

# Long Range Campus Development Plan



Candace Mastrel

## Message from the President



When I assumed the presidency at Montana State University, I initiated a strategic planning process for the university to ensure we shared a clear vision for our future, had identified priority goals to guide our decision making and performance measures to monitor our progress.

The Long Range Campus Development Plan is a dramatic example of the planning culture that has since developed at the university. I applaud the leadership of Facilities Planning, Design and Construction for guiding us through this process, and thank the faculty, staff, students, and community members who have given their time to participate in this effort.

We are extremely proud of the attractiveness of our campus, and know it is an important factor in recruiting and retaining students, faculty, and staff.

Likewise, we realize the importance of state-of-the-art facilities to enrich and enhance the educational experience for our students, the research setting for our faculty and students, and the quality of the work environment for all of our employees.

We recognize our responsibility as stewards of public resources and are committed to using the MSU long-range planning process to ensure the wisest use of all resources. The principles of this process apply to all of our teaching and research resources from field-based agricultural activities to highly specialized climate controlled laboratories. This comprehensive approach promotes sustainability and environmental stewardship and protects the beauty of our natural environment, while proactively anticipating the impact of growth, both on the campus and in the surrounding community.

A handwritten signature in blue ink, which appears to read "Geoffrey Gamble".

Geoffrey Gamble  
President, Montana State University



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# 1

## Introduction

Origins and History

Vision for the Future

### Origins and History

#### The College Takes Form – 1890 to 1900

Founded in 1893, Montana State University was established as Montana's Land Grant Institution. The Morrill Act of 1862 enacted a publicly funded higher education system nationwide that provided land for the advancement of agriculture, mechanical arts and military tactics.

Officially called the *Agricultural College of the State of Montana*, Bozeman was selected as the site for the state's first legislatively created college. Its original enrollment of eight students attended classes in a former roller skating rink on Main Street.

Concurrently, a few miles to the south, construction was underway on what would become the permanent home of the university. Completed in 1894, Taylor Hall was the first building constructed on the current campus and housed the Montana Agricultural Experiment Station, which was established through the Hatch Act (1893) to create a national and state research and outreach system. The campus facilities continued to expand as enrollment increased, academic programs expanded and women began to attend for the first time in 1894. In 1898, four years after the completion of Taylor Hall and one year after the first four students graduated, Main Hall, now known as Montana Hall, was completed.

**Taylor Hall, the first building on campus, completed in 1894 (attributed to Helena, Montana Architect Charles S. Haire).**



# Origins and History

*continued*

## Turn of the Century – 1900 to 1920

In 1906, the agricultural department expanded from a single course in agriculture to include specialized majors in agronomy, animal industry, dairy, and horticulture. Construction of Linfield Hall (1907) was necessary to accommodate the specialized course needs and the agricultural student enrollment.

In 1913 the institution’s name changed to “State College of Agriculture and Mechanic Arts.” Following the passage of the Smith-Lever Agricultural Extension Act (1914) the university housed the Cooperative Extension Service

office and performed contract education for industry and government agencies. James Hamilton (university president, 1910-1919) foresaw the institution’s ability to become a leader in engineering and mechanical-based academic programs. Hamilton promoted academic and social program advancement by articulating the institution’s mission with the motto “Education for Efficiency,” which was used for many years.

World War I influenced the curriculum and student population during this era. Agricultural programs and experimental farming practices for maximum production



**Biology lab, 1896.**



**Montana Hall is completed in 1898.**



**Linfield Hall, constructed in 1907 (Helena, Montana Architects Charles S. Haire and John G. Link).**

1890

**Montana State University is established as a Land Grant Institution in 1893. It was named The Agricultural College of the State of Montana on February 16, 1893 by the State Legislature.**

**Football team, 1897.**



1900

**Women’s Basketball team, 1903, MAC-Montana Agricultural College.**



**Survey Class, 1907.**



1900 to 1920 continued

yields increased, along with female enrollment. The Reserve Officer Training Corps (ROTC) was formed on campus in 1917 as a college-based military officer commissioning program under the provisions of the National Defense Act. University students became involved in World War I and expressed their intense loyalty by constructing the “M” on Mount Baldy, located north of Bozeman and visible from the campus.

The campus facilities continued to develop in conjunction with the growth of the institution. In 1917, architect George Carsley was contracted to prepare general plans

and “bird’s eye views of the buildings and grounds” of both the State University in Missoula and the State College of Agriculture and Mechanic Arts. Carsley collaborated with well-known architect Cass Gilbert in development of the campus plan. The resulting George Carsley/Cass Gilbert Plan has also been referred to as the 1917 Cass Gilbert Plan.



Hamilton Hall was built as the first student residence, dedicated in 1910.



Research and teaching farm at South 3rd Avenue and Lincoln Street.



Uniformed students working on campus, 1918. Visible in the background is Montana Hall.

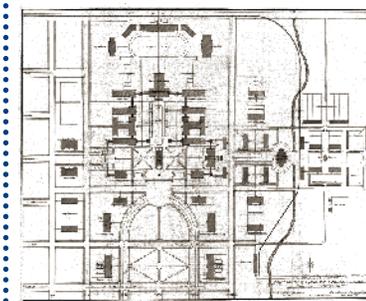
1910

The institution’s name changes to “State College of Agriculture and Mechanic Arts.”

“The M” on Mount Baldy.



1917 George Carsley/Cass Gilbert Plan, which was approved by the Montana Board of Education in 1920.



1920

# Origins and History

*continued*

## The Early Years – 1920 to 1940

In 1920, the institution officially became Montana State College. The “Agricultural and Mechanic Arts” portion of the name was removed because it no longer reflected the expanded programs of the college. The student body increased to nearly 360, with 40 professors specializing in agriculture, engineering, science, and the mechanical arts.

During this era, the George Carsley/Cass Gilbert Plan continued to inspire the development of the campus. The construction of Romney Gymnasium, Roberts Hall, Lewis Hall (between 1922 and 1923), and several other notable campus buildings began to form the basis of the historic campus core and very closely resemble the layout represented in the 1917 plan.



Roberts Hall was designed by Bozeman Architect Fred F. Willson and constructed in 1922, during the first construction boom that resulted in seven new buildings between 1920 and 1929.



Duck Pond (referred to then as Frog Pond) with Traphagen Hall in the background (left) and Romney Gymnasium (right) circa 1922.



Aerial photograph of the campus, 1933, shows implementation of elements of the 1917 George Carsley/Cass Gilbert Plan (foreground right is Linfield Hall; center right is Montana Hall; top center is Herrick Hall.)

1920

Romney Gymnasium was constructed in 1922 (Stanley & Barker Architects, Great Falls, Montana, and George Carsley, consulting architect, Helena, Montana).



A basketball game in Romney Gymnasium, 1929.



1930

Agricultural barns along South 11th Avenue. Taylor Hall is visible in the background on the right side of the photo.



## The Second World War Era – 1940 to 1960

World War II had a significant impact on the institution's population and programs. Bozeman-based flight training exposed military personnel to the college, and returning Veterans sought out the area for post-war education. During the post war education boom of the mid-1940's the college population increased to 1,200 students and 140 professors. Programs expanded to include degrees in Liberal Arts and Humanities. Student housing needs changed with the student demographic, which included more married students with families. Danforth Chapel opened in 1952, funded by campus faculty and students desiring a non-denominational spiritual place within the campus community.

Prior to World War II the college's facilities consisted of about 600,000 gross square feet. The campus facilities experienced significant growth in the two decades following the end of World War II. Building construction boomed and building space more than doubled on campus. During the 1940s and 1950s the university added approximately 1 million gross square feet of building space. It was during this period of growth that the University departed from the 1917 George Carsley/Cass Gilbert Plan. In some instances, development was outside of the planned area of the 1917 plan, such as the Fieldhouse, which was constructed in 1957.



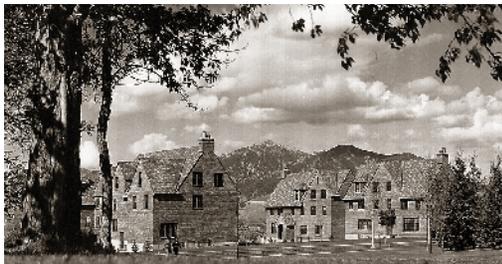
Campus housing for students with families known as "Trailer Village," 1944.



Fieldhouse dome under construction; completed in 1957 (Bozeman, MT Architect Oswald Berg).

1940

Atkins Quadrangle, a women's dormitory, was designed by Architects Fred F. Willson (Bozeman) and Gordon Cottier (Great Falls, Montana) and constructed in 1935.



1950

Danforth Chapel, built in 1952.



1960

Reid Hall under construction in 1959.



# Origins and History

*continued*

## Turning the Tide – 1960 to 1970

Political consciousness peaked throughout the United States, and a progressive demeanor influenced by politics, foreign policy and social change affected student life and expectations of university campuses. A surge of new students necessitated an overhaul of administrative, curriculum and extracurricular activities. Native American studies and cultural programs were initiated in 1967. The “turning tide” was emphasized with the official name change to Montana State University on July 1, 1965.

Similar to many higher education institutions in this time period, the university’s financial state was stretched during the 1970s due to federal and state funding deficiencies. The Nursing curriculum increased along with women

faculty advancements, due in part to affirmative action programs and pay increases that supported professional women. The trend of co-ed dormitories allowed greater flexibility in meeting the shifting student gender populations, allowing the university to occupy the housing constructed in the 1970s.

Despite limited financial resources, during the 1960s and 1970s the university still continued to experience significant expansion in facility growth. Thirty five new buildings were constructed, including athletic events facilities and numerous agricultural structures. The campus facilities began to evolve in a manner similar to that at other institutions across the nation, which included high-rise style dormitories and student housing that accommodated families with young children with daycare needs.



Rodeo held in the fieldhouse.

July 1, 1965-officially designated “Montana State University” by the Montana State Legislature.



Overview of campus with Bridger mountains in the background.

1960

The early days of Media and Theatre Arts.



Registration for classes in the fieldhouse.



1970

Powwow held in the fieldhouse.



## Modern Era – 1980 to Present

During this era communication programs and services, athletic programs and recreation facilities expanded, and the underground infrastructure was updated and encapsulated in a tunnel system in 1995.

In 1972, the Museum of the Rockies moved from the quonset buildings to its permanent location at South 3rd and Kagy – nestled in farmland at the perimeter of the city. More than a decade passed before the current museum building was constructed in 1987.

