hall/Rose Hall at main entry
  - Remove signage at Nicolet Entrance to aid visitor wayfinding
- Maintain access to arboretum directly from Nicolet Drive Building Opportunities:
  - Expand housing in southwest corner of campus to create a second residential village
  - Site academic building expansion for ease of connection to concourse and utility tunnel
  - Accommodate footprint for Kress Events Center

Arboretum:

• Preserve and maintain the location of the Cofrin Arboretum outside of the Circle Drive

Campus Entry:

- Place architectural "welcoming beacons" on Cofrin Library and Student Services building at entrance
- Remove signage to campus at Nicolet Entrance to aid visitor wayfinding from Green Bay to campus

Sustainability:

- Increase density of academic buildings increased within campus core to minimizes distances for utility and other infrastructure connections
- Create and protect open space, habitats, and site ecology

- Site proposed academic buildings sited for optimal solar orientation and massing
- Create areas designated for runoff and storm water recharge

Pedestrian and Site Specific Studies:

- Expand concourse to new academic buildings and enhance existing concourse connections
- Maintain and expand exterior circulation routes to accommodate building expansions



CIRCULATION

- Modifies roads to create a continuous circle
- Emphasizes existing main entrance drive; eliminates or de-emphasizes existing South circle drive

### **BUILDINGS / PARKING**

- Expands parking along perimeter additional 1700 cars
- Creates new housing village to provide additional 1200 beds

### PEDESTRIAN CIRCULATION

- Expands and enhances councourse system
- Academic building sites based on efficient linkage to concourse to concourse system
- Promotes concourse level winter garden opportunities

**Completed Circle Template** The individual layers of circulation, buildings and parking, and other campus features of this particular alternative are added to the base aerial photograph and build upon each other.



### South Campus Drive Concept

Circulation and Wayfinding:

- Establish Nicolet Entrance as the main entrance to campus with roundabout feature for ease of circulation
- Move visitor welcome booth to Nicolet Entrance
- De-emphasize or close existing main entrance to campus
- Adjust roadway access to the interior of campus from South Campus Drive to become a series of left hand turns ending in circles

### Parking:

- Expand parking at various locations within the South Campus Drive boundary
- Create parking streets throughout residential village

Utilities and Infrastructure:

• Locate proposed academic buildings near existing utility tunnel Context and Community:

- Expand housing in northeast corner of campus to energize future development potential of adjacent land
- Create a second visitor parking lot adjacent to Wood Hall/Rose Hall at main entry

**Building Opportunities:** 

- Site academic building expansion for solar orientation and in proximity to utility tunnel
- Expand housing adjacent to existing housing village
- Accommodate footprint for Kress Events Center

### Arboretum:

- Preserve and maintain the Cofrin Arboretum outside perimeter roadways
- Introduce a permanent natural buffer to the core of campus to preserve the open space between the housing village and academic core

### Campus Entry:

• Remove signage at Main and Nicolet entrances so that they become the primary ingress/egress points to aid visitor wayfinding from Green Bay to campus

• Create entry sequence through arboretum/open space corridor Sustainability:

- Increase density of academic buildings within campus core to minimize distances for utility and other infrastructure connections
- Create and protect open space, habitats, and site ecology to preserve green buffer between housing village and academic core
- Accommodate proposed academic buildings expansion by adding on to existing facilities and orient new construction to maximize solar access
- Create areas designated for runoff and storm water recharge

Pedestrian and Site Specific Studies:

• Maintain existing concourse but site new buildings for solar orientation and regardless of potential for connection to concourse

- Develop campus quadrangle between Library/Union/MAC Hall as a traditional quad
- Create green spaces are created at the center of housing pods



### CIRCULATION

- Creates South Campus Drive as an entrance collector for campus
- Roundabout at intersection with Nicolet to handle traffic and exiting movement

### **BUILDINGS / PARKING**

- Housing expansion to create synergy with future development to north exit
- Create permanent natural open space buffer between housing and academic core

### PEDESTRIAN CIRCULATION

- Maintain existing concourse level circulation
- Most new academic buildings can be added to system efficiently
- Campus quadrangle as an inward looking space at concourse level

**South Campus Drive Template** The individual layers of circulation, buildings and parking, and other campus features of this alternative are added to the base aerial photograph and build upon each other.



### Inner Loop Road Concept

Circulation and Wayfinding:

- Create an inner loop roadway system, primarily for visitor, emergency, and service vehicles
- Ensure Inner Loop Road maintains visual contact with campus core
- Maintain all ingress/egress points
- Preserve Main Entrance, de-emphasize/remove signage at other entrances Parking:
  - Expand parking adjacent to the Inner Loop Road
  - Establish Inner Loop Road as a parking street and create a grid-like network of parking streets throughout undergraduate housing village

Utilities and Infrastructure:

• Locate proposed academic buildings near existing utility tunnel Context and Community:

- Explore potential connection to future development of Schott Property to northeast of campus
- Construct a campus visitor center proposed adjacent to the Cofrin Library
- Create a second visitor parking lot adjacent to Wood Hall/Rose Hall at main entry

**Building Opportunities:** 

- Site academic building expansion for solar orientation and in proximity to utility tunnel
- Expand housing between existing housing village and academic core
- Accommodate footprint for Kress Events Center

### Arboretum:

Preserve and maintain location of the Cofrin Arboretum outside the perimeter roadways

• Plan a small permanent open space adjacent to the University Union Campus Entry:

• Develop campus quadrangle between Library/Union/MAC Hall as campus entry feature

• Preserve main entrance, de-emphasize/remove signage at other entrances Sustainability:

- Increase density of academic buildings within campus core to minimize distances for utility and other infrastructure connections
- Expand academic buildings by adding on to existing facilities and orienting new construction for solar access
- Create and protect open space, habitats, and site ecology
- Increase density of housing village increased with proposed dorms
- Create areas designated for runoff and storm water recharge

Pedestrian and Site Specific Studies:

- Make no changes or additions to existing concourse; take concourse off line when it becomes too expensive to maintain/repair
- Remove section of concourse between Cofrin Library and Student Services to open up quad to entrance road
- · Create and enhance exterior pedestrian spaces and circulation systems
- Introduce concept of campus quad as a link between campus entrance and campus core



**Inner Loop Road Template** The individual layers of circulation, buildings and parking, and other campus features of this particular alternative are added to the base aerial photograph and build upon each other.



## Campus Spatial Diagram and Conceptual Preliminary Master Plan

### **Conceptual Alternatives Summary**

The consultants presented all three conceptual alternatives in May 2004, during a series of open sessions held on campus over the course of a day. Rather than a way to determine which alternative was more popular, the sessions were designed to spark discussion of the opportunities and constraints that came to light through exploration of various elements and relationships. The follow-up survey (Appendix A4) further clarified key components of each alternative and allowed for more-extensive feedback from participants.

Campus participants also had access to an interactive website over the summer where they could exchange ideas with others and post messages regarding their own thoughts on the Master Plan. This communication tool generated relatively few postings over three-and-a-half months. Comments generally supported continued preservation of the Cofrin Arboretum, a strong component in each of the three conceptual alternatives.



**Parking Streets** In the conceptual alternatives stage of the planning process, the concept of parking streets was formulated to solve some parking expansion issues while creating a finer mesh of campus roadways and controlling traffic speeds. Although the concept did not continue to evolve during the remainder of the process, the consultants still feel that it is a viable alternative to the expansion and construction of traditional surface parking lots.

### **Campus Spatial Diagram**

The Campus Spatial Diagram was developed during the Conceptual Preliminary Master Plan stage of the master planning process. It illustrates the fundamental principles of the Preliminary Master Plan. The Campus Spatial Diagram allows planners to consider relationships without focusing on specific details or the exact location of elements. The diagram is a tool used to gain consensus on the overall direction of the Master Plan and articulate the relationships between component parts of campus.

The Campus Spatial Diagram illustrates the following conceptual assumptions that in turn, addressed the primary planning issues identified in the Plan.

Circulation and Wayfinding:

- An Outer Loop Road serves as the primary commuter transportation system
- The Outer Loop Road is a medium-speed roadway with a rural character
- An Inner Loop Road serves as the primary vehicular transportation system for visitor, emergency, and service traffic
- The Inner Loop Road is low-speed and has an urban, pedestrian-oriented scale
- The academic core is contained within the Inner Loop Road Parking:
  - Parking is located between the Outer and Inner Loop Roads
  - Only visitor and accessible parking penetrate the Inner Loop Road
- Parking is also hierarchical by location, with housing parking being the furthest out, then commuter parking, and event parking closest to the Inner Loop Road Utilities and Infrastructure:
  - Overall infrastructure of campus is hierarchical
  - Utility corridors and infrastructure capabilities are explored at the site design level

Context and Community:

- Visitors have precedence over every-day campus users in terms of circulation and parking
- Arboretum and golf course are maintained as campus assets open to the community

Building Opportunities:

- Academic buildings are contained within the Inner Loop Road
- Housing occurs in the campus mid-zone
- Recreation facilities expansion would occur in campus mid-zone

### Arboretum:

- Arboretum is maintained and preserved outside of the Outer Loop Road
- Green swaths of arboretum-like landscape are introduced to the core of campus along major ingress/egress points

Campus Entry:

- Arrival sequence for campus users is drive (Outer Loop Road), park (campus mid-zone), walk (campus core)
- Arrival sequence for visitors is drive (Outer and Inner Loop Road), park (visitor parking in Inner Loop), walk (specific building/destination)

### Sustainability:

- Open space, habitats, and site ecology are created and protected to extend naturalized green space into the heart of campus
- Multimodal pedestrian transportation and alternatives to vehicular travel encouraged

Pedestrian and Site Specific Studies:

- Inner Loop Road is pedestrian oriented with slow vehicular speeds
- · Campus core is fundamentally a pedestrian space
- Concourse connection is maintained in campus core only
- Campus quad is an interactive, traditional campus space



**Campus Spatial Diagram** This diagram facilitated comments and feedback about the general layout and interconnectedness of individual elements on the UW–Green Bay Campus.

### Conceptual Preliminary Master Plan

The Conceptual Preliminary Master Plan was guided by detailed feedback from the conceptual alternatives stage in the master planning process. The challenge was to use feedback generated from presentation of three conceptual alternatives and effectively synthesize that input into one cohesive plan. The resulting Conceptual Preliminary Master Plan was reviewed by the Master Plan Steering Committee and presented to the campus through a series of workshops on campus in October, 2004.

These assumptions target all key aspects of the primary planning issues as outlined in the Conceptual Preliminary Plan.