The increased campus housing created in the previous era accommodated an unprecedented population growth which impacted academic programs and facilities. It became necessary to develop a plan to further guide university development. In 1982 the Office of Facilities

Planning prepared a development plan entitled *Montana State University: Master Plan for Campus Development*. The timing was also appropriate because the City of Bozeman was updating its master plan. Many of the previous development goals and implementation processes remained relevant to the current planning efforts, allowing the current Long Range Development Plan (Plan) to build on the 1982 plan.

By 2007, the university reached 12,338 students, with 594 full-time and 256 part-time faculty. Leadership in research-intensive academic programs, and new state-of-the-art science and engineering facilities resulted in the university being ranked 94th in the top tier of research universities in the United States (Carnegie Foundation for the Advancement of Teaching, 2006).



Museum of the Rockies, constructed in 1987.



Tailgating at the new football stadium.

1980

1990

2000

Centennial Mall and gates completed in 1994.



Faculty and staff help incoming freshmen move in.



Aerial overview of present-day campus taken from the north side of town.



## Vision for the Future

The university's historical pattern of growth is a clear reflection of the success of academic and extracurricular programs, and opportunities supported by the Montana University System and the local community. The university is continually changing and evolving, recently experiencing an influx of international influence. It has also experienced an increase in research opportunities and technological advances that contribute to a dynamic educational environment. The university's buildings and landscape reflect the ideals of the institution and influence the process of learning. A campus plan provides planning principles and guidelines to ensure that future building, infrastructure and landscapes are well-conceived and designed. In order to prepare for proper growth and success of the university, it is imperative that a campus development plan, which is in concert with the vision for the future, be put in place.

Montana State University is planning the growth of both the student body and the physical campus by creating and implementing the Plan. It is clear, from both historical growth patterns and demands by the academic community, that preservation of existing assets, along with additional campus facilities and amenities, are critical elements in the long-term success of the university. The City of Bozeman is also growing at a similar or accelerated rate, demanding an even more committed effort of

collaboration in the realm of campus planning. By working cooperatively with university students, faculty and staff, outside agencies, and campus planning professionals, Montana State University hopes to provide future designers, planners and staff with a comprehensive Long Range Campus Development Plan that is useful as a living document. The Plan is an easy reference tool to be used in project design and planning efforts in addition to long term efforts which focus on land use and expansion of the university.

A campus development plan enables the university to respond intelligently to growth pressures and constructively use these pressures as a positive force in realizing the ultimate potential for the university, both in the academic and physical senses. A useful plan is in harmony with the university's vision, incorporating lessons learned, and acting as a motivation for balanced renewal and expansion of the entire campus and its environs. The Plan is not a statistical forecast for student, faculty and staff demographics, but rather a charted course of action for realizing the potential for success given existing and future resources that may present themselves or be captured during the next 10, 25 or 75 years. The Plan is a dynamic tool which will be revisited every five years to ensure that it meets the goals of the university and changing market trends.

*A view of Centennial Mall looking east.*



Victoria Drummond

# 2

## The Planning Process

Introduction

Why a Long Range Campus Development Plan?

Purpose

Implementation

Planning Process

Planning Principles

Goals and Objectives

### Introduction

A university's buildings and landscape reflect the ideals of the institution and influence the process of learning and discovery. A campus development plan provides planning principles and guidelines designed to help guide and shape the physical environment in a well-conceived and designed manner. MSU engaged campus constituents, the surrounding community and statewide constituent groups in a participatory planning process. The resulting Long Range Campus Development Plan (Plan), also referred to as *MSU Tomorrow*, is a culmination of two years of those participatory efforts. It represents an important shift toward comprehensive, long-term planning that will honor and preserve the university's history, while striving to support and advance its future aspirations.

## Why a Long Range Campus Development Plan?

The primary purpose of the long range campus planning effort is to establish a shared vision for the physical development of the campus environment that is comprehensive, creative, useful, and most importantly, inspiring. Successful comprehensive planning recognizes attributes that create the area's unique sense of place and formulates guiding principles and goals to protect physical assets and accomplish the expectations of the university's mission.

The process of formalizing a long term shared vision fit into the emerging culture of planning at MSU. Individuals throughout the campus and local community were engaged in open-forum planning of the future campus. Throughout the participatory process, stakeholders transformed their sense of ownership into ideas that shaped stewardship of the final plan. Inclusive planning efforts that culminate in an adopted formal development plan ensures that the physical development of the campus will be guided by a set of wide-ranging principles that are aligned with the priority

interests of academic, research and service missions. The Plan will help guide campus growth and future decisions related to the physical environment of the campus.

MSU continuously changes, which necessitates renovation and adaptation of existing facilities as well as planning new facilities, while maintaining the architectural character of the campus, embracing historic elements, and preparing for technological innovations and demands. It is a tool to achieve a successful balance between preservation and the need to accommodate growth and maintain the desirable quality of life on campus.

The Plan identifies potential building sites that promote rational build-out of the core campus while preserving critical open space. The building sites suggest building orientation for connectivity, as well as views and proximate parking. The Plan illustrates the alternatives the university has for future use of its land and facilities.

*Looking across the valley at town and campus with the Spanish Peaks in the background.*



Rob Outlaw

## Purpose

In recent years, a culture of planning emerged through the recognition that unintended consequences occur when land and facility assets are developed without the guidance of a long-range comprehensive plan. The purpose of a formal development plan is to reflect and nurture the diversity of the university environment.

The Plan strives to create a collegial environment that supports the university's mission. It envisions an attractive and well-conceived campus that emphasizes its unique northern Rocky Mountain location and the extraordinary natural resources and community setting. As a plan for the future, it establishes an order for the interrelated parts of the campus, such as architecture, landscape, circulation, and continued concentration of development within the historic core for an integrated and efficient, yet beautiful and unique campus.

## Implementation

The Plan is a living document and the result of a dynamic process that addressed the existing conditions and anticipated needs to accommodate appropriate growth. The intent is for Facilities Planning, Design and Construction to periodically lead the effort to systematically gather and assess data and to refine criteria to accommodate change, provide permanence and allow the university to evolve.



*Fall foliage in front of the Plant Bioscience building.*

Stephen Hunts

## Planning Process

The objective of the planning process was to maintain an open process, to encourage an exchange of ideas, and to synthesize constituents' concerns into a collective vision. Originally, the task was to produce a 20-year build out plan of campus, but early in the process it evolved into a more inclusive plan of the entire 950 acres and development over the next 75 years. The eventual long term build out will depend on the goals achieved in the 10- and 25-year profiles.

A broad cross-section of the local and campus communities, including participants from City of Bozeman and Gallatin County Planning departments, the College of Agriculture, Montana Agricultural Experiment Station, Auxiliaries, Associated Students of Montana State University (ASMSU), and State Architecture and Engineering (State A&E) came together through a series of public forums and internal discussions. The process was a coordinated team approach with executive oversight. Participants met regularly, both formally and informally, guided by a planning team made up of staff from Facilities Planning, Design and Construction, the

School of Architecture, the Executive Oversight Committee, and Ayers Saint Gross Architects and Planners. Together these stakeholders assessed campus historical context, inventoried existing conditions, established planning principles and overarching development strategies, evaluated design options, and refined proposed solutions. The process built a strong and inclusive long range development plan.

As part of the comprehensive inclusion of campus constituency, the stakeholders were surveyed for their anticipated future square footage needs in order to meet anticipated department program and expansion needs. Results of the survey were used to identify probable building sites in the 10-year, 25-year, and long term projected build out profiles. Appropriate building sites were selected by matching square footage needs in appropriate neighborhood locations, and also preserving critical open spaces, creating green corridors, defining borders and entries, and addressing connectivity throughout the overall campus.

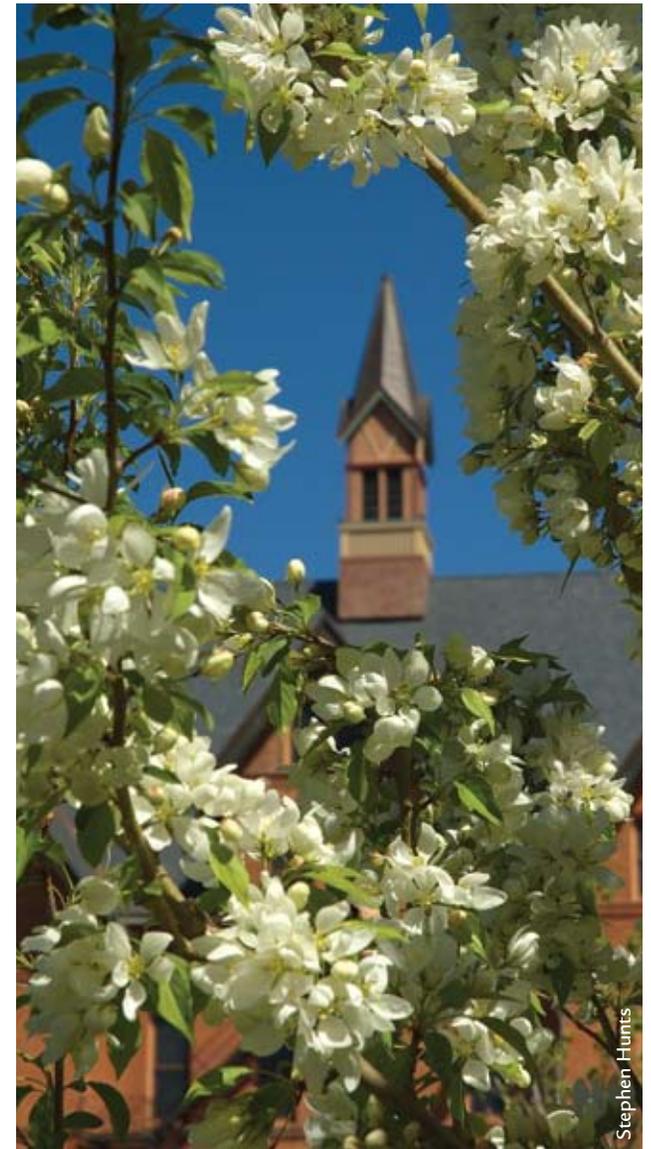
*Community meeting forums.*



## Planning Principles

Early in the planning process, eight planning principles were established. These principles represent the university's ideals and commitment to excellence in teaching, research and outreach, and helped develop a plan that will sustain and strengthen MSU's position in higher education. The Planning Principles represent the administration's formal commitment and conviction in governing the planning process and development of the campus. The Planning Principles link the planning process and the resulting physical development of the campus to the university's vision and mission. They are to:

1. Promote the commitment of Montana State University to the contemporary mission of a Land Grant institution through the physical integration of teaching, research and outreach.
2. Coordinate college and departmental goals and physical developments with the strategic vision of the university.
3. Recognize the critical relationship of the physical environment to excellence in teaching, learning, research, public relations, and the quality of life.
4. Develop the physical environment of the university through collaborative relationships with the larger community.
5. Build on our unique heritage, sense of place and strategic vision of the future as a model of planning and design excellence.
6. Develop a campus environment that enhances the personal experience of the university community through a spatial network that promotes human interaction.
7. Be exemplary stewards of our physical resources.
8. Continue a comprehensive approach to campus planning to guide future development of the university.