Circulation and Wayfinding:

- The main entrance maintained and enhanced
- Nicolet Entrance changed to test the concept of a roundabout intersection for traffic control and de-emphasized as an entrance to campus
- The Inner Loop Road forms a circle encompassing the campus core and academic buildings
  - Inner-loop concept includes Kress Events Center with academic core and routes road to east
  - Inner loop concepts excludes Kress Events Center from the academic core and routes road to west
  - A series of arteries penetrate into the campus core to provide direct access to buildings or parking for visitors, service, and emergency vehicles
- Perpendicular roadway intersections introduced for safety and navigational purposes

Parking:

- Parking expanded adjacent to existing parking lots whenever, wherever possible
- Buffer strips introduction in parking lots for storm water infiltration
- No parking streets depicted in this plan per feedback from campus during earlier conceptual alternatives presentation

Utilities and Infrastructure:

• Buildings sited along existing utility corridor or adjacent to buildings already connected to the utility system.

Context and Community:

- Pedestrian and vehicular access to potential future development of Schott Property accommodated
- Proposed housing village expansion occurs where it will energize the surrounding neighborhoods for potential commercial development

### **Building Opportunities:**

- Academic building expansion situated for solar access and connected to the concourse
- Housing expansion occurs adjacent to existing housing village
- Non-traditional student housing pod addition on southwest corner of campus
- Addition of lantern-like features to buildings for wayfinding at night
- Preliminary footprint for Kress Events Center from Venture Architects is depicted

### Arboretum:

- Arboretum maintained and preserved outside the Outer Loop Road
- Arboretum gateway maintained and preserved
- Green swaths of arboretum-like landscape introduced to the core of campus
- Green belt preserved between existing housing village and academic core Campus Entry:
  - Entry accommodates visitor parking
  - Concourse connection between Cofrin Library and Student Services removed
- Campus quad and entry drive become one space

### Sustainability:

- Density of academic buildings increased within campus core
  - Distances for utility and other infrastructure connections minimized
  - New buildings sited to maximize solar efficiency
  - Proposed academic buildings expansion accommodated by adding on to existing facilities
- · Density of housing village increased with proposed dorms
- Open space, habitats, and site ecology created and protected and extended into heart of campus as naturalized green space
- Buffer strips proposed for parking lots
  - Urban heat island effect of asphalt paving reduced
  - Site-specific parking lot storm water recharge areas created
- Campus-wide, large-scale designated storm water recharge areas
- Multimodal pedestrian transportation and alternatives to vehicular travel explored

Pedestrian and Site Specific Studies:

- Multimodal circulation system exists within campus
- Athletics and recreation facilities expansion
- Creation of "access plazas" in housing pods for un-programmed, green, interactive spaces and vehicular traffic for emergency/service/move-in only

Much of the discussion and feedback during the conceptual preliminary Master Plan stage centered on the removal of a section of the concourse to open up the campus quad as the final destination of the arrival sequence. Comments both supporting and opposing the removal were heard. Participants were encouraged to visit the site and imagine the difference in character and human scale the proposed change would create.

A second discussion centered on alignment of the Inner Loop Road to the east or west of the Kress Events Center. The fundamental decision referred back to the Campus Spatial Diagram and it was decided that as a non-academic building, the sports complex could be located outside of the academic core and not be connected by the concourse system.

Feedback from this stage included a general acceptance of the other primary planning elements and relationships contained within the evolving Master Plan.


# Preliminary Master Plan and Pedestrian / Site-Scale Design Foci

Consensus on the overarching ideas and physical forms described in the ConceptualPreliminaryMasterPlanledtothedrawingupofthePreliminaryMasterPlanusing standard dimensions for roadways, walkways, and parking lot layouts.

# Preliminary Master Plan

# Circulation and Wayfinding:

- Main entrance maintained and enhanced and the information booth remains in current location
- Nicolet Entrance changed to test the concept of a roundabout intersection for traffic control and de-emphasized as a visitor entrance
  - Nicolet Entrance sign removed; entrance to be used primarily by daily campus traffic and during peak event periods
- Inner Loop Road forms a complete circle encompassing the campus core and academic buildings; located to the west of the Kress Events Center
- Traffic tables introduced where major pedestrian walks cross the Inner Loop Road

# Parking:

- Parking lots expanded from existing lots whenever, wherever possible
- A 50-stall visitor parking area added to the main entrance

Utilities and Infrastructure:

• Buildings sited along existing utility corridor or adjacent to buildings already connected to the utility system

# Context and Community:

- Bicycle lanes are added to entry drives into campus and are proposed along
  Nicolet Drive
- Land for future bicycle lanes reserved
- Roadway and circulation system designed to accommodate public bus transportation around campus

# Building Opportunities:

- Academic building expansion sited in inner core along utility corridor with potential connection to concourse
- Housing expansion planned in existing housing village as infill and as one three-building pod over existing housing parking lot
- Non-traditional student housing pod located in southwest corner of campus overlooking Bay of Green Bay
- Kress Events Center footprint shown
- Addition to University Union explored as part of campus quad
- Potential retail development depicted in northeast corner of campus
- Arboretum:
  - · Arboretum maintained and preserved outside of the Outer Loop Road

- Arboretum gateway maintained and preserved
- Green swaths of arboretum-like landscape introduced to the core of campus, particularly in the southern portion of the inner core
- Green belt preserved between existing housing village and academic core Campus Entry:
  - Entry accommodates an total of 187 visitor parking stalls
  - Concourse connection between Cofrin Library and Student Services removed
- Re-designed campus quad and entry drive become one space Sustainability:
  - Density of academic buildings increased within campus core
    - Distances for utility and other infrastructure connections minimized
    - New buildings sited to maximize solar efficiency
    - Proposed academic buildings expansion accommodated by adding on to existing facilities
  - Density of housing village increased with proposed dorms
  - Open space, habitats, and site ecology created and protected and extended into heart of campus as naturalized green space
  - Buffer strips proposed for parking lots
  - Urban heat island effect of asphalt paving reduced
  - Storm water recharge areas
  - Designated storm water recharge areas
  - Hierarchy of multimodal transportation options
    - Pedestrian circulation on foot throughout entire campus
    - Bicycle circulation accommodated for present along major roadways
  - Future bicycle lanes accommodated by easement
  - City bus transit along Inner Loop Road

Pedestrian Design Considerations:

- Walkway and bicycle lane connections to surrounding community
- Walkway system enhanced within campus
- Walkways and bicycle lanes accommodated along the Inner Loop Road
- Bicycle lanes added as actual lanes or as land reserved along major entry points to campus
- Concourse system between existing buildings preserved
- Concourse connections between proposed buildings accommodated
- Introduction of exterior courtyards throughout campus
- Housing quads redesigned for pedestrians
- Pedestrian crossings at major intersections along Inner Loop Road



#### Site Specific Studies

The primary focus at this stage in the Master Plan development was to explore pedestrian and site-scale components of the design. A day-long series of presentations were held on campus in November 2004 to present these concepts. The workshop included a rendered Master Plan as well as the following site-scale design elements:

- The Quad A traditional campus space created by opening up a section of the concourse and allowing on-grade access to Student Services and University Union.
- Weidner Center Parking Plaza A primarily pedestrian plaza between Weidner Center and Studio/Theatre Arts that can be accessed by large vehicles (i.e. busses) during events.
- Housing Pod Plazas Flexible outdoor space in the center of housing pods is created by the removal of vehicular traffic circles and primarily green and unprogrammed in nature. Sidewalk widths would accommodate emergency/service vehicles and moving day traffic.
- Retail Opportunity A small four-unit retail development in the northeast corner of campus between the campus housing village and surrounding residential neighborhoods.

Workshop participants commented on the evolution of the Master Plan drawing as well as the site-specific design areas and pedestrian scale circulation systems. Support for the Master Plan was expressed and specific elements or areas of the Plan were modified to address comments.

Participants expressed general support for the site-scale design studies and it was determined that a more-extensive study of the entrance should be conducted to create a unified space that encompasses the idea of an entrance drive, campus quad, and Weidner Center parking plaza.

# Final Master Plan

The Master Plan and Master Plan Recommendations followed consensus of the Preliminary Master Plan and Site Specific Studies. Both the Master Plan illustration and the Master Plan Document were adopted in August 2005.

#### Introduction

Thank you for agreeing to participate in our planning workshop for the University of Wisconsin Green Bay Master Plan. Your input will help insure that we address the issues most important to the success of the campus. Please review these questions prior to our workshop. Note that the questions will not apply equally to all participants.

#### **General Questions**

- What is your overall perception of the campus?
- If you can recall, what was your first impression of the campus?
- What are the most significant landmarks on campus?
- What are your favorite buildings, spaces and places on campus? ... Why?
- What buildings, spaces and places do you see as most problematic? ... Why?
- From your perspective, how well does the campus function?
- From your own experience on campus, how would you change or improve the environment?
- Are there areas of the campus that you avoid? ....Where? ....Why?
- How would you characterize the visual appearance of the campus?
- What message does the appearance send?
- How can the appearance be improved or enhanced?
- How does the campus interface with the City of Green Bay and the surrounding community?

- How does the campus relate to the University of Wisconsin System?
- How can these relationships be enhanced or improved?
- From your knowledge of the history of the campus, are there consistent ideas that should be respected and continued?

#### Specific Questions

- Are the present site facilities adequate for your current activities or operations?
- If not, how can they be improved?
- Do you foresee a need to expand facilities to meet your needs for the next five to ten years?
- We have been specifically asked to address the following issues. What concerns or problems do you have regarding these areas?
- 1. Traffic flow and circulation to/from campus as well as within the campus boundaries.
- 2. Parking development opportunities.
- 3. Approaches to campus, campus image definition.
- 4. Pedestrian circulation within the campus.
- 5. Quality and quantity of open space on campus.
- 6. Unify visual character of campus.
- 7. Environmental Issues (green building, stormwater management, native plant materials).

# INPUT SESSIONS WORKSHOP ATTENDEES

Tuesday, March 2, 2004-UWGB Campus 10:00 – 11:00 A.M.

**Academic Programs and Activities** Carol Blackshire-Belav Fritz Erickson Scott Furlong Chervl Grosso Sue Hammersmith Fergus Hughes Mimi Kubsch Donna Ritch Jan Thornton Lvnn Walter Karl Zehms Dean Rodeheaver Paul Pinkston Les Raduenz Tom Maki

#### 11:00 – Noon Residence and Student Life

Brenda Amenson-Hill Glen Gray Sue Keihn Lisa Tetzloff Les Raduenz Paul Pinkston

# 12:00 – 2:00 P.M.

# **City/County/Town Planners**

Merritt Bussiere Chuck Lamine Bill Lockery Cole Runge Rob Strong Les Raduenz Maura Donnelly 2:00 – 3:00 P.M. <u>Athletics and Intramurals and Recreation</u> Ken Bothoff Tim Helein Les Raduenz Maura Donnelly

#### 3:00 – 4:00 P.M. <u>Campus Safety, Risk Management and</u> <u>Parking</u> John Baumgart

Randy Christopherson Jane Rank Paul Ebel Keith Rosin Les Raduenz Maura Donnelly

#### 4:00 – 5:00 P.M. University Union

Anne Buttke Mark Keating Dan Murphy Curt Willmann Les Raduenz Paul Pinkston

# 5:00 – 6:00 P.M.

<u>University Village Housing Inc.</u> Sue Hammersmith Tom Maki Glenn Gray Kelly Franz 7:00 – 8:30 P.M. <u>Open Forum</u> David Mott Les Raduenz John Lyon Warren Johnson Joe Blazkowski Jenna King Maura Donnelly Tara Reed

#### Wednesday, March 3, 2004-UWGB Campus 7:45 A.M. – 9:00 A.M. <u>Campus Facilities and Infrastructure</u> Mike Barry

Mike Barry Dave Kieper Dennis Nellis Paul Pinkston Les Raduenz Dana Laundrie Lvnn Renard Ernie Fameree Phil Fellenz Lisa Fink Leon Zitlow Bill Ahnen Paul Bach Pam Kohlmeyer **Dennis Bailey** Laura Gonnereng Miek Van Lanem David Zeeman Maura Donnelly

#### 9:00 A.M. – 10:00 A.M. <u>Auxiliary Operations and Arboretum</u> Committee

#### Bob Howe Tom Maki Pat Sorelle Amy Wolf Vicki Medland Les Raduenz Paul Pinkston Laurel Phoenix Tara Reed Dave Dolan Maura Donnelly

# 10:00 A.M. – 11:00 A.M. Non-Affiliated Tenants

Muriel Jaeckels Jo Mellen (coming in place of Eileen Littig) Glenn Slaats

#### 11:00 A.M. – Noon Information Services

Leanne Hansen Gary Herlache Dave Kieper Kathy Pletcher Maura Donnelly Janice Swiggum

# 12:00 – 2:00 P.M.

#### Campus Master Plan History Edward Weidner

Sue Hammersmith Tom Maki Steve Swan Les Raduenz Joe Blazkowski Maura Donnelly

# 2:00 P.M. – 3:00 P.M.

<u>Governance</u> Cliff Abbott John Landrum Maura Donnelly

# 3:00 P.M. – 4:00 P.M. <u>On Campus Student Services</u>

Diana Borrero-Lowe Sandy Deadman Chad Goeden Pam Harvey-Jacobs Sue Keihn Ron Ronnenberg Greg Smith Karen Swan Brenda Amenson-Hill Paul Pinkston Maura Donnelly Mary Ann Rose Les Raduenz

#### 4:00 P.M. – 5:30 P.M. Open Forum

Bob Bush Suzanne Pedersen Mike Driedric Tom Maki Brenda Jerabek Jessie Fink Judy Crain Kumar Kongayappan Ganga Nair Elizabeth Nair Robert Tripp Les Raduenz Bruce Shepard Joe Blazkowski Debbie Furlong Sharon Gutowski Kate Meeuwsen Susan Frost Yarvelle Draper-King Jonathan Virant Maura Donnelly Jason Willard Matthew Baumann Ganga Nair Kathy Groves Jennifer Powell

# 5:30 P.M. - 6:00 P.M.

Master Plan Steering Committee

# CONCEPTUAL ALTERNATIVES PRESENTATION

# Tuesday, March 2, 2004-UWGB Campus 10:00 A.M. – 11:30 A.M.

Grant Winslow Ellen Olson Pam Spangenberg **Rick Spangenberg** Dick Anderson Chuck Wiseman Mark Olkowski David Kieper Ashley Dombrowicki Sue Keihn Nan Nelson Mike Stearnet Jim Albers Les Raduenz Paul Pinkston Leanne Hansen Anne Buttke Poppy Grant Scott Furlong John Landrum Ginny Dell Maura Donnelly Jan Malchow Yarvelle Draper-King Sheila Carter Sharon Dimmer Mike Barry Kate Meeuwsen

# 1:00 P.M. – 2:30 P.M.

Nora Kanzenbach Dan Murphy Greg Smith Karen Swan Dave Cerny Brenda Amenson-Hill Tina Tackmier Lisa Tetzloff Diana Borrero-Lowe Bonnie Laundrie Monika Pynaker Diane Blohowiak Marlys Brunsting Paula Ganyard David Mott Fergus Hughes Glenn Gray Jane Rank Randy Christopherson Keith Prechter Maura Donnelly

#### 4:30 P.M. – 6:00 P.M.

Adam Ruechel Nathan Petrashek Jonathan Virant Diane Ford John Lyon Jaren Naniot Jeff Berg Ryan Pelkey Fue Xiong Marcelo Cruz Chris Schanz **Bob** Tripp Sarah Tebon Sarah Oldenburg Rachel Abhold Mitch Bruckert Janet Jordan Les Raduenz Maura Donnelly Jim Albers Elizabeth Nair

# 6:00 P.M. - 7:00 P.M.

Campus Master Plan Committee Meeting

# CONCEPTUAL MASTER PLAN PRESENTATION

Thursday, October 7, 2004-UWGB Campus 10:30 A.M. – 12:00 P.M. Campus Master Plan Committee Meeting

12:00 P.M. - 1:30 P.M.

John Lyon Donna Ritch Scott Furlong Kevin Fermanich Jill Fermanich Sarah Oldenburg Michael Stearnet Jen Pfundtner Todd Sanders Maura Donnelly Les Raduenz Paul Pinkston Jan Thornton Leanne Hansen Sherri Arendt Kate Meeuwsen Jonathan Virant Chervl Grosso Dean Rodeheaver

# 2:00 P.M. - 2:30 P.M.

Mary Fischer Kathy Pletcher David Kieper Andy Speth Nora Kanzenbach Sue Keihn Lynn Niemi Lisa Tetzloff David Fleming Bill Lockery Randy Christopherson Dick Anderson Sue Miller Jean Dickinson Judy Martin Joan Keberlein Dennis Nellis Mike Barry Brenda Amenson-Hill Philip Livingston Rick Warpinski Sara Ann Kleinhans Mark Olkowski

## 4:00 P.M. – 5:30 P.M.

Kevin Roeder Yarville Draper-King Pamela Spangenberg Glenn Gray Les Raduenz Greg Smith Karen Swan Dean Rodeheaver

# PRELIMINARY MASTER PLAN AND SITE SPECIFIC STUDIES PRESENTATION

Thursday, November 11, 2004-UWGB Campus 10:30 A.M. – 12:00 P.M. Campus Master Plan Committee Meeting

# 12:00 P.M. - 1:30 P.M.

Leanne Hansen Dave Dettman Scott Furlong Lisa Tetzloff Mark Olkowski Tina Tackmier Sarah Oldenburg Greg Smith Bob Hendersen Dean Rodeheaver Marlys Brunsting

#### 2:00 P.M. - 3:30 P.M.

John Shuck John Gerow Glenn Gray Steve Gerring Diana Borrero-Lowe Mike Morgan Mike Thron David Kieper Thomas Erdman Sue Keihn Randy Christopherson Les Raduenz Keith Rosin Nick Walton Poppy Grant Barb Raduenz Bob Skorczewski **Bill Lockery** 

Dennis Nellis Judith Blahnik Pam Spangenberg Kim McKeefry Bob Howe Andy Speth

# 4:00 P.M. – 5:30 P.M.

Dean Rodeheaver Les Raduenz Tom Maki Jim Albers Marcelo Cruz Representative from the Weidner Center Appendix A3: Initial Master Planning Workshop Summary

Over the course of two days (March 2 and 3, 2004), the UW-Green Bay Master planning team, including representatives from the University of Wisconsin Green Bay, UW System Administration, Ken Saiki Design, Berners-Schober Associates, and TranSmart Technologies, conducted a series of information gathering meetings and forums. The fourteen meetings and two open fora targeted a diverse group of participants including UW-Green Bay administration, faculty, staff and students; City of Green Bay and Brown County representatives; and concerned citizens and neighbors. Through the process, major themes or ideas were brought to life and a broad range of issues was discussed. The following summary highlights the major issues, concerns, and opportunities extracted from these participatory workshops.

## Major Issues:

- Wayfinding and Signage
  - o This is a primary issue for all visitors and infrequent campus visitors identified in any workshop session
  - o Roadway and building signs are important
  - o Non-signage landmarks could be enhanced throughout campus
- Circulation (Pedestrian and Automobile)
  - o There was a strong push to keep and expand the concourse system connections
  - o Automobile congestion is an issue when exiting campus, especially at peak times or after large events or gatherings
  - o Multiple campus entrances often make circulation difficult to navigate through or describe to others
  - o Delivery and service entrances to campus and buildings are often difficult for pedestrians as well as drivers
- Parking
  - o Distribution, management, and expansion are issues that should be addressed
  - o Visitor or accessible parking and drop-off spots are lacking in quantity, hard to find, and difficult to describe to others
- Infrastructure/Maintenance
  - o Storm water, systems, and electrical and emergency power were all raised as concerns
  - o Chilled water capacity will need to be increased with new anticipated buildings
- City Growth and Proximity

- o Impacts and opportunities associated with City of Green Bay growth
- City Connections
  - o Enhancing connections to Green Bay is important
- Campus Appearance
  - o General consensus is that the UW-Green Bay campus is beautiful
  - o The arboretum is a wonderful asset
  - o Upkeep of existing facilities such as campus open spaces as well as interior tunnel spaces is important
- Campus Tradition and Sacred Spaces
  - o Creation or establishment of spaces of tradition is important to integrate into the fabric of the campus
  - o There doesn't appear to be one traditional campus space or building—the place where you take a graduation photograph
  - o Existing "sacred" elements include the arboretum, shoetree, and concourse system
  - o Potential creation of a "memorial grove" area for alumni tree donations
  - o Theatre plaza as a sculpture garden and entry to Lawton Gallery
- Recreation
  - o There is a shortage of facilities in the spring due to wet field conditions
  - o Volleyball tournament and other large activities are important
  - o Golf course is an asset and there is a desire for the campus community to use it more often
  - o Arboretum provides recreation activities for campus community and the public, although the purpose and focus continues to be education and research

# **Driving Factors:**

- Known building projects (adding, remodeling, new construction)
  - o Student Union expansion, Kress Events Center addition
- Potential building projects in future (adding, remodeling, new construction)
  - o Additions: Visitor Center, Alumni House
  - o Renovations: Student Services Building, Rose Hall/Wood Hall
- Bay shore (floodplain status) focusing on connections and use
- Desire for central student gathering space/quad space and downtown Green Bay facility
- Original master plan—focusing on interdisciplinary, ecological, green building principles

## Appendix A4: Conceptual Alternatives Survey and Feedback

The University is revising its Master Plan (or comprehensive development plan). The slides from Ken Saiki's presentation can be viewed using the D2L (Desire to Learn) web site set up for the Master Plan. Instructions and links can be found at http://www.uwgb.edu/pboffice/MasterPlan/index.htm. We want your input on the alternatives presented in the plan. This brief survey evaluates your perspective on five critical issues: traffic, parking, location of new buildings, pedestrians, and campus density.