*Spring flowers bloom near Montana Hall.*

# Goals and Objectives

## General

Premise	Goal(s)
University-owned land is a finite and diminishing resource, which represents an increasingly valuable and irreplaceable asset.	Responsibly manage the increasingly valuable and irreplaceable land asset.  Act as exemplary stewards of the university's resources. Actual planning outcomes may be seasoned by financial realities, but sound planning principles will not be abandoned to financial expediencies.
Land use devoted to academic, instructional and student-oriented functions will expand beyond the current developed campus, and at the same time the historic core will not be displaced or abandoned over the next 25 years.	Use planning principles and approved plans to build on the unique heritage and sense of place, and coordinate the physical development of the campus with the university's strategic vision.
It is assumed that over the next 25 years, the university's student enrollment will grow at a steady but marginal rate to approximately 15,000 FTEs.	Implement the master planning process as a dynamic and cyclical method to guide the university's future development.

*The entire campus is a classroom. Here survey students utilize campus green space for surveying class work.*



## Land Use

Premise	Goal(s)
University-owned land is a finite and diminishing resource, which represents an increasingly valuable and irreplaceable asset.	<p>Cluster together in the vicinity of Kagy Boulevard those facilities that present a high public interface (e.g. sports events facilities and Museum of the Rockies).</p> <p>Establish enterprise zones that accommodate public and private commercial partnerships.</p> <p>Develop the South 19th Avenue corridor as a pleasant, institutional frontage, with academic and commercial uses and outreach activities, as opposed to residential uses.</p>
Adjacent, non-university property will continue to develop according to the Bozeman 2020 Community Plan, which will include a mix of commercial, professional, high-tech, and residential uses.	Work cooperatively with the City of Bozeman, Gallatin County and other respective jurisdictional agencies when their decision involves land adjacent to the university. Also, the university should link the campus physically with the many assets and amenities in adjacent neighborhoods, parks and other properties.
The university's planning and land-use projections recognize that the land west of South 19th Avenue is an institutional resource available for all appropriate uses.	<p>Evolve agricultural activities west of South 19th Avenue and transition to land uses that are compatible with the evolving development of the surrounding City of Bozeman.</p> <p>Continue agricultural field use of land west of South 19th Avenue over the next 25 years.</p> <p>Create an agricultural endowment to support the evolution of agricultural programs.</p> <p>Continue the demonstrated stewardship of the agricultural property.</p>
Properties adjacent to the north and east side of the campus core will continue to be too expensive in the foreseeable future to seriously consider any major land acquisition program to accommodate future growth.	Research what land is suitable for acquisition or explore ways to make university-owned land more appropriate for development.

## Goals and Objectives

*continued*

### *Land Use continued*

Premise	Goal(s)
The university expects to continue to rely on leasing private-sector facilities off campus and temporary facilities in appropriately designated campus areas to cover variable space surge needs.	Focus on building new structures to accommodate a stable base of increasing space requirements over time.
Residential development is not typically connected to campus central utilities; therefore, the southeast area of campus is best suited for development of academic facilities that benefit from central utility connection. An exception might be to consider housing with direct access to Greek Way.	
The southeast area of campus has remnants of previous uses and contains the Physical Plant operations; however, it is generally under-utilized or under-built based on its proximity to both the Heating Plant and the campus academic core.	Encourage migration of the Physical Plant operations from their current area to provide room to develop new academic uses near the Heating Plant and within the campus core.  Relocate Facilities Services west of South 19th Avenue.
Athletics is an integral element of the current developed campus and will remain and expand in its present location.	Prepare for growth in the athletic program, which may necessitate additional lands for new facilities. Improve vehicular and pedestrian connections to these areas and facilities.
The State Fish, Wildlife and Parks (FWP) building will occupy its site on the east side of South 19th Avenue for at least the next 25 years.	Provide for retaining this property in a condition suitable for the State Fish, Wildlife and Parks (FWP) facility, while developing long range campus development plan elements around it. Design new projects to respect existing FWP facilities and needs.
It is expected that the USDA Forestry Lab will occupy its site on South 7th Avenue for the remainder of existing lease (approximately 50 years) unless an alternate site is negotiated.	Provide for retaining this property in condition suitable for the USDA Forestry Lab, while developing long range campus development plan elements around it. Design new projects to respect existing facilities.

*Land Use continued*

Premise	Goal(s)
If the USDA-ARS facility is constructed on its approved site west of the Plant Bioscience building, it will occupy that site for at least the next 50 years.	Provide for retaining this property in a condition suitable for the USDA-ARS facility, while developing long range campus development plan elements around it. Design new projects to respect existing facilities.
The Duck Pond open space along South 11th Avenue is a campus feature that will remain for the foreseeable future.	Responsibly maintain and improve this special feature.
Campus edges should be defined yet porous.	Improve gateways to the campus to create a sense of arrival, and enhance the university's visual image with signage, landscaping, lighting, roadways and pedestrian walkways.

*Constructed in 2008, the Chemistry and Biochemistry Building was created to house state-of-the-art research endeavors. It is situated in the heart of campus.*



Victoria Drummond

## Goals and Objectives

*continued*

### Architecture

Premise	Goal(s)
University-owned land is a finite and diminishing resource, which represents an increasingly valuable and irreplaceable asset.	<p>Plan, design and develop campus support infrastructure prior to building development.</p> <p>Construct new future-landmark architecture on significant sites. Siting new buildings will be crucial to the future formation of defined exterior spaces on the campus.</p> <p>Continue to view athletic facilities as one of the academic neighborhoods and encourage growth in balance with university growth.</p> <p>Encourage new buildings to comply with the evolving campus architectural fabric and enhance the campus unity with central open spaces and pedestrian corridors.</p>
Historic campus buildings and structures represent a unique opportunity to strengthen the university's sense of place and tradition. Adaptive re-use planning will increase the development potential and importance of preserving existing campus historic structures.	<p>Identify, preserve and improve significant historic buildings and structures, which represent components of the campus heritage, through the use of sound historic preservation and adaptive re-use principles.</p> <p>Set project budgets to accommodate and promote quality project planning, design and construction that includes sustainable practices and appropriate ancillary features such as landscaping and infrastructure.</p>

*Detail of the front facade of the Marga Hosaeus Fitness Center, completed in 2008.*



Victoria Drummond

*Architecture continued*

Premise	Goal(s)
Increasing the building density in the campus core will result in a more defined environment in which quality pedestrian-oriented and interconnected open spaces are established by building placement.	<p>Direct scale-appropriate academic and civic institution density to the campus core to enhance the character and add vitality to the campus.</p> <p>Encourage area densities as follows:</p> <ul style="list-style-type: none"><li>· Campus core will accommodate approximately 250,000 to 300,000 gross square feet of new facilities.</li><li>· Areas immediately adjacent to the west of the campus core will accommodate approximately 250,000 gross square feet of new facilities.</li><li>· South and southeast of the campus core will accommodate approximately 1 million gross square feet of new facilities.</li></ul> <p>Establish a three-tiered classroom improvements plan that categorizes the classroom use and needs (e.g. furnishings, lighting, layout and technological equipment).</p>
The central Heating Plant has sufficient capacity to support a significant amount of additional building area in the campus core, can be expanded to increase capacity further, and will remain in its present location.	Long range campus development plan goals call for expanding the academic land uses in the current facilities area of campus. As this happens, sensitive design will need to be implemented to properly integrate new non-utilitarian uses with operations-based uses.
Building gross square footage has increased at a faster rate than enrollment growth over the last 25 years, due in part to increasing demands for student activity and living spaces, research requirements, technological needs, and academic programs. This national and local trend is expected to continue.	Plan student activity, living spaces and auxiliary uses to be flexible for multiple uses and to be located in areas where they are accessible from residence halls and student housing, and other campus areas via a network of well-planned pedestrian and vehicular corridors.
Langford Hall, Johnstone Hall, Hannon Hall, Hapner Hall and the Atkinson Quads have limited access to convenient and sufficient nearby parking facilities.	Retire some residential uses in the northeast area of campus and encourage future development of integrated institutional, commercial, residential and parking uses to create a dynamic mixed-use neighborhood.

## Goals and Objectives *continued*

### *Architecture continued*

#### Premise

The national trends and the evolving campus culture will continue to increase focus on socially responsible design, sustainable development practices, energy conservation and efficiency, and recycling.

#### Goal(s)

Establish and implement a standard of sustainable building practices that are nationally established and supported by the design industry.

Require that campus development continue its commitment to accommodate persons with disabilities by adopting ADA-specific design guidelines and signage.

The campus has evolved into a series of connected academic neighborhoods.

Continue to develop the campus core with appropriate development in the neighborhood concept that compliments the unique features of the designated area.