<u>1.Traffic (access and "wayfinding").</u> Which of these alternatives to addressing issues of getting on and around campus do you favor and why? Check one, comment to the right.



2. Parking. With enrollment growth and with facilities plans like the expanded sports/events center, new parking will be needed. Where should new parking go? Check one, comment to the right.



3. New buildings. With growth would come a need for more academic buildings and student housing. Where should new buildings go? Check one, comment to the right.



<u>4.</u> Pedestrians. How should the campus address pedestrian circulation in the new master plan?

\_\_Move people outside. Maintain the concourse as is and encourage people to walk above ground.

\_\_\_Preserve both inside and outside. Add new concourses where possible but keep them small and plain looking to encourage people to walk above ground. \_\_Emphasize the inside. Add new concourses and accentuate "life under ground" by adding lounges, outdoor gathering areas, windows and other highlights.

5. Campus density. Which of the pictures below best illustrates the kind of campus you would like to see in the future? Check one, comment to the right.





Name (optional)

\_\_Faculty \_\_Academic Staff \_\_Classified Staff

# MASTER PLANNING SURVEY SUMMARY

<u>Alternative</u>	Academic Staff	<b>Classified Staff</b>	<u>Faculty</u>	<u>Total</u>
Traffic Alternative 1	18	13	7	38
Traffic Alternative 2	13	8	16	37
Traffic Alternative 3	15	12	5	32
Parking Alternative 1	2	5	5	12
Parking Alternative 2	28	19	17	64
Parking Alternative 3	13	11	6	30
New Buildings Alternative 1	4	5	2	11
New Buildings Alternative 2	20	15	15	50
New Buildings Alternative 3	22	12	10	44
Pedestrians Alternative 1	5	1	5	11
Pedestrians Alternative 2	11	11	7	29
Pedestrians Alternative 3	24	19	16	59
Campus Density Alternative 1	20	12	17	49
Campus Density Alternative 2	21	21	11	53

Number of surveys sent: 610 Number of surveys returned: 112 (9/14/04)

# MASTER PLANNING SURVEY RESULTS

CODE

AS Academic Staff

- CL Classified Staff
- **F** Faculty

## 

Southwest Entrance not as much used.

I like the circle idea because it is very confusing for visitors right now. Directions are hard to give.

Library and Weidner remain cornerstones to entry, although I do like the inner loop for sporting events.

Potential problems: traffic bottlenecks at main entrance and intersections w/main entrance.

Do not close southwest entrance. Add inner loop for sports center.

I like the completion of circle drive, but not the closing of the southwest entrance. We will need all of the entrance/exit paths as possible with more students.

Poor access to green lot.

Too much traffic for one entrance/exit.

Do not close the southwest entrance.

I like this concept but see a need for access to sports events. Also, many people are carrying materials to/from campus; somehow it would help to have easier access to the buildings by car to load/unload.

 ${\rm I}$  do not favor closing off the southwest loop – difficult to access that part of the arboretum.

People unfamiliar with campus would appreciate the main entrance being the first they encounter. Also, Weidner Center patrons would be closer to their destination as they enter.

Without road between Weidner and SA, trucks and buses will have hard time at Weidner.

Do not close the southwest entrance.

I think the southwest entrance should not be closed. If it was it would really load up the other entrance at busy times.

I like this one best. I would just de-emphasize SW entrance, not close it. Also, add the inner loop for sports events from plan 2 to ease traffic.

I like the idea of the road going behind the sports center rather than between PSC and MAC – too much pedestrian traffic between those buildings. I think the Welcome Booth should be relocated in an area close to the sports center and the union. Most new prospective students will start at the Union or sports center. Weidner Center people never stop at booth – most know where they are going. It would be nice to have a turn-about with the info center in the center.

Closing this entrance puts severe traffic pressure on other exits especially in late afternoon and during Weidner performances.

Keep main entrance. It is the best and first sight of the campus.

Having the entrance to campus along the bay is very appealing – also the visual appeal of Nicolet Drive.

De-emphasize SW entrance (not close) to avoid congestion on main entrance.

Can those two options be combined?

- 1. relocate circle
- 2. keep main entrance and sw entrance.
- 3. add inner loop for event center traffic.

Easier to give directions. Easier to follow directions.

I think that the addition of too many roads would take away from the campus environmental focus. However, I do not think reducing points of entry to the campus would help with increased traffic flow.

Closing entrance will create problems for Bayfest, Weidner events etc. Traffic lights at SW entrance will help safety issues. Road east of PSC makes pedestrian problems.

Main entrance needed for Weidner Center. Seems to be best choice.

Main entrance takes you to heart of campus - keep it.

Doesn't seem to be more easily navigable. Would create bottleneck at one entrance.

Closing off the extra street to Nicolet will cause a terrible bottleneck getting on and off campus before and after work and for Weidner Center.

Two exits on Nicolet provides an alternative to leaving campus at "risk" hour and after big events, for those getting on 43 from Nicolet and other area traffic. Would not like to see the southwest entrance closed although de-emphasize is ok.

I think this is the best of the alternatives presented because it is easier to see traffic on Nicolet Drive when leaving campus.

Southwest entrance is confusing to visitors. Enhance the entrance from 54/57.

Southwest drive is too congested, very bad in winter. I have sat waiting for traffic to move out onto Nicolet for a long time and traffic on Nicolet will not let you merge, 2 lanes useless. We need lights!!

Relocating Circle Drive is good idea. Closing Southwest entrance might cause problems for students leaving campus. It is heavily use currently.

No, what confusion to close SW entrance. Anyone who cannot read a map to find their way either does not belong in college or needs to go back to school for map reading. Creates much congestion by access roads. Relocating Circle Drive might be a good idea but expect more speeders if you make it more navigable.

Do not like closing SW entrance. We need all the entrances we have.

The main entrance is central and allows more people to at lest use common sense with directional use. Besides, a campus with an overall beltline if you will would be very convenient.

Please do not close any entrances. That would only create more bottlenecks. SW entrance need not be marked, but should stay open for folks who know where they are going.

Retain a main entrance while at the same time improving navigation around campus. Maintain the integrity of the campus and the arboretum.

Keep main entrance – better traffic control.

Ends confusion w/SW entrance. One main entrance off Nicolet would require traffic control, however.

No, No, No. No need to close Nicolet entrance.

Eliminates confusion about where main entrance is. SW entrance requires you to drive a long way before ever seeing a building.

Traffic: Alternative 2
F, F
AS,
CL, CL, CL, CL, CL, CL, CL

# CODEASAcademic StaffCLClassified StaffFFaculty

#### Comments:

Closing an exit to Nicolet will increase backups on Circle Drive. What is needed is some traffic control on Nicolet.

Do not close main entrance far too important for people trying to locate the Weidner Center. Many are not familiar with the campus.

Like the idea of inner loop. Not sure about closing main entrance – it is a beautiful intro to the campus.

If I am giving directions to someone for both a parking and a meeting spot, this looks simple.

I like deemphasizing one entrance. Not in favor of closing any entrance as it would

add to congestion exiting campus that already is high as long as not detract from spacious/environmental feel of campus.

I like entering the campus immediately off Nicolet. The inner loop will be valuable if the activity center becomes an active place.

Disadvantages: Further distance to drive on campus for Weidner Center. Also may be more confusing to patrons. Elimination of main entrance could create traffic backup. Traffic lights at entrance may be desirable at heavy traffic times. Main traffic way is not convenient to sports center.

Advantages: Would appear to require least amount of cost and construction disruption. Has most logical traffic flow around dorms.

This option would have a negative public input on access to Weidner Center.

I like the idea of an inner lop for sports/events, but not the path suggested. Also we need the main entrance for the Weidner Center.

Horrible access to Weidner Center.

De-emphasize main entrance (not close it).

Can' close main entrance - would make traffic for Weidner too difficult.

Would not close the main entrance as the campus already has very few entrances.

People often consider the SW entrance as the main entrance. Only the signage indicates otherwise.

If an inner loop is created, I hope serious attention is paid to the Hwy 54/57 turn-off.

Eliminating either entrance could cause traffic congestion at peak times. The inner loop for the PSC is a great idea.

Need to do something to alleviate traffic mess at intersection of Nicolet and southwest entrance.

Main entrance to far from the core.

Don't like entering and not seeing center of campus. Do like sports center loop.

With adequate signs, this option is appealing.

Closing entrances will create problems. Loop around PSC may work.

The simpler the better. Easy in – easy out – easy directions – easy signage. Only issue – no quick way to get to residence life. Have to drive all the way around or would people use Bay Settlement? We have huge traffic issues on weekend. 800-1000 cars on one Sunday afternoon navigating w/ minimal directions.

How does this affect Weidner traffic flow after an event?

Seems to make most sense.

I like this traffic plan for access to academic buildings, but the only concern I have is access by the public to the Weidner Center and Sport Center.

An inner loop for the sports center might be a good idea, but all the traffic ends up at one exit when considering campus exits.

De-emphasize "Main" entrance but do not close it. Do close it as an exit during Weidner Center events.

Main entrance seems to have limited value now. Get people on the circle.

Don't close main entrance.

The inner loops make the core of campus more accessible.

Perhaps a good idea.

Although this may be more expensive, I think the long-term goal of easier navigation and no confusing entrance rests w/this choice. Does current traffic count – rather send most via SW entrance now.

I like the inner loop for sports events, but do not like closing the main entrance. Again, we need all the entrances to handle traffic flow.

Close current main entrance to reduce confusion for incoming deliveries and surplus sale traffic.

I would like to see one main entrance using the present SW one and improving the flow of traffic at peak times, i.e. 4:30. I would also like to see bike paths along roadsides to prevent bikers riding on Nicolet. Maybe put a stop light on Nicolet.

No, No, No. The main entrance should be emphasized!

De-emphasize, but do not close main entrance. Welcome booth should be at Southwest entrance, since most folks approach from the south. Give these 2

entrances more logical names! User friendly.

CODE		
AS	Academic Staff	
CL	Classified Staff	
F	Faculty	

## Traffic: Alternative 3

#### Comments:

Like this approach - where will the parking booth be located?

Need to maintain traffic flow/access to/from Weidner Center. Can an addition sports/event center loop be added to this?

We need a main entrance that is clearly marked with "people" at the desk – Info Center – could be operated by student workers – long overdue.

Not this one - ruins aesthetic appeal of our beautiful campus.

This would make the campus more like a small city. More parking is always a plus.

Addition of numerous interior roads would decrease aesthetic beauty of campus, require greater maintenance and could create more safety issues for pedestrians and vehicle. This choice is least desirable.