*Three eras of architecture. Engineering and Physical Sciences Building (1996) in the foreground, Cobleigh Hall (1970) in the center, and Roberts Hall (1922) back left, connect to create an engineering complex.*



## Open Space

Premise	Goal(s)
University-owned land is a finite and diminishing resource, which represents an increasingly valuable and irreplaceable asset.	<p>Identify and designate those campus open spaces to be maintained, enhanced and protected.</p> <p>Continue to develop unified green corridors connecting campus elements and the main pedestrian axis within the campus core as the campus develops beyond Grant Street and South 11th Avenue.</p> <p>Site and scale new facilities to create an interconnecting network of green corridors and open spaces that accommodate and promote human interaction, both within the existing campus core and as the developed campus expands to the west.</p> <p>Construct new facilities that enhance the value and character of premier open spaces (Centennial Mall and Romney Oval), the evolving open spaces and pedestrian network extensions.</p> <p>Manage long-term expansion of the campus west of South 11th Avenue in a manner which produces new campus open spaces that are the qualitative equivalent to the Centennial Mall and Romney Oval.</p> <p>Develop campus landscapes with local indigenous species and materials with proven climatic and sustainability factors.</p>
Surface water features on university property may be enhanced as necessary, but will continue to exist in roughly their present locations. The university and the surrounding community will consider re-establishing historical watercourses that are culverted.	<p>Remove some culverts and restore surface water features to a natural state and appearance.</p> <p>Incorporate restored surface water features in green corridors and open space areas.</p>

## Goals and Objectives

*continued*

### Landscape

#### Premise

The natural elements and spaces of the landscape are valuable assets of the campus character and will be maintained, enhanced and protected.

#### Goal(s)

Create a memorable landscape of indigenous vegetation that celebrates the region's climatic diversity and supports a natural viewscape for each of the seasons.

On campus continue the tree-lined streetscapes of the historic south side residential neighborhood of Bozeman.

Promote sustainable, efficient landscape and stewardship of the natural resources.

*Site and landscape amenities are as important for visual aesthetics as they are for functionality.*



Stephen Hurts

## Circulation

Premise	Goal(s)
The campus core is pedestrian-oriented.	<p>Limit vehicle intrusion into the campus core and retain and protect the pedestrian-oriented circulation.</p> <p>Provide safe access choices for pedestrians as well as motorized and non-motorized vehicle use.</p> <p>Actively employ parking demand management techniques to encourage alternative modes of transportation.</p> <p>Provide service corridors and service access to all buildings.</p>

## Parking

Premise	Goal(s)
The university has the second-highest ratio of parking spaces among its peer institutions group. The university cannot continue to provide an ever-increasing amount of parking. The parking-space-per-FTE ratio will decline over the next 25 years.	<p>Increase alternative modes of transportation using the University's FTEs and pertinent ratios.</p> <p>Plan, site and construct parking facilities to accommodate future university needs, which include collaborative and enterprise zone uses.</p> <p>Continue to encourage bicycle use as part of traffic and parking demand management.</p>
Public transit will develop significantly over the next 25 years.	Integrate public transit to serve a series of strategic university destinations serving all areas of the campus.
Traffic travels along South 11th Avenue through the campus academic area. This situation will continue to present special challenges to the expansion of the campus pedestrian network west of South 11th Avenue.	Develop traffic calming measures to improve pedestrian safety.
Kagy Boulevard separates the Stadium and Museum of the Rockies properties from the core campus. Kagy Boulevard will likely be widened to its full traffic configuration in the next 25 years.	Use pedestrian corridors, continuous landscaping and shared parking to integrate university facilities south of Kagy Boulevard into the campus fabric.

## Goals and Objectives *continued*

### *Parking continued*

Premise	Goal(s)
The arterial character of South 19th Avenue represents a significant challenge to the westward growth of the campus and connectivity between the east and west elements of the university's properties. Portions of South 19th Avenue will be widened to five lanes and will continue to carry an increasing amount of traffic over the next 25 years. This situation will continue to present special challenges and require unique solutions to accommodate the expanding campus pedestrian network west of South 19th Avenue.	Connect the University's circulation networks (vehicle, bicycle lanes, pedestrian trails, etc.) to similar networks within the surrounding community.
The intersection of South 19th Avenue and College Street is becoming more congested. Planned improvements of the intersection will relieve some congestion and accommodate a greater traffic volume. The intersection also will become increasingly important as a regional and local arrival point, or gateway, to the university.	Develop the South 19th Avenue and College Street intersection as a distinct campus gateway, creating a sense of arrival that is inviting, significant and well defined.
The university granted an easement to the City of Bozeman for underground city infrastructure along the future route of Fowler Lane. It is highly probable that Fowler Lane will be constructed through the university's property (agricultural land) in the next 25 years.	Coordinate with the City of Bozeman and Montana Department of Transportation on any infrastructure through university property to ensure that MSU's needs are met.
Existing campus service drive areas are insufficient and must be improved.	Construct adequate service drive, loading and temporary parking areas for service access to existing and new campus facilities.

*Parking at the South Fieldhouse parking lot, with Bobcat Stadium in the background.*



## Housing

Premise	Goal(s)
Academic growth is expected to expand west along College Street between South 11th and South 19th avenues.	<p>Retire existing housing units in this area and construct new academic buildings.</p> <p>Construct some of the campus residential housing closer to commercial and residential development adjacent to Garfield Street.</p> <p>Integrate a variety of housing opportunities within various zones in order to create dynamic and interactive communities.</p>
The cost of living in the Bozeman community, particularly housing costs, is high and expected to continue to rise. The consequent shortage of affordable housing in the community will continue to be a problem for the university's faculty, staff and students.	Explore the possibility of providing some type of affordable living environment for faculty and staff.
On-campus housing provides certain intrinsic characteristics that are not present in private sector housing in the surrounding community.	<p>Continue to provide housing for students on an as-needed basis.</p> <p>Construct a pedestrian corridor linkage between outdoor recreational activity spaces and campus residence facilities.</p>
Demand for housing units for nontraditional occupants is marginally decreasing; however, overall demand for these apartment-style units remains steady, partially due to their perceived attractiveness to other student populations.	Provide student apartment-style housing alternatives in addition to traditional residence options.

## Goals and Objectives

*continued*

### Research

#### Premise

In 1980, the university's research enterprise was negligible. The university's annual Sponsored Programs' expenditures reached \$100 million in 2006, elevating it to one of the Carnegie Top 95 Research Universities in the country.

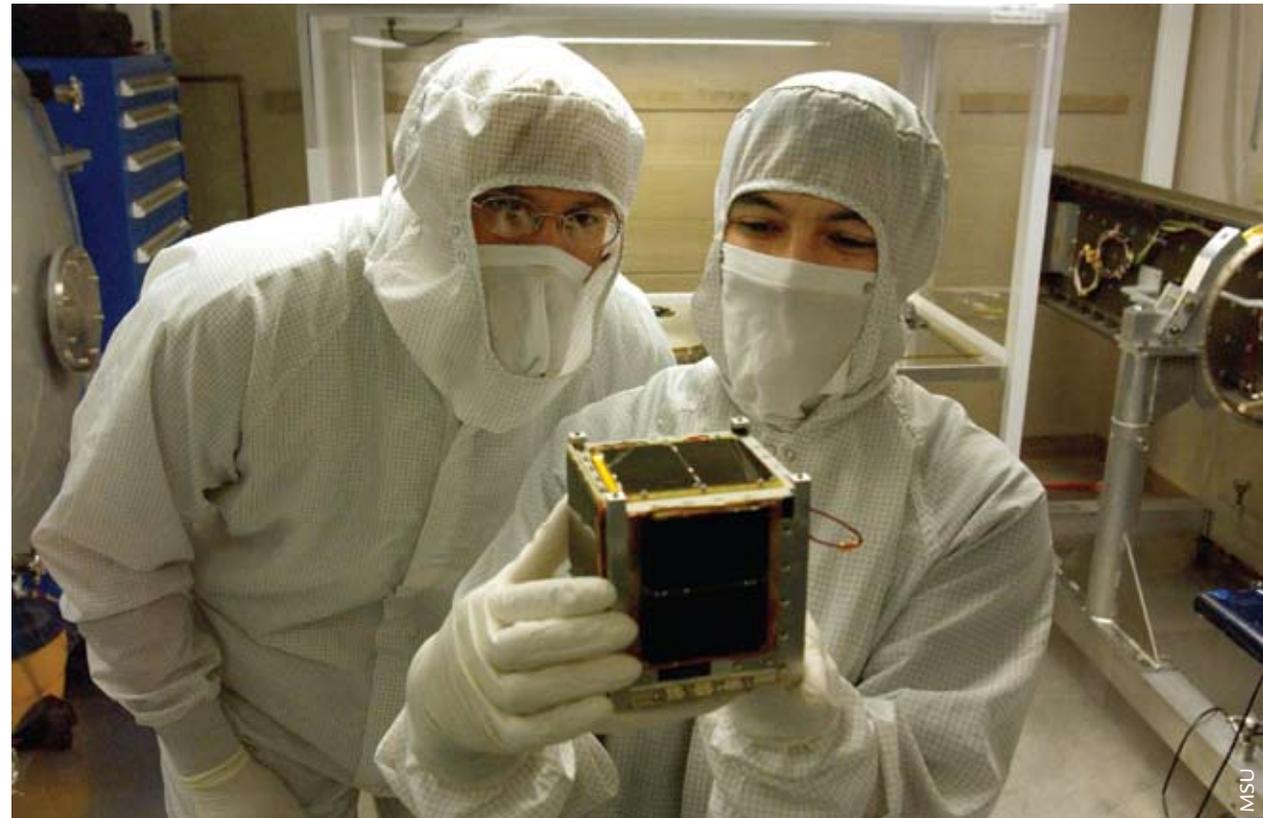
#### Goal(s)

Continue to increase the research enterprise and remain a leading research university.

Promote university research enterprise and support increased directly sponsored university research and collaborative research partnerships with non-university entities.

Integrate university research with instructional functions and aggregate public/private research-park partnerships and associated activities away from the campus core.

*Research is a vital part of the university. Investment in new technologies is a growing field and is an integral part of the Plan.*



## Signage

Premise	Goal(s)
The present signage system is inadequate.	<p>Establish a hierarchical system of wayfinding within the buildings and throughout campus.</p> <p>Incorporate the university's branding policy in campus signage.</p> <p>Provide signage that aesthetically conveys necessary and functional information.</p> <p>Locate signage that provides sufficient safety, directions and location information to regular users and visitors to the campus.</p> <p>Surpass ADA mandatory requirements with a more friendly approach to accessibility signage.</p>

*Gateway signage and informational kiosks welcome visitors at key entries into campus. They also help establish the contextual relationship of the university within the surrounding community.*



# Sustainability

Premise	Goal(s)
Wise stewardship of resources includes sustainable development practices.	Develop the campus using practices that avoid irreversible damage to natural resources by encouraging development projects that include utilization of green technologies and renewable materials.  Demonstrate a unified commitment for stewardship of resources through meaningful assessment and public accountability.  Continue to advance the opportunity to utilize LEED® (U.S. Green Building Council - Leadership in Energy and Environmental Design) or similar sustainable construction practices in buildings on campus to attract research and grant-funded opportunities that match acquired capital.