Do not want to see either entrance closed.

Provides greatest flexibility for expansion and core of access.

Allows you to get into campus more. Keeps the main entrance and the 2 exits onto Nicolet.

No, keep cars on the outside of campus. We should not build more internal roads.

I do not see network of interior roads in this image. Where are they?

Interior roads and on street parking too much congestion especially with pedestrian traffic.

Try to minimize on-street parking. This would often lead to more congestion as drivers wait for others ho are parallel parking.

Lots of on street parking would be a mess to monitor. Currently difficult to direct visitors to correct building and lot. This would help. Also help handicapped access. Because this campus is atrocious for people w/disabilities – cannot park reasonably close to interior buildings.

One of the things people like about this campus is the traffic-free core. People unfamiliar with campus could become easily confused as they try to navigate congested streets and try to find their way.

Add sports center loop to this and you are set.

Road from WH lot to S to sports center. One road only. Will then work w/shuttle for parking.

I like the on street parking concept to cut the number of lots.

With increased enrollment, all entrances will be needed. Interior roads are a good idea. On-street parking is snail at economical.

On-street parking - need I say more.

On street parking will be a nightmare for traffic and snow removal.

More interior roads would make the campus feel more urban -not as safe or as comfy for pedestrians. Let's keep this a pedestrian campus please!

On street parking is a nightmare.

Violates a core element of original plan to limit auto traffic in middle of campus.

We are not an urban campus so this type of on-street parking will take away from the pedestrian end and natural beauty.

Keep the 3 entrances on Nicolet.

Seems logical but on-street parking provides congestion to the interior of the campus. More car and pedestrian accidents etc. during class changes.

Traffic congestion at 4-5 pm is already a problem. Need to increase ease of getting in and out of campus. More entrance points?

On-street parking good idea, but what about snow removal?

No.

Best! Can't eliminate entrance/exit roads. It is too congested now when leaving after work. Will roads have to be widened for on-street parking? Need a bike lane on Nicolet Drive. This is a dangerous area.

Do not like network of interior roads - just puts pedestrians at risk.

I think on street parking is problematic for snow removal.

Do not allow on-street parking - a mess!

No on-street parking; facility is already difficult enough for truck traffic.

Better, but would need to know more.

With 7,500 we would feel like a more alive, close knit community. Outside events/ programs would do better.

CODE

AS

CL

F

Academic Staff

Classified Staff

Faculty

#### 2. PARKING

#### <u>Alternative 1</u>

#### AS, AS F, F, F, F, F CL, CL, CL, CL, CL

Comments:

I am not sure people will want to park so far out for events at the new center.

Exclude on street parking.

Parking needs to be out of the core. The core needs to be green space.

Allows for expansion of facilities with no disruption to parking.

Our society needs more walking! However, I feel handicapped parking should be made available next to ALL buildings. The library gets many complaints on this issue.

Lot is too far out.

Do not like any of the categories for Parking. Having attended activities at major universities around the country, my feeling is for the few events annually shuttle them from LS or Wood Hall lot.

This opens up more parking for union and PSC and residents. We are running out of space for sports center and residents with all the additional buildings. I like the road behind the PSC not in front of the parking lots.

Allows for development of academic buildings. Easier snow removal?

No need to have new lot so far out. The land is not needed.

Too far out.

I think this option is the best based on what the campus was created on - environment friendly. Also, seems to be the safest for staff and students getting to their vehicle.

No, people complain about walking now. This cannot be a serious idea. I realize it is proposed by off campus planners.

Coexists with the campus idea. We need to build to maintain a campus theme.

This option does not fragment the open spaces, makes people get exercise, keeps noise levels down near buildings, keeps air cleaner near buildings.

#### Parking: Alternative 2

#### Comments:

Better for those long cold winters.

This seems a reasonable compromise between having parking too near or too far from buildings.

Not in the core. Do not want urban feel to campus.

I like the historical sense of keeping parking at the periphery of campus. Walking is healthy.

This seems reasonable but number one would be ok too.

Close to events/buildings but still within a convenient distance.

Closer to buildings is more convenient but out of core preserves inner beauty of campus.

Keep better access to Weidner --otherwise maybe acceptable.

People on this campus complain if they cannot park near buildings.

Something still needs to be done about handicap parking - maybe one special lot?

Bringing students closer is the attractive feature.

We have long, cold winters so parking should be located closer to buildings as opposed to along the periphery.

Provides easier access for handicapped, decreases travel time. On street parking too difficult to monitor.

Better for new sports center.

Best option because it reduces walking in winter months.

No reason not to make them closer. Keeps them a little further from the trails.

This would be valuable but additional parking is needed on the north end by the blue lot. On street parking can be a mess.

Increases residential parking options yet keeps green space at a premium. It would be nice to have connections to the commuter out lots and academic core via tunnels.

Looks like this is the most appealing option of the three listed.

Closer, yet not in core. It allows the students more convenience.

Avoids paving areas within academic core; maintaining the aesthetics and beauty of the core area.

Discourages housing students from driving to class. Assign parking for special lot instead of just parking in any lot.

Not too close and not too far; seems to be the middle-good choice.

Proximity to buildings is good. Will there be visitor spots in each or a couple of visitor lots? Will this address customer walk-in registration, i.e. shots stays in close proximity to buildings?

This seems reasonable, as long as the core remains pedestrian.

Keeps with current emphasis on lots outside campus core.

Best of both worlds -- fairly close parking without losing pedestrian core.

I prefer parking closer to the buildings unless of course you designate the closer lots for visitors and staff.

Create a designated faculty/staff lot or lots. Combine with on-street parking.

Save core for future needs. It does not increase walking distance.

Do not use yet – but seems logical.

The happy medium of the options.

Emphasis is not on parking but on the campus core.

One huge ramp at sight of existing sports center lot. It is close to MAC – close to housing and close to a expanded sports center. Raise parking rates – now ridiculously low – yes, I am a staff member. To help pay for new ramp, charge additional sports

center ticket price to pay for ramp. Charge additional Weidner event charge to help pay for ramp.

Students and others want and will use parking lots closer to buildings. It is nature of our climate vehicular mode for everyone and convenience culture we live in. Do not see this reversing or changing in the future.

I like the additional parking near housing, sports center and other lots. I think we may need more parking near sports center area.

I actually think our current parking is ok. This option seems closest to an expansion of what we have now.

A good compromise.

Allows shorter time to access buildings. Would not want on-street parking.

Yes, Yes - closer to buildings or even to access to the concourse.

People who bitch about walking on this campus should go to UWM or Madison for a day!

Parking is more aesthetically pleasing if kept at periphery.

#### Parking: Alternative 3

CODE AS Academic Staff CL Classified Staff F Faculty

# Comments:

Given the climate of the area and the number of people with special needs, it makes more sense to bring parking in rather than cut parking structure.

On street parking is a terrible idea. It is unsightly, and may look congested.

Looks to be easier for traffic flow and foot traffic.

We need a main entrance that is clearly marked with "people" at the desk – info center could be operated by student workers – long overdue.

I like the on street parking idea allowing employees to park closer to work locations.

Most user friendly system.

Too much congestion with pedestrian traffic.

Lots along roadsides are fine; avoid on-street parking.

Best for new sports center. Should connect lots via smaller roads.

Closer parking and on-street parking – smart economically and politically – retain all entrances.

On street parking - need I say more.

No on-street parking.

Do not like street parking idea.

Will create more traffic congestion.

Bad to increase traffic in core.

On-street parking will cause problems with snow removal plus traffic will not flow when people are parking and pulling out along the roads.

Try to impact the Arboretum as little as possible.

No, new interior roads would be clogged with traffic and pedestrians – a step backward.

I like this option also except for on-road parking – too hazardous. But I like the location of those lots.

Provides important access while preserving the beauty of the campus. The fewer functional lots the better.

Pedestrian traffic good. On street parking encourage it.

No on-street parking. It would create more accidents between parking cars and cars driving by.

## **3. NEW BUILDINGS**

Alternative 1

CL, CL, CL, C, CL F, F AS, AS, AS, AS

#### Comments:

Keeping students closer to rest of campus will make it easier for them to get to classes.

Disadvantage: Separation from existing student residence.

COL	DE .
AS	Academic Staff
CL	Classified Staff
F	Faculty

Students won't interact with older adults as in possibility.

Initially students in new housing may consider themselves isolated from others.

Too far removed from existing housing.

Too far from existing buildings.

Logistics with AC's and RA rounds would be tough especially due to disconnect from Com. Center. Many things will be housed at the CC when additions are completed.

I like this one. I do think you should allow some roadside parking in new area.

Yikes!

Housing in this one will be quite far from union.

No way – while perhaps pleasing to some students due to proximity to Nicolet Drive, this is a disaster for housing staff trying to complete tasks efficiently. Split campus, this is practical only if housing area proposed is graduate or married housing area.

Do not like to separate student housing.

Would get the feeling of a campus atmosphere w/SW buildings as people approach the campus area – academic buildings, not housing.

More equitable distance from all buildings to academic core.

# New Buildings: Alternative 2

When the surrounding area becomes more developed, students will be more likely to use it.

Keeps students integrated with campus.

The possibility of connecting to off-campus developments sounds most promising.

We need a main entrance that is clearly marked with "people" at the desk – info center could be operated by student workers – long overdue.

This sounds great if retail development can come off Scottwood.

I think the community should eventually include commercial development -- is an attractive option.

I like the idea of future development close to our housing.

Keep existing and new residence areas together – more community spirit; easier maintenance.

Keeps housing together while also keeping it set off as its own community.

Housing/unit/sports center should make a cluster.

But with new building both SW and SE of Core.

Keep student housing together so students do not seem isolated in another area.

Keep housing in one location easier to monitor.

Do not overcrowd the southwest.

Keep them together.

UW-Green Bay Campus Master Plan

# Keep housing close to existing housing.

#### Elongates campus.

I think it is important to keep all housing together for community feeling.

I think that keeping student housing in the same general area as it currently is located is a good idea.

Keeps housing together. Allows greatest flexibility for long-term expansion, growth of both housing and academic buildings.

I think housing should stay together.

Keep students near each other for interaction-type activities.

Keeps housing together in one area – much easier to foster community building. Keeps the campus core less clustered and aesthetically planning.

Keep housing together.

Best to keep housing outside of campus core.

I think it is important to locate all housing in one area of the university. But I would recommend that only upper classmen live in the faraway residence halls and keep freshmen close by campus.

Having been an on-campus student, I thought it was nice to have all the housing in one area. I also feel that if you were walking back to the housing without a friend that it was a pretty good bet that at least one other person was walking back to housing.

Keep NE core free for more expansion.

It would seem more efficient to keep student housing together on the northeast part of campus.

Remove the Wood Hall lot and extend academic buildings in that area, Parking?

Important to maintain housing in a central location.