*Romney Gymnasium has historically been used for recreation and athletics. This building, like many other historically significant buildings, can eventually be renovated and updated for modern needs and users, thereby utilizing existing building stock.*



Stephen Hunts

# 3

## Existing Conditions

General

Landscaping

Land Use

Academics

Open Space

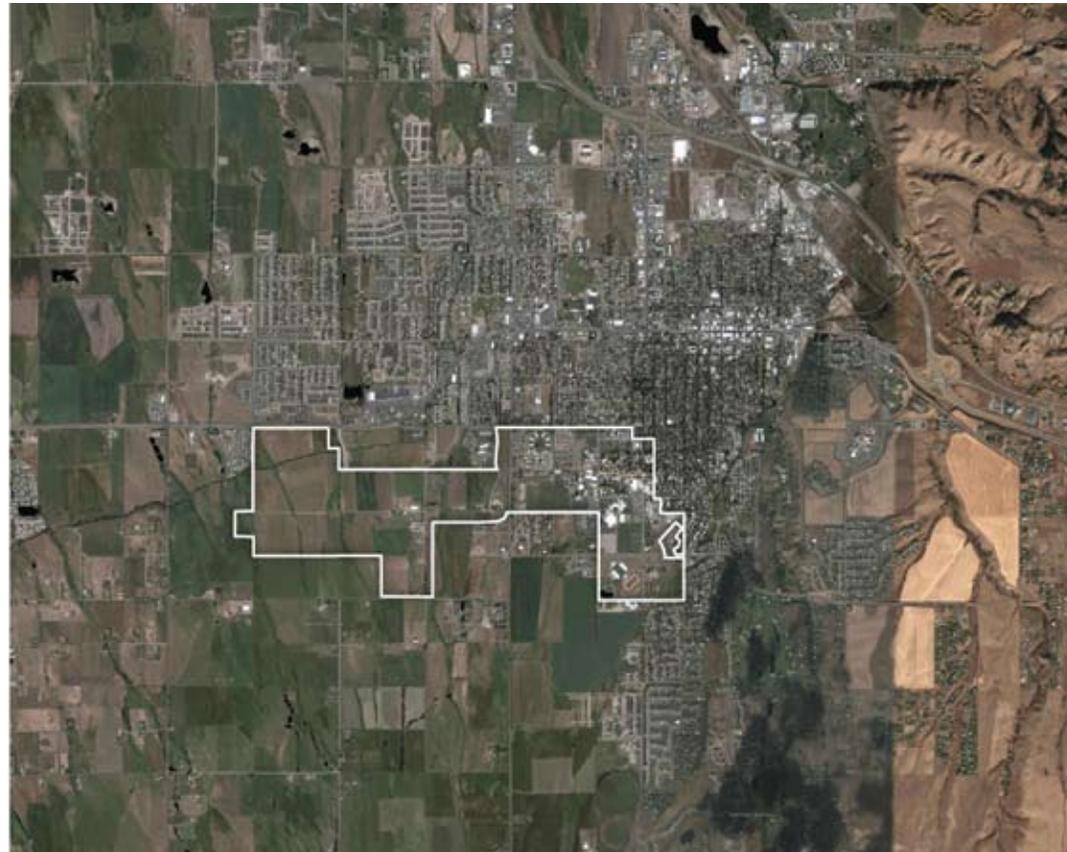
Housing

Circulation

Sustainability

Architecture

*Aerial photograph showing the outline of the campus in the greater context of the Gallatin Valley and the Bozeman area. Downtown Bozeman is located northeast of the campus.*



## General

### Relationship to the Community

Surrounded by the picturesque Rocky Mountains in the Gallatin Valley, Montana State University is located on a hill approximately 1.5 miles southwest of Bozeman's historic downtown. Since its inception as a Land Grant institution, MSU has played an important role in the community's growth and success and is embedded in the community. Evolving from its agriculture and mechanical arts (engineering) teaching roots, MSU has grown into a diverse institution that provides intellectual, economic, cultural and recreational opportunities. It is also a major employer within the community, providing employment for over 2,600 individuals.

Originally located on the outskirts of town, the university now shares its boundary with the city on all but the furthest west edge of the campus. The campus is

comprised of 950 acres and stretches from South 3rd Avenue west to Ferguson Avenue. Prominently located on a hill, the campus is highly visible due to residence hall structures (still among the tallest buildings in Bozeman) and several of the area's most recognizable landmarks, including the domed Brick Breeden Fieldhouse and the cupola-capped Montana Hall.

The university maintains a cooperative relationship with the City of Bozeman in seeking design solutions and in serving members of the larger community. The Long Range Campus Development Plan (Plan) improves on the community relationship and increases the community interaction with planned enterprise zones, strategically placed commercial and academic facilities, and enhanced connectivity to emerging residential neighborhoods adjacent to campus.

*Campus panorama with Bridger Mountains in the background (2007).*



## Climate

Nestled in the Gallatin Valley, the university is surrounded by mountain ranges from the greater northwest Rockies. The weather varies as each of the four season's cycle through the valley. At 5,000 feet above sea level, the valley may experience snow seven months of the year; however, the semi-arid climate and abundant sunshine create beautiful outdoor environments and year-round recreation opportunities. During the summer season, daylight lasts into the evening, extending outdoor activities into the twilight.

## Views

The campus offers many panoramic views. Numerous vantage points on campus provide spectacular views of the Bridger, Tobacco Root and Gallatin mountain ranges. Recognizing the recruiting value of the surrounding

natural resources, the Plan incorporates strategies for protecting on-campus opportunities for viewing these extraordinary viewsheds.

## Public Service

Fulfilling its land grant institution mission of public education and outreach, the university serves Montana residents through its Cooperative Extension Service, KGLT radio station, KUSM public television broadcasting station, Montana Agricultural Experiment Stations, and the Museum of the Rockies.

## Campus Image and Identity

The identity of the campus is closely tied to the natural landscape. The surrounding mountains and rivers distinguish MSU from other universities and are significant draws for students, faculty and staff from around the world.



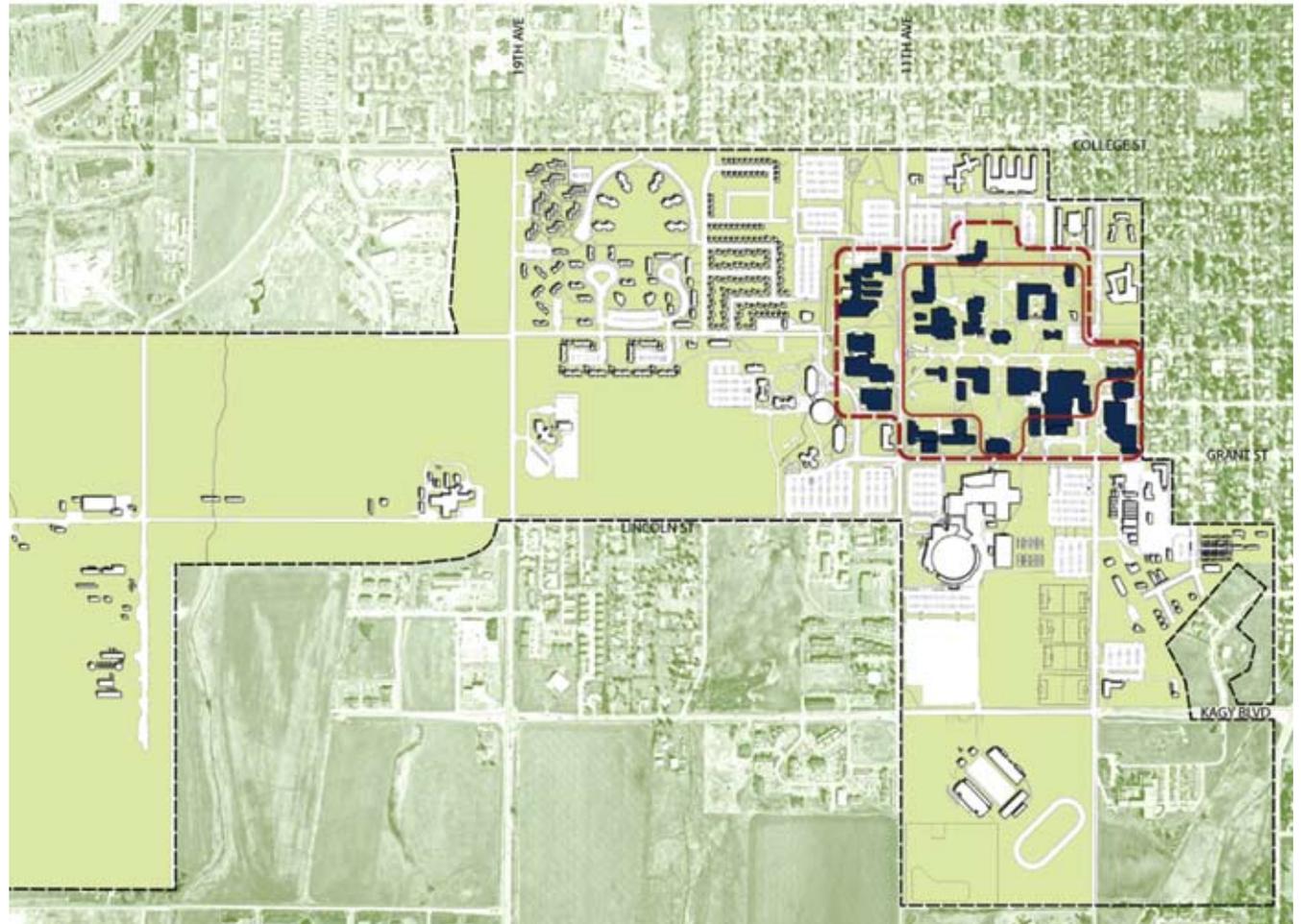
## Land Use

### Campus Core

The campus core embodies the cultural and natural resources associated with historic activity and thereby is a significant cultural landscape. Student services and educational facilities regularly used by a majority of the campus are within the campus core, creating a central nucleus of the university. The historic core consists of the area from College Avenue to Grant Street, and from South 6th Avenue to South 11th Avenue. The buildings within the core are primarily academic in nature, but

include several residential and support facilities. The core is interconnected by a series of open spaces and pedestrian corridors, the most prominent of which is Centennial Mall—a linear paved, pedestrian-oriented corridor that stretches from South 6th Avenue to South 11th Avenue—and the north lawn space leading up to Montana Hall from Harrison Street to the Romney Oval and Gymnasium. Montana Hall is the focal point of the campus core.