Combination of Alternative 2 and 3 - Red area is a swamp and not a good place

to build. Blue area a good place to put a circle of buildings such as the ones nearby. Currently empty field requires no removal of valuable trees or destruction of wetland (this person colored in red and blue on survey as referred to in comment.)

A few other thoughts regarding student housing: The rumor was, several years ago when I worked that some or all of the older student apartments would be torn down at some point. I do not know if this was to make room for new housing buildings, green space or whatever. I just want to say that unless the proposed, if accurate is at lest 20 years down the road, this would be a big mistake economically. The mortgages or other loans on these buildings are paid off, I assume, and I believe from working in all of them that they are structurally sound. Of more concern to me is the first four UVHI buildings constructed which I believe are more shoddily built and have first floors which are fatally flowed, so to speak, since they are part way underground and prone to water and mildew problems. It would be better to keep the old apartments at 2 people to a two bedroom apartment to make them more attractive, than to tear them down, assuming this is economically feasible from Residence Life's point of view.

Keep housing all together. This is the only way kids can interact when not using the rest of campus.

I believe the on campus living experience for a campus of our size is best served by one central housing development. With a new S & EC this is accessible and preserves the beauty of campus.

Keep housing in one place.

Keep student housing together.

Keep housing together to service the people living there more easily.

# New Buildings: Alternative 3

#### Comments:

Would benefit students w/disabilities.

Increase density will promote more pedestrian activity.

Campus core should maintain academic focus.

I know you have heard this before – but I think it is important to preserve as much of the arboretum as possible.

Brings students closer - it is the attractive feature.

Keeps a closer community feeling.

This would encourage students to use expanded union and PSC more. May create parking issues as most students bring cars.

For interaction of residential students and the RA/AC staff, this would be the best of the three.

I think this one should have more parking for Residence away from Union and PSC and MAC.

Closer housing is user-friendly. Emphasize the Union more to support on-campus living. Housing closer to Shorewood would be nice (by #8 Green or south of #11 Fairway).

Housing closer to campus core would lead to more program interaction.

Housing closer to campus core provides easy walking access.

Too congested this way.

Housing: It is easier for students to walk and closer to union. Academic: closer to entrance.

Better proximity to campus core for student housing.

Keep students close to academic buildings and other housing creating community climate.

Students are clear that they want closer to core. Since housing is consumer choice and solely dependent on student choice and rest to survive need to pay most attention to what students want. No disadvantages to university goals of community building and efficient cost effective operations.

Keep housing together. Do not like idea of seeing housing at SW entrance. Keep this area natural as it now is.

I like having student housing closer to the campus core. May encourage more student participation in campus events and more interaction with each other. But would it hinder future building expansion?? Has anyone given any thought to the hundreds of visitors to our campus?? When our prospective students and their families come to visit, we need something easy for them to access. They need to be able to get to the admissions office easily.

I would like to see more living/learning programming and think getting housing in closer would help create that.

This allows student activity to be part of campus without seeming to be center of campus.

Keep housing together. Old northeast vs. new southwest - not good.

Housing should be kept in the same area to create a community.

# 4. PEDESTRIANS

Alternative 1 AS, AS, AS, AS, AS, AS F, F, F, F, F CL

# Comments:

Would have to make the outdoors more people friendly -- benches, clear signage, path etc. As it is now the outside is not conducive to pedestrian traffic.

CODE

Academic Staff

**Classified Staff** 

Faculty

AS

CL

F

The students will cut across the grass - leave worn paths everywhere.

Not in this climate.

#### Pedestrians: Alternative 2

Students appreciate the tunnels.

Economically feasible.

Encourage people to walk as it is good exercise and extends life!

Not affordable.

What about sidewalks to parking lots??? Like the Weidner Center lots?

Keep some inside walking w/this one.

Why on earth would you do this!!

Improve outdoor accessibility i.e. LS to Union walk.

The tunnels are an attraction for prospective students – makes UWGB unique.

Makes school special.

That is why students like it here.

Add concourses above ground. Too much of this beautiful campus and it employees are underground. The above ground concourses should be all windows.

Considering the inadequate amount of staff to remove snow in winter and how many doorways are closed in winter, you need adequate inside pathways.

This is our campus special feature and what attracts many students.

Stay interconnected - matches interdisciplinary mission.

This is attractive to our student body. It is a huge selling point now especially in winter. Keep the outside aesthetically alive as well and let people choose. They usually walk the shortest distance anyway!

Great for studying between classes. However, the outside also should be preserved if possible.

Above ground in. -50 wind chill is not an option.

Nine months we have cool/cold weather, we live in Wisconsin. I believe the tunnels are a plus for UWGB.

Let's not forget the weather is lousy in Green Bay six months per year. The best part of the main campus is the tunnel system.

Because we need to choose and investment in inside has already been made.

I really like our unique tunnels, especially during our cold winter months. Students can take outside route if they wish.

Like this idea –need gathering areas.

# 5. CAMPUS DENSITY

#### Alternative 1

More likely to maintain a pedestrian campus.

The academic core should be concentrated – promote interaction, engagement around learning – minimize distance between classes.

Build density by design - leaving large open areas for the future.

When things are too spread out, people are less like to participate.

An attraction of our campus is its beauty. Keep learning and civilization at the heart of campus surrounded by open, natural beauty.

Many students choose UWGB for the open areas. It is important to keep open access around student housing so they have place for activities and stress relief.

We have a feel students like and we should conserve that if possible.

Natural areas on campus should be preserved as much as possible.

Keep draw at core of campus. This is a scenic campus. It should stay that way.

I think this plan will better maintain the overall aesthetic of the campus. Too many roads confuse people and make it difficult to give directions without lots of signage.

I like a dense pedestrian core with the car and housing on periphery.

I think it is easier for people to navigate a cluster of buildings rather than feeling overwhelmed by academic and housing buildings being intermingled. If you know to go to housing, you can go to the housing area to look for your building. The same is true for academic buildings. I also think this preserves the idea of an environmentally friendly campus.

Preserve green space and fill core.

Keep campus environmentally focused - condense.

I like this better than the 2<sup>nd</sup> alternative, but have problems with both. In a time of tight budgets which will likely remain for decades, anything that adds excess costs will never get past the legislature to begin with. It is best to use existing roadways and corridors rather than tear up the countryside for 15 y ears and add prohibitive costs to campus renewal. At some point someone has to say enough is enough as far as people having to walk too far to get to their destination. People drive around for ten

minutes looking for a closer place to park, then spend 20 minutes each way driving to the exercise studio or the diet center.

Open, park-like setting is what makes campus unique – need to maintain that identity for UWGB.

Keep things structured like commercial/residential zoning in real life is the best. Kids need to be away from academics too -- especially for free-time.

Most in line with the existing campus, preserves the functionality and beauty of campus. We are currently unique for many reasons and one is the breadth of the campus and its beauty.

Maintain rural feeling as much as possible.

Keeping vehicle traffic down within core should be a priority. There is already too much vehicle traffic (service vehicles) on service road.

There are so many things that make our campus unique – the woods, the concourse, the closeness that it would be a shame to lose them. One knows change is necessary but let's keep our uniqueness.

Keeps open spaces open for us to enjoy. Avoid interior roads that bring noise, fumes and make it harder for pedestrians to walk safely.

A dense core presents a better sense of community. I like the sidewalk idea.

#### **Campus Density Alternative 2**

Our current campus "feel" is important – our signature. Concentration at the center w/roads is not ideal.

I just think this would look nicer.

This plan seems as though it would be a happy camper.

More roads connecting buildings only increases congestion.

May offer more of a community feeling.

It keeps things focused in a general area. As the campus grows in the distant future it will most likely have to spread out.

More open feeling.

Keeps arboretum more intact. Easier for residential students.

The closer and more connected the entire campus the better. Added housing by the union, community center and golf courses is preferred.

Avoids buildings being cramped together.

Spreading the density across campus -though adding more roads may make it more confusing.

My biggest issues include getting people to Residence Life --then from Residence Life to Weidner. Too many turns irritate them! Ease is the key.

I like increased density across campus. Do not like road inside circle drive.

I like creating the feel of an active campus. (like Lawrence in Appleton). Dislike idea of roads (traffic) every 9 feet.

This increases the opportunity for the best of both worlds – density in a 700 acre campus of 5,800 or 7,800 students.

# Inventory

# **Electrical Service:**

The campus electrical service originates at the Heating/Chilling Center. Two separate (preferred and alternate) primary, sources of 7.2/12.5 KV are provided from Wisconsin Public Service (WPS) to weather-protected 15KV switchgear. The switchgear consists of two 15KV main circuit breakers (preferred and alternate), metering and six (6), 15KV feeder breakers. In order to transfer from one source to the other, WPS is required to de-energize the services, while the campus electricians mechanically make the switch over.

Two of the feeder breakers serve the Heating/Chilling Center. One serves the facility substation in the basement and the other feeds an oil- filled exterior transformer, which serves a 4160 V chiller on the first floor. The remaining four feeder breakers serve the following groups of buildings: 1) Lab Science, Environmental Sciences and Instructional Services. 2) M.A.C. Hall, Kress Events Center, Physical Plant, Sports Lighting, Parking and Street Lighting. 3) Rose Hall, Wood Hall and Cofrin Library. 4) Student Services/Union, Theater Hall, Studio Arts and the Weidner Center. The primary distribution system is composed of 15 KV shielded polyethylene insulated cables run in ducts, encased in concrete, with manholes every 250 FT or less. The system is a basic multiple loop system, where the loops are operated open with sectionalizing switches pad mounted outdoors to permit feeding the entire load on the loop from either terminal. There is one spare switch terminal available at a pad- mounted switch located adjacent to manhole P-8 and one spare switch terminal available at a pad mounted switch adjacent to P-15. Not all the facilities are on the loop; some are radial fed. The loop system is preferred by the Facilities Management Department.

All the residence hall buildings in the northeast corner of the campus are served directly from WPS services at less than 600V. These buildings are separately metered.

The main switchgear is original equipment installed in 1970, but is in fair condition. The main breakers were cleaned in 2001. There are no spare breakers and the space within the switchgear yard is full and not expandable without fencing and wall revisions. The cables and sectional switches were installed in 1985 and the campus has not experienced any problems with this system.

# Power Distribution (Normal Power):

The facilities on campus each have their own service transformer located in a vault,

which provides the building with 480/277 V or 120/208V, 3 phase, 4-wire power. Some of the transformers are original and others have been upgraded or replaced. The metering and distribution equipment within the facilities varies in type and condition depending upon the age of the system and the amount of upgrades or additions done in the past. Rose Hall and Wood Hall do not have main disconnects on the secondary side of their service transformers.