*Map showing the outline of the historic campus core in a solid red line and the current campus core in a dashed red line.*



## Districts and Neighborhoods

The pattern of land use within the built campus has evolved loosely, resulting in clusters of related functions or distinct “districts.” Specific sub-areas within districts that exhibit particular and distinguishing activities are recognized as “neighborhoods.” For example: the Marga Hosaeus Fitness Center (Fitness Center) and its activities represent a Fitness and Recreation Neighborhood within the greater grouping of athletic facilities in the Athletics District.

Each grouping of similar facilities establishing a sense of place for the District, interconnects the Neighborhoods, and promotes an overall order and balance to the campus layout. Neighborhoods can accentuate their purpose and identity through unique landscapes, architecture and programs while maintaining connectivity to the campus.

Current districts include Athletics, Housing, Academics, and Agriculture. Chapter 4 outlines how the framework plan will further define and expand neighborhoods and districts.

- Neighborhoods in the Athletics District include Marga Hosaeus Fitness Center, the intramural fields, Bobcat Stadium, Brick Breeden Fieldhouse, Dyche Field, and a collective concentration of general athletic facilities.
- Neighborhoods within the Academics district are formed by colleges, centers, and groups of buildings. For example: the Arts and Architecture Neighborhood includes the Black Box Theatre, Howard Recital Hall, College of Arts and Architecture, and the outdoor performance area for Shakespeare in the Parks.
- Housing forms neighborhoods through the clustering of traditional housing units with dining halls and student recreational facilities within the campus core, and non-traditional housing (e.g. faculty, graduate, families with children, recreational facilities) located more towards the edges of campus.
- Neighborhoods within the large Agriculture District include the agricultural pastures and fields and Horticultural Farm, Miller Pavilion and support facilities, Bozeman Agricultural Research and Training (BART) Farm, and Marsh Laboratories.

## Leased Land

Montana State University has partnered with state and federal entities to provide facilities on campus that enhance and support MSU and the community. These include 10 acres of MSU land leased to Montana Fish, Wildlife and Parks (FWP) for state’s District Three office at South 19th Avenue and Lincoln Road; the South 7th Avenue site of the USDA Forest Service Rocky Mountain Research Station; McCall Hall; and portions of the Marsh Laboratory complex. Newly leased land off South 11th Avenue for the proposed USDA Agricultural Research Service (ARS) building will complement Academic and Agriculture Districts.

*The new Black Box Theatre, completed in 2008, is part of the Arts and Architecture Neighborhood.*



## Open Space

### Gateways, Edges, and Boundaries

Gateways are part of campus edges and boundaries that delineate campus property and separate it from adjacent property. The gateways and entrances into campus have evolved and changed as the university has developed. An original and now historic gateway to campus is at South 8th Avenue and Harrison Street. Today the primary gateways into campus are South 19th Avenue and College Street, South 11th Avenue and College Street, South 11th Avenue and Kagy Boulevard, and South 7th Avenue and Kagy Boulevard. Secondary entrances are located at Grant Street and South 6th Avenue, and South 19th Avenue at both the Lincoln Street and Garfield Street intersections.

Edges exhibit a variety of character and conditions. Some are very clear, while others blend into the community and are non-distinct. Edges are formed by roads, buildings, pathways, landscapes, fences and topographic changes.

The edges and boundaries around the campus east of South 19th Avenue are more clearly defined and consist of College Street, Kagy Boulevard and South 6th Avenue. Of note, South 6th Avenue between Cleveland Street and Grant Street edges exhibit high-rise campus buildings and different landscaping treatment than the small-scale residential Greek houses and adjacent community plantings on the east side of the street. Kagy Boulevard acts more like an open space buffer between larger, manicured practice fields to the north and less formalized open space to the south.

The campus west of South 19th Avenue exhibits less formal or defined edges and gateways. Although clearly bordered by Garfield Street or Huffine Lane, MSU's and Montana Agricultural Experiment Station's (MAES) agricultural fields blend in with surrounding, privately owned land, with only a fence establishing the dividing edge or boundary.

*The gateway sign at the corner of Kagy Boulevard and South 11th Avenue.*



## Open Space

Open space on Land Grant institutions represents heritage land. Often these cultivated or natural open spaces continue to provide a critical link between the accomplishments of the past and vision of the future.

Formal and informal open spaces exist on the MSU campus. Formal open space typically represents significant or iconic areas. These are often named spaces such as parks and historically significant gathering spaces. Notable formal open space includes Romney Oval, Centennial Mall,

Hedges Recreation Area and Montana Hall's north lawn. In addition, formal parks on campus include Danforth Park, Wally Byam Park, Buckingham Park, Veteran's Park, and Frank M. Harrington Park (includes Duck Pond).

Informal open spaces function as areas for impromptu gatherings, campus events, and passive and active recreation. The area around Danforth Chapel, the intramural fields north of Kagy Boulevard, the grass areas between the Quads, and the Mandeville Creek corridor are considered important informal open space.

*Core-dated to 1875, this Cottonwood tree along South 11th Avenue is the oldest tree on campus.*



## Circulation

See referenced maps on following pages.

### Vehicular

Historical vehicular corridors connecting downtown Bozeman’s residential and commercial areas to the university still exist, although increasingly traffic is directed more toward expanded arterial and collector roads and away from neighborhood roads. Over time, roads that bisected portions of the campus were abandoned, providing more continuity to the campus and increasing pedestrian safety within the historic campus core. Continued development of the area will increase MSU’s accessibility and connection to the surrounding area.

The *Greater Bozeman Area Transportation Plan: 2001 Update* classifies South 19th Avenue as a principal arterial road and South 11th Avenue as a collector road, but both are primary north-south corridors for university access. South 7th Avenue and South 6th Avenue are secondary vehicular access corridors with limited access to the campus. The primary east-west corridors are College Avenue and Kagy Boulevard. The portion of College Avenue adjacent to the university is classified as a minor arterial, and Kagy Boulevard is classified as a principal arterial. Secondary east-west corridors include Garfield, Lincoln, and Grant Streets. Furthermore, Harrison Street provides access into the Johnstone Center complex, and Cleveland Street provides access to parking and utilitarian areas of Atkinson Quads, Hapner Hall and Herrick Hall.

Vehicular access does not typically penetrate the Academic District, except for service and emergency access. The majority of visitor traffic arrives via South 19th Avenue and South 11th Avenue. An existing visitor parking lot is located at the corner of South 7th Avenue and Grant Street for convenient access to the Student Union complex and library.

### Pedestrian

Pedestrian corridors are sidewalks, paved plazas and footpaths, although service roads and grass or turf are also used by pedestrians. Most pedestrian corridors or routes have been created as a result of historic traffic patterns and

designed connections to building entrances. Pedestrian plazas and seating areas are located in both formal and informal settings across campus. In addition, most buildings feature seating areas or pedestrian amenities near entrances or courtyards.

The primary north-south pedestrian corridor extends down the center of the historic campus core and begins at the Johnstone Center and ends at Romney Gymnasium. Pedestrians are able to walk south from College Street to Grant Street (more than six blocks) without crossing a public vehicle route. Centennial Mall, the primary east-west pedestrian corridor, is within the center of the campus core. Centennial Mall is a main pedestrian corridor. This corridor begins at the steps on South 11th Avenue and terminates at the drop-off just west of the intersection of Garfield Street and South 6th Avenue. Unintended paths occur near building and sidewalk corners, where foot and bike traffic across grass causes significant soil compaction that inhibits continued vegetation growth.

MSU has coordinated with the City of Bozeman to align campus bike and pedestrian trails with the city designated trail system.

### Parking

Although parking availability within the campus core is limited, MSU has abundant parking along its perimeter, particularly to the south of campus. Faculty, staff, students, and visitors are able to park conveniently and within a five-minute walk of their destinations on campus. Demands for convenient campus-core parking becomes increasingly difficult to accommodate as the campus expands and as interior surface lots are converted to building sites.

Vehicle parking on campus is classified for use by different types of permits. The 12 categories of parking on campus include remote, proximate, visitor, service, bicycle, and motorcycle. Parking permits are required for all parking facilities on campus. City streets adjacent to campus are categorized as either resident only, time of day or duration

restricted. Remote parking is provided on the north end of campus near the intersection of College Street and South 11th Avenue and on the south end of campus near Brick Breeden Fieldhouse, just off of Kagy Boulevard, and adjacent to Bobcat Stadium. These parking areas are also used for overflow during athletic and performance events. Motorcycles and scooters have designated parking areas within parking lots.

## Bicycle

Use of alternative transportation on campus, such as bicycles, is encouraged. Students, faculty and staff use bicycles to access campus on a year-round basis. Bicycle registration is required on campus. Strategically placed bicycle racks accommodate bicycle parking near building entrances and along Centennial Mall. Local bike advisory and advocate groups have worked to link regional and local bike routes with campus gateways to provide safe and efficient corridors for campus access.