## Power Distribution (Emergency Power):

Many of the campus facilities have emergency stand-by generators. The smaller units (100 KW and smaller) are natural gas type. The larger units are diesel type with associated fuel storage tanks. The generators are 480 V or 120/208 V depending upon the normal service to the building. The Lab Sciences building has two generators; a newer diesel unit, which serves the Lab Sciences, and an older natural gas unit, which serves Environmental Sciences and Instructional Services buildings.

## Uninterruptible Power Systems:

The Instructional Services Building contains the Campus Main Telecommunications Network equipment. The equipment is connected to individual UPS units. There is no main shut-off for the banks of UPS's.

# Site Roadway, Pathway, and Parking Lighting:

The campus pathway lighting was replaced in the mid 1990s with "Kim" semi-cutoff fixtures on pedestrian scaled poles in all locations except for the plaza lighting of the library. The "Kim" fixtures are in good shape and provide adequate illumination. The roadway lighting fixtures are cobra head style fixtures arm mounted to poles. In the late 1970s, to reduce energy consumption, every other fixture was removed and the remaining fixtures were retro fitted with high- pressure sodium lamps.

# Central Heating/Cooling Plant:

The campus is set up with a central boiler, chiller, and compressed air distribution system via an underground "walk-through" tunnel. The central plant is actually located at the south end of campus, across Highway 54/57. The tunnel extends to the north with a partial section of tunnel extending to the east, while the main tunnel artery feeding existing buildings runs to the west and then to the north ending at the Theatre Hall. The piping in the tunnel is sized for a campus of almost twice the existing size. A majority of the equipment in the central plant has been replaced. Existing equipment which is original has been well maintained and is in very good shape. All utilities are metered separately, however the steam, chilled



**Cofrin Library Lighting** As lighting on campus is updated, fixtures should be cut-off type and should conform to the International Dark-Sky Association Standards.

water, and compressed air utilities supplied to the campus by the plant are not metered.

The student residential housing complex at the northeast corner of campus uses gas, water, sewer, and electric. The water is distribute from the campus system while the sanitary is a separate feed. The electric and gas are separate feeds to this area from WPS corporate mains.

# Chilled Water:

The chilled water system has three chillers, a 1400-ton electric chiller, 1200-ton electric chiller and a 725-ton steam turbine chiller. The turbine chiller is not used and needs some repairs. Each of the chillers has a circulating pump which pumps into the primary variable flow campus chilled water distribution system. This loop distributes chilled water to the campus through the underground tunnel system.

There are two primary chilled water pumps, 300 HP variable speed pump, and a 150 HP variable speed pump. The 150 HP pump can easily maintain the system flow for one chiller, but not two. The 300 HP pump can handle three chillers on line. There were flow restrictors installed in the distribution piping from the chilled water mains to each of the buildings to help balance the flow and maintain pressure in the main piping system. The original pumping system used a primary distribution pump and building secondary pumps. This system was removed due to problems maintaining a return water temperature differential and over pumping the loop. There have been no issues with cooling of any of the buildings on campus as long as they maintain 45F water temperature.

The underground piping system has a capacity of 320,000 gallons. This storage ability allows for one hour of peak load capacity. The campus currently drops the loop temperature at night to below 39 degrees and uses that capacity during the day by demand limiting the chillers. Past campus operation has been to demand limit to a maximum of one chiller. With the increase in new buildings and remodeling on campus, the campus load on a peak day is actually 2,700 tons by calculation. The actual load by diversity is 2,400 tons. This requires that both chillers operate to maintain system temperature through the day. By continuing their demand limit concept, they essentially lose capacity on their buildings before noon with only one chiller operating.

By operating the existing two chillers at full load and utilizing the underground sub-cooled loop, the campus can add 400 tons or 15 percent capacity without additional equipment. The piping and primary variable speed drive pump system could actually support a third pump and chiller which would allow the campus load to grow by 50 percent.

# Compressed Air:

There is a 6" compressed air pipe which runs through the underground tunnel system feeding pneumatic air to each building. Compressed air is primarily used for the temperature control system. This system also provides air for the art and woodworking classes in Studio Arts and the laboratories in the Laboratory Science Buildings. All of the buildings on campus are connected to the main air compressor system, except for the recent building, M.A.C. Hall, which has its own separate air compressor. There are two 25 HP air compressors in the central heating/cooling plant distributing 100 lbs. pressure throughout the tunnel system. Only one compressor is required to operate to maintain load. There are no capacity problems with this existing system.

#### Steam:

The steam system utilizes two 60,000 lb/hour boilers (one is decommissioned), one 30,000 lb/hour boiler, and an 8,000 lb/hour summer boiler. The summer boiler is slated for replacement by three 15,225lb/hr high efficiency boilers in 2005. Steam is distributed at 100 lb. pressure and is reduced in pressure at each of the buildings to 15 lb. pressure for use in the heating systems.

The steam system has a large deaerator and water conditioning system for maintaining the physical condition of the equipment and piping. There is a condensate return piping system which utilizes individual building condensate pumps to return the condensate back to the boiler plant. The typical temperature of the return water is 160 degrees. Approximately 90 to 95 percent of the water is returned back to the deaerator system.

A calculated maximum peak load for the campus is 45,000 lbs/hour and the actual operating capacity with diversity is 38,000 lbs/hour. The summer load is approximately 8,000 lbs/hour during the peak summer months which allowed minimal operating time on the old summer boiler. An 18,000 lbs/hour load is anticipated in the spring and fall months.

The existing boiler equipment and piping system can easily support a campus of twice its current size.

# City Water:

There are 12" and 10" city water mains which feed the campus from the south. There is also an 8" main that comes off Nicolet Drive on the northeast side of campus. One of the water meter pits (12" service at the south-west) has been decommissioned by the city due to pipe failures. The water system is a semi-circular loop which is not connected at the south end. Many of the buildings are fed with 3" or 4" distribution piping from the main which will not accommodate adding a fire protection system in the future. The city water pressure to the building is 45 psi and is marginal for system requirements.

Some of the buildings have water softeners, although the water system is from the Green Bay Water Department which has a lower mineral content than surrounding areas. Many of the buildings have back-flow preventors installed to protect the main water system. Maintaining and sizing of these is critical. The campus is at the end of the city water mains. There is a 16" high pressure water main at the east side of campus, installed in 1982, to serve the new residential and institutional construction north of campus. This main is available to supply campus, utilizing a pressure regulator. Division of State Facilities (DSF) has initiated a water survey to clarify future water main needs.

# Natural Gas:

There is a natural gas pipe which is extended throughout the campus. This pipe is separate from the tunnel piping system. The natural gas piping feeds the emergency generators in designated buildings, classrooms in the Laboratory Building and the Studio Arts building. The natural gas is distributed at a high pressure and

reduced in pressure at each of the buildings. The natural gas piping system that feeds the campus originates from the physical plant meter.

There is a separate 2" gas main which feeds the UW-Housing residence hall buildings and the Union building kitchen loads.

## Storm and Sanitary:

There are two main storm and sanitary distribution points for the campus. The two sanitary pipes are connected to the city mains in Nicolet Drive. The two storm pipes discharge to the Waters of Green Bay. One set is extended from south of campus and the other is from the north. The storm and sanitary systems are adequate and will accommodate future expansion. The Union has grease separators to protect the piping system. There are also various other storm water discharges to Mahon Creek and City water easements. The UW-Green Bay housing area has a separate 8" sanitary main.

There is a concurrent and separate UW System Stormwater Study being conducted by OMNNI Associates which will provide for water retention and filtering of the storm water systems on campus.

# **Recommendations:**

Electrical Service:

- The EXISTING Main 15KV switchgear should be replaced with a new line up of sheltered-aisle- 15KV switchgear with adequate distribution breakers for future loads.
  - This new switchgear shall be located in the same location as was the existing gear.
  - Equipment and working clearances should be maintained per National Electric Code (NEC)
- Existing exterior vault enclosure and canopy may need to be revised
- Spare ducts and/or new ducts may be needed from the switchgear line- up running east in the area north of the Heating/Chilling Center and then north under Highway 54/57 to the main campus area north of the highway. New utility corridors/tunnels should be established to facilitate the expansion of utility services without interfering with future premium campus growth areas.

- Corridors need to be utilized and adhered to at all times rather than taking the shortest route from one point to another; thus maintaining proper clearances around future building sites
- Provide new 15 KV switches along the utility corridors, at locations that facilitate the extension of feeders to new construction areas of the campus
  - The basic multiple loop system shall be continued for all services to new buildings.
- Existing radial fed buildings can be revised into the loop system during major renovations of those facilities and/or their services
- Conduct a Coordination, Short Circuit and Arc Flash study on the entire primary and secondary services
  - Information provided will be useful in sizing fuses and current relays to coordinate with utility as well as internally

# Power Distribution (Normal Power):

- Main disconnects should be added at the secondary side of the service transformers of Rose and Wood Halls to meet NEC
- New buildings are to have exterior pad mounted or interior vault type service transformers, depending upon project budget, interior and exterior space limitations.
- Spare service conduits shall be provided as feasible
- · Main circuit breakers or fused switches shall be provided
- Transient Voltage Surge Suppression units shall be installed at main distribution switchboards and panel boards.

# Power Distribution (Emergency Power):

- New buildings are to have stand-by emergency generators installed in separate, fire rated rooms, or on the exterior of the building with the appropriate visual and sound screening.
  - Two transfer switches to be provided; one for life safety egress lighting and the other for critical equipment and devices.
- The IS building should have its' own dedicated emergency generator

# Uninterruptible Power Systems:

- The electrical distribution of the campus network UPS and the WPNE UPS at the IS building should be updated.
- Larger UPS units should be installed, rather than many small units
- For easier maintenance, the entire system should have the minimal amount of main disconnects

# Site Roadway, Pathway, and Parking Lighting:

- All new pole top fixtures to be Metal Halide or High Pressure Sodium, cut-off type luminaries. Reference ANSI/IES RP-8 and RP-20.
- All site lighting wiring is recommended to be in conduit and over sized for voltage drop
  - Higher voltages, 480V, 277V and 208V to be utilized for site lighting systems

# Central Heating/Cooling Plant:

- Any new construction should be connected to the tunnel system
  - The physical condition of the tunnel is good, although repairs are needed at the manholes and at a section of the tunnel under Highway 54/57
  - The tunnel has flooded approximately three times in the past, and the chilled water insulation in the tunnel needs to be replaced or repaired
    - Insulation replacement by means of a payback has been reviewed in the past with negative results. With the increased cost of energy a revised evaluation is necessary
    - The insulation is still wet in sections of the tunnel, therefore deterioration of the exterior of the pipe may occur
  - It is recommended that a back-up water pumping system be reviewed or that the pumps be monitored for failure to keep tunnel dry
  - The main distribution piping is adequately sized for future buildings at the south and west end of campus
    - The east side of campus has been extended from the capped main at the lower southeast corner of the tunnel system
    - This piping is direct buried using the shortest route
    - Consideration should be made in the future that the main tunnel distribution system be extended and that the concept of extending underground direct buried piping not be continued for cost reasons
- Utility corridors should be established to avoid having to move piping in the future
  - The first issue with an east side tunnel extension will be The Union project. The existing utilities serving the Commons are at maximum capacity.
  - The potential exists for a future co-generation use at the Central Plant
  - Space should be maintained in this building for this potential use
  - Steam from this co-generation system can be used for year-around campus steam needs and in the summer for the steam turbine or future third chiller
     This future third chiller could be an absorber type chiller
  - The electrical distribution for the campus is located adjacent to the Central Plant, so electrical generation use is very viable.