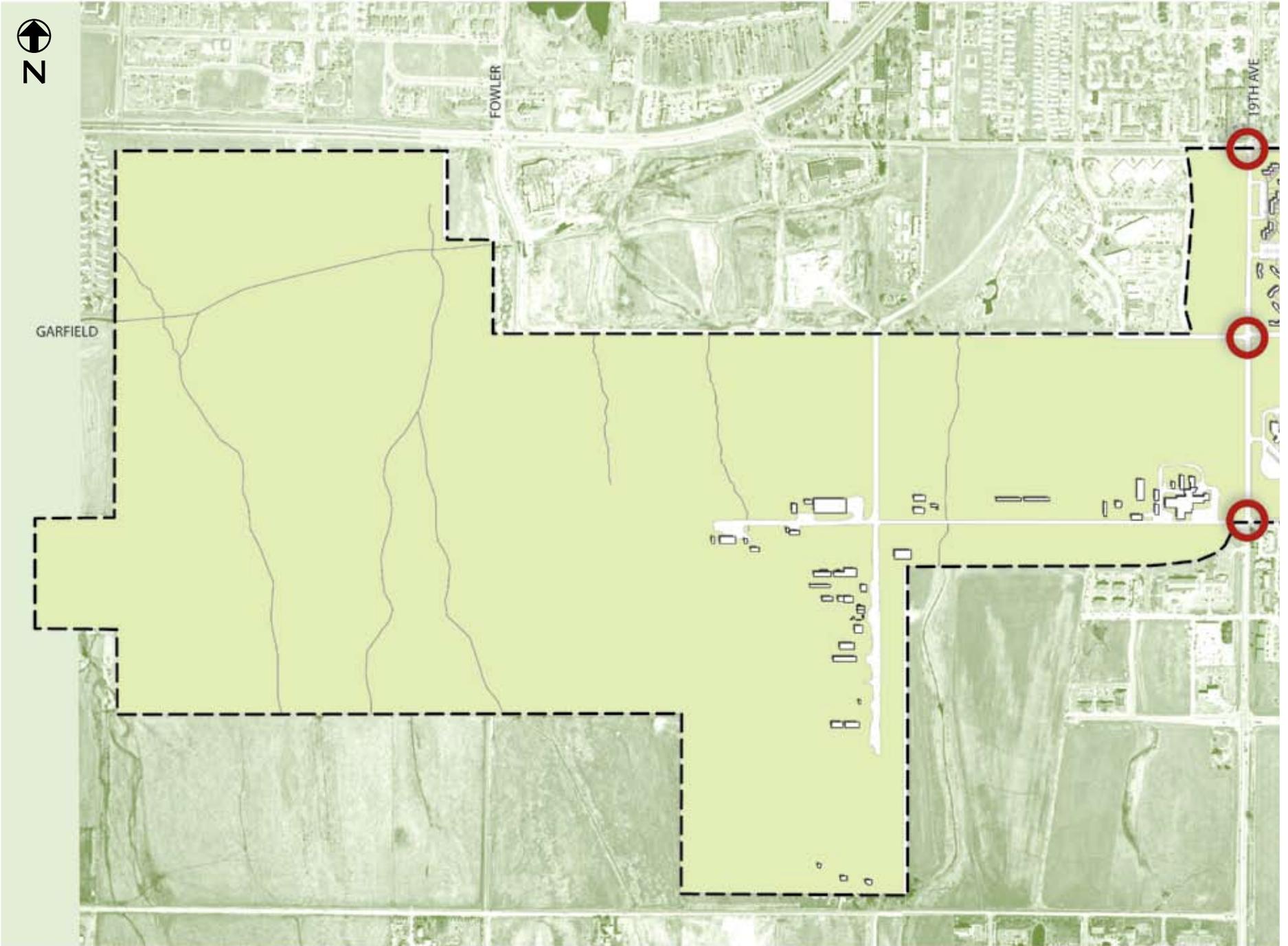
## Transit

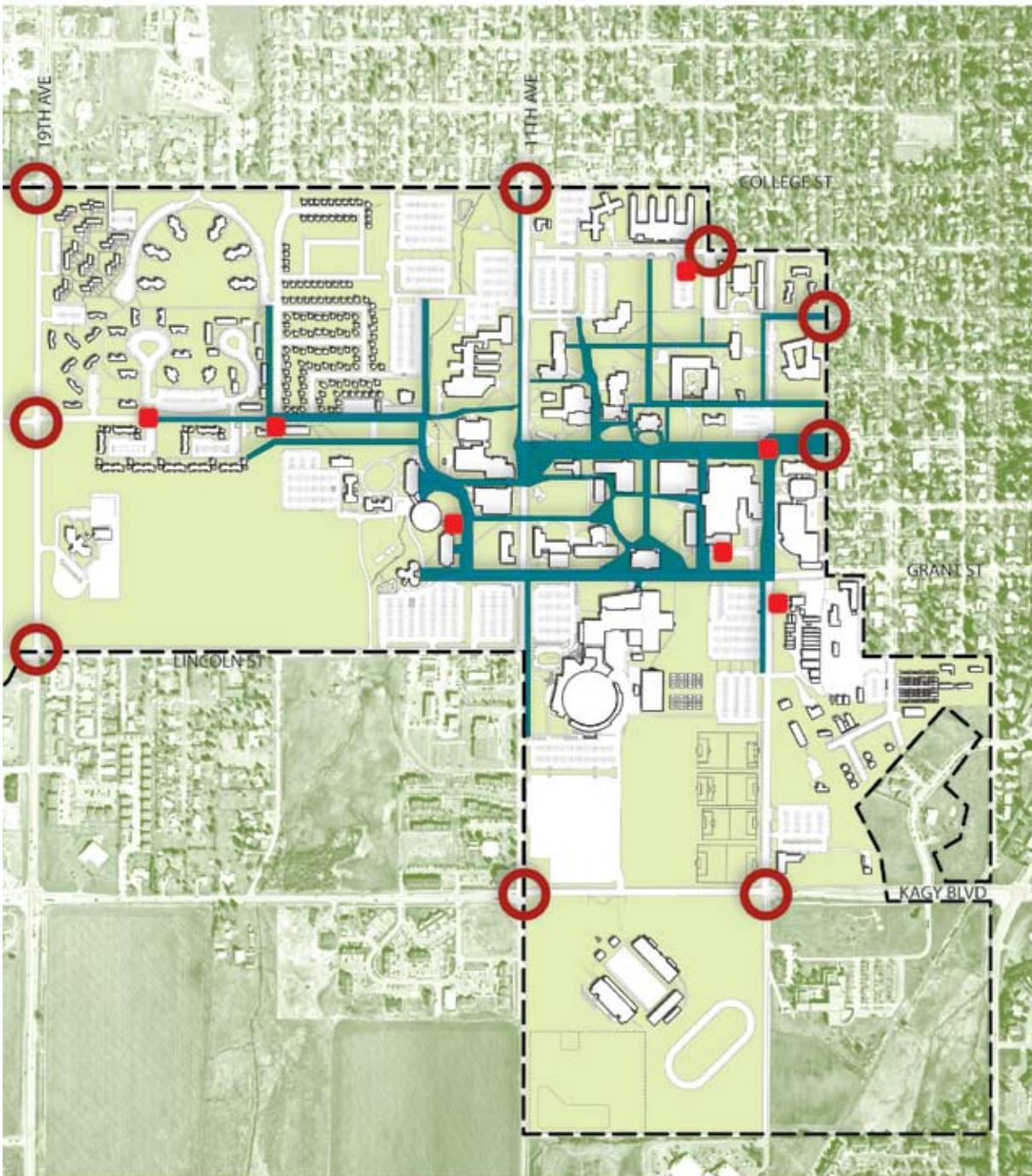
In 1986, a study performed by the university's College of Engineering and Western Transportation Institute (WTI) conclusively found that the community and the university would use a transit system that served a greater geographical area than the campus and its immediate vicinity. A campus-oriented bus service (Bobcat Transit) began in 1987 using a two-bus system that focused on University service, but was also available for use by the general public. Until recently, the bus system operated on campus and was funded by Associated Students of Montana State University (ASMSU). Adoption of the *Greater Bozeman Area Transportation Development Plan: 2001 Update* by the City of Bozeman and Gallatin County led to expanded sponsorship of the current Streamline and Skyline transit system that has routes connecting the campus to the key areas of Bozeman, Belgrade, Four Corners and Big Sky. The transit system is underwritten by a consortium of local entities, including ASMSU, which makes it possible to operate on a non-fare basis.

*Bicycle parking near Roskie Hall.*

*Skyline, one of the several local transit operators, provides service to the campus by linking to area amenities, such as ski areas. Intercity transit is also currently available through Streamline transit service.*