# Chilled Water:

- The chilled water system is in very good condition and the existing pump and distribution pipe size allows for 50 percent future capacity expansion
- The 150hp primary pump should be replaced with a larger pump to allow for full load back-up and expansion of the system
- The campus should either use the 725 ton steam turbine chiller or replace it with a third chiller to provide back-up capacity for campus use.
  - Currently, the campus will need both electric chillers running at over 90 percent capacity on a peak day
  - Operating the steam turbine would reduce electrical demand usage at peak load and have an energy payback. The cost of repairs/upkeep of the system would need to be included in the study. The new "summer" boilers will allow for the capacity to operate this steam turbine
- A second cooling tower is required to operate three chillers
- The past use of demand limiting should not be reconvened as it will cause long term damage to buildings finishes

## Compressed Air:

- A compressed air system has adequate capacity for future expansion
- The future need of compressed air for the temperature control system will be reduced
  - Future control systems will probably utilize electric valves, and damper operators and direct digital controllers

#### Steam:

- A steam system and distribution piping is in excellent shape and the only concern is the size and efficiency of current equipment.
- The summer boiler is slated to be replaced by multiple higher efficiency boilers in 2005
- Replacement of the distribution condensate pumps from each of the buildings back to the physical plant should be continued

# City Water:

- The city water system should have a pipe extended at the south end of campus from the existing abandoned 12" meter pit at the southwest corner to the 10" meter pit at the southeast corner
  - This will provide a complete loop around the campus for water distribution, reduce pressure loss and maintain better flow through the dead-ended condition at the south-west meter pit

- A water flow study should be commissioned to review the potential connection to the high pressure city water pipe
- Campus should also use a minimum 6" pipe for future buildings and for replacement of water lines into existing buildings
  - The 6" size will accommodate future fire protection use

## Storm and Sanitary:

• The storm and sanitary piping systems are in good condition and able to be connected onto for future buildings

# Implementation:

- Conduct all relevant studies for further information on specific aspects of campus utilities
- Use separate studies as reference to the Master Plan.
### **Appendix C: Non-Campus Entities**

### UVHI

University Village Housing Incorporated (UVHI) was formed in 1984 for the express and sole purpose of providing low-cost housing for the students of the University of Wisconsin-Green Bay.

At the time, the University operated a 563-bed student apartment facility which is still operated today by the University. Because of a State of Wisconsin moratorium on residence hall construction, UW-Green Bay was unable to obtain state funding for construction of additional facilities to meet students' demand for on-campus housing.

UVHI in essence provides the facilities for occupancy while the University provides management services for the facilities. Debt service payments and insurance expenses are the responsibility of UVHI, while the University is responsible for maintenance and marketing of the residence halls.

The University of Wisconsin – Green Bay and UVHI entered into a cooperation agreement for 30 years commencing September 1, 1990. The agreement allows the University sole and exclusive use of the UVHI-owned properties. The University has an exclusive option to purchase the properties for the amount of the total mortgage outstanding on the properties should the University wish to exercise that option.

Effective July 1, 2001, this cooperation agreement was revised for a period of 30 years subordinating management fees paid to the University to all obligations of UVHI under the Project Contract, mortgage notes issued thereunder (such as the Series 2005A Note), and any special parity debt (such as the Series 2001B Note). All other terms and conditions remain substantially the same.

#### **Ecumenical Center**

The sole purpose of the Ecumenical Center is to provide non-denominational campus ministry for the University of Wisconsin-Green Bay campus. The Ecumenical Center property is owned by a 501.C.3 committee for campus ministry, University of Wisconsin-Green Bay, Inc.

# Appendix D: Demographic Survey

#### Non-campus residents by Zip Code

The first map shows the 68 zip codes that have 10 or more addresses for students who did not live on campus in 2004-05 (not 0 or more, as listed in the key). These 68 zip codes contain 85% of all non-campus addresses. The second map shows the 7 zip codes that might be considered our "core" service area, the dark blue and green ones with over 200 addresses per zip code.





Over half (55%) of all non-campus addresses come from BEYOND these 7 zip codes, and could not be considered eligible for bus service. Even within the "core", bus service is limited almost entirely to four zip codes – 54301, 54302, 54303 and 54304 (in the box). Less than a quarter (22%) of non-campus addresses fall within one of those four zip codes.



# Appendix E: Spatial Standards for Roundabouts

The City of Green Bay and Brown County have taken steps in recent years to introduce roundabouts to intersections as traffic calming devices, replacing the signaled intersections and lines of cars that are commonplace in the roadway landscape today. Issue of traffic control, particularly along Nicolet Drive at the Nicolet and Main entrances was raised during the input and planning sessions. Unfortunately, Wisconsin DOT traffic counts do not warrant the installation of a traffic control measure, such as a stop light, at any of the intersections.

UW-Green Bay has an opportunity to ally itself with the progressive measures being taken in local jurisdictions and create a partnership that could perhaps result in the design and implementation of a roundabout at the Nicolet Entrance to campus. The Master Plan explores this as a viable option and ultimately shows an urban double roundabout at this intersection. A second roundabout, at the intersection of Campus Drive (currently South Campus Drive) and Sports Center road on the UW – Green Bay campus, is designed as an urban compact roundabout. This smaller roundabout was added in anticipation of increased traffic due to the construction of the

Highway 54/57 and Bay Settlement Road Interchanges as well as the addition of the	ì
Kress Events Center, which has the potential to draw larger crowds during events	•

The United States Department of Transportation and Federal Highway Administration have created a publication that delves into the issues of roundabouts in the United States and provides examples, spatial standards, and considerations when designing roundabouts for a variety of locations and situations. The spatial standards diagrams included in this appendix are taken from this guide. (Roundabouts: An Informational Guide. U.S. Department of Transportation. Publication Number FHWA-RD-00-067, June 2000). This guide is available to the general public on an unrestricted basis.

	1		2		3			1	2	3
	Nicolet Drive Mahon to SW UWGB Entrance		Nicolet Drive SW UWGB and Main Entrance		Nicolet Drive Main Entrance to Scottwood Drive		Scottwood Drive	NORTH- BOUND +	NORTH- BOUND +	NORTHBOUND +
TIME	NORTHBOUND	SOUTHBOUND	NORTHBOUND	SOUTHBOUND	NORTHBOUND	SOUTHBOUND	NORTHBOUND/SOUTHBOUND	SOUTHBOUND	SOUTHBOUND	SOUTHBOUND
12 A.M 1 A.M.	22	24	21	16	27	18	17	46	37	45
1 A.M 2 A.M.	15	10	17	11	25	7	16	25	28	32
2 A.M 3 A.M.	15	6	12	6	13	6	14	21	18	19
3 A.M 4 A.M.	6	4	7	6	8	6	3	10	13	14
4 A.M 5 A.M.	7	18	4	26	3	25	8	25	30	28
5 A.M 6 A.M.	37	105	21	126	19	99	34	142	147	118
6 A.M 7 A.M.	138	282	92	326	85	265	100	420	418	350
7 A.M 8 A.M.	785	492	394	458	357	437	190	1277	852	794
8 A.M 9 A.M.	515	274	288	217	279	236	87	789	505	515
9 A.M 10 A.M.	705	303	360	219	350	199	87	1008	579	549
10 A.M 11 A.M.	456	376	264	248	257	255	94	832	512	512
11 A.M 12 P.M.	320	426	202	333	140	245	95	746	535	385
12 P.M 1 P.M.	519	572	273	302	190	394	129	1091	575	584
1 P.M 2 P.M.	488	479	256	378	163	307	108	967	634	470
2 P.M 3 P.M.	360	458	280	334	248	300	137	818	614	548
3 P.M 4 P.M.	519	738	353	404	267	495	149	1257	757	762
4 P.M 5 P.M.	543	674	432	535	397	540	205	1217	967	937
5 P.M 6 P.M.	595	493	450	362	383	385	204	1088	812	768
6 P.M 7 P.M.	354	367	289	259	255	293	138	721	548	548
7 P.M 8 P.M.	253	310	221	254	213	254	114	563	475	467
8 P.M 9 P.M.	211	314	171	186	144	292	91	525	357	436
9 P.M 10 P.M.	143	174	123	97	125	147	55	317	220	272
10 P.M 11 P.M.	100	86	84	63	87	66	66	186	147	153
11 P.M 12 A.M.	51	64	43	42	40	29	34	115	85	69
TOTAL	7157	7049	4657	5208	4075	5300	2175	14206	9865	9375

Site Category	Inscribed Circle Diameter Range
Mini-roundabout	13-25m (45-80 ft)
Urban compact	25-30m (80-100 ft)
Urban single-lane	30-40m (100-130 ft)
Urban double lane	45-55m (150-180 ft)
Rural single lane	35-40m (115-130 ft)
Rural double lane	55-60m (180-200 ft)

**Roundabout Standards** (Above) "Typical Inscribed circle diameter ranges by roundabout category." From Roundabouts: An Informational Guide. U.S. Department of Transportation. Publication Number FHWA-RD-00-067, June 2000.

**Vehicle Volume Summary** (Left) Traffic counts on Nicolet Drive from Mahon to Scottwood Drive during September 23-29 2002 demonstrate that the volume does not warrant the installation of control devices such as a signalized intersections.



**Urban Compact Roundabout** An example of an urban compact roundabout proposed at the intersection of Campus Drive (currently South Campus Drive) and Sports Center Drive. From Roundabouts: An Informational Guide. U.S. Department of Transportation. Publication Number FHWA-RD-00-067, June 2000.



**Urban Double Roundabout** An example of an urban double roundabout proposed at the intersection of Campus Drive (currently South Campus Drive) and Nicolet Drive at the Nicolet Entrance to the UW – Green Bay campus. From Roundabouts: An Informational Guide. U.S. Department of Transportation. Publication Number FHWA-RD-00-067, June 2000.



Additional Roundabout Configurations Examples of other roundabout sizes and configurations. Top left: typical mini-roundabout, top right: typical single-lane roundabout, bottom left: typical rural single lane roundabout, bottom right: typical flared entry roundabout. From Roundabouts: An Informational Guide. U.S. Department of Transportation. Publication Number FHWA-RD-00-067, June 2000.