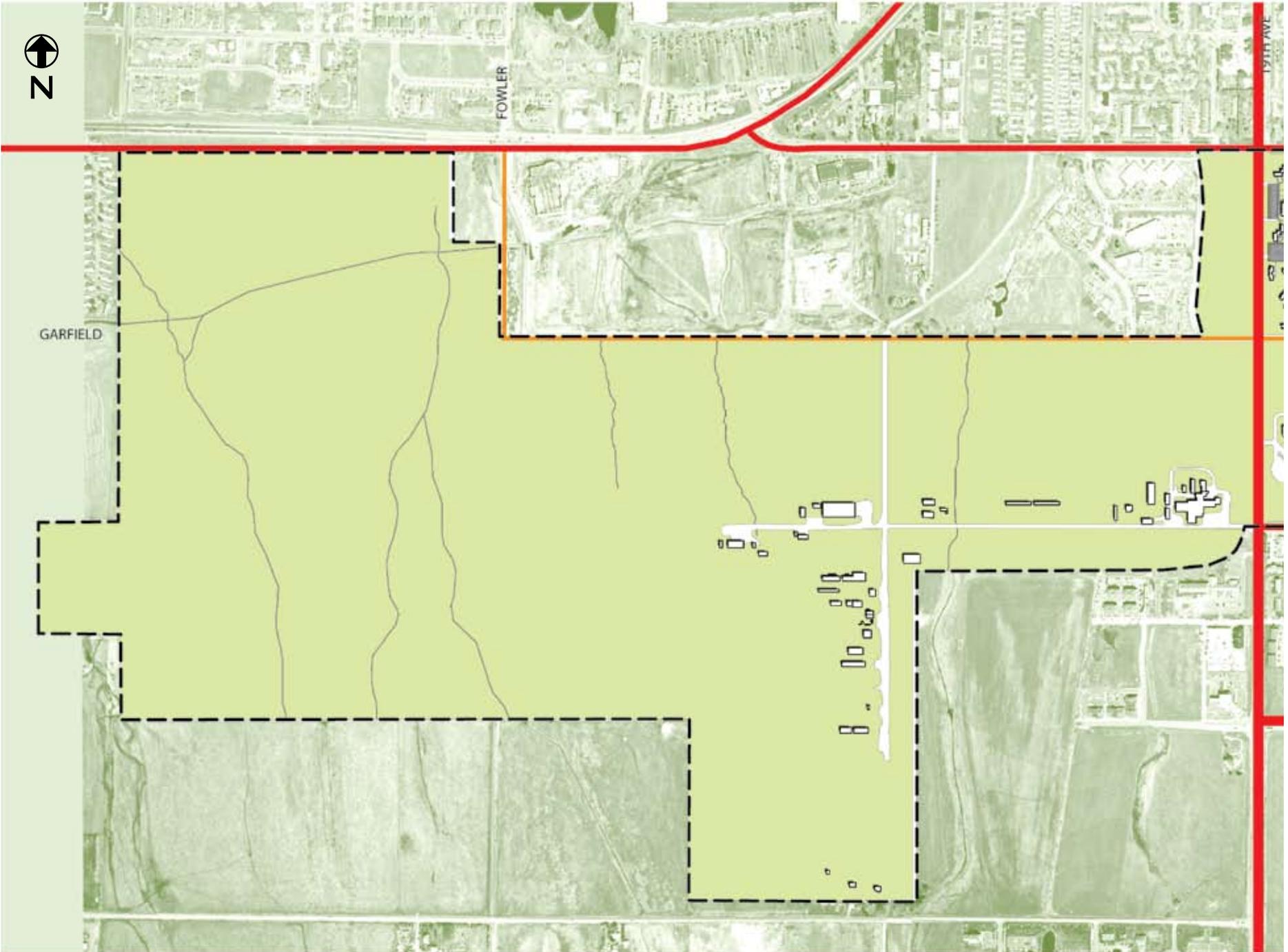


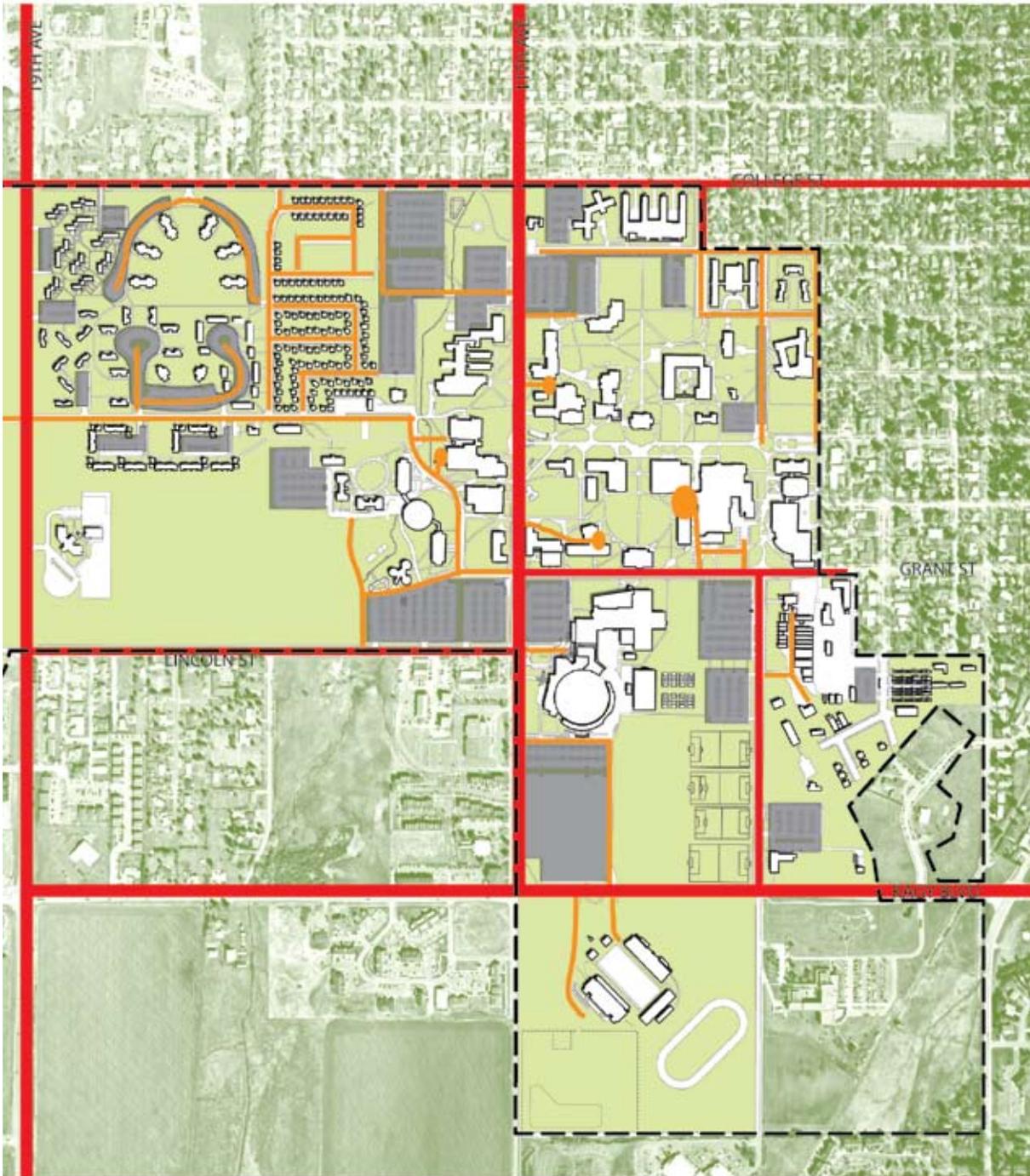




## Existing Pedestrian and Bicycle Circulation

- Major Pedestrian Paths
- Campus Entries - Primary and Secondary
- Bus Transfers and Stops





## Existing Vehicular Circulation

- Primary Vehicular Circulation
- Secondary Vehicular Circulation
- Surface Parking Lots

## Architecture

The university consists of a collection of buildings with origins spanning portions of three centuries. Architectural expression and character, as well as physical building needs, have changed since the founding of the university over a century ago. The buildings reflect the architectural style, academic trends, social and cultural norms, and building construction of each respective era. Eclectic in design by necessity, the campus buildings embody the ideas, values and vision of those who shaped the university. The use of locally obtained natural material and brick in the early structures helped to establish the university's image of academic achievement, strength

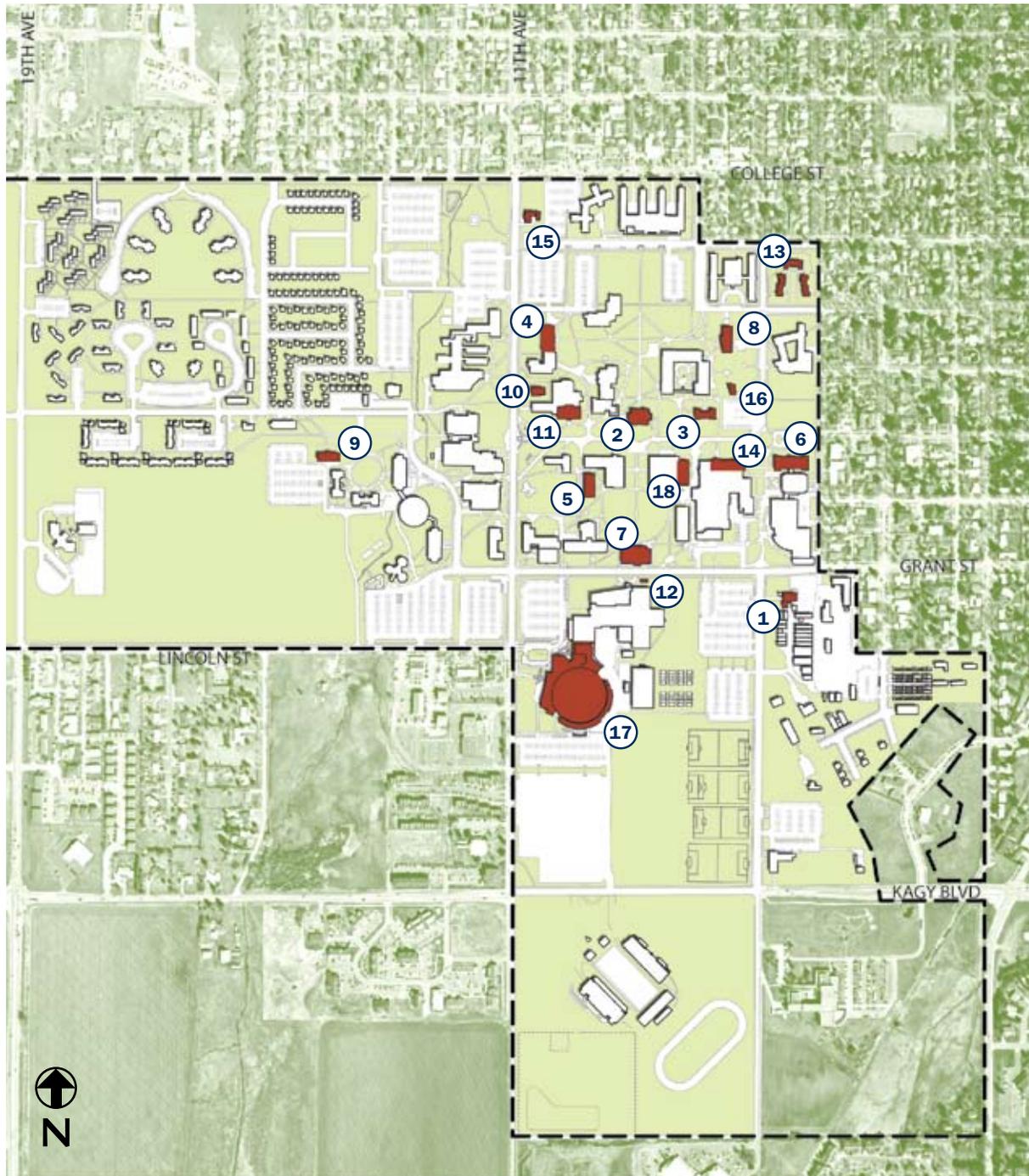
and perseverance. The massing, scale and character of the campus buildings provided critical spaces between them, which contributes to a sense of community within campus neighborhoods.

A functional, attractive campus contributes to the ongoing success in higher education's competitive environment. Teaching and research has evolved in the 21st century, requiring larger, more flexible interiors than in the past. To continue to thrive, facilities must periodically be adapted, renovated and remodeled to serve continually evolving needs.

*Newly remodeled in 2008, the Marga Hosaeus Fitness Center provides students, faculty and staff with state-of-the-art recreation opportunities.*



Candace Mastel



## Historic and Heritage Sites

The campus character developed over time with the use of brick and other indigenous building materials. Although the campus is not on the National Register for Historic Places or Buildings, many of the older buildings on campus have been inventoried for Heritage Property designation, according to the Montana Antiquities Act for state-owned buildings. Although only the Heating Plant (1) has been approved as a Heritage Property by the State Historic Preservation Office (SHPO), Montana Hall (2), Hamilton Hall (3), Linfield Hall (4), Traphagen Hall (5), Roberts Hall (6), Romney Gym (7), Herrick Hall (8), S.O.B. Barn (9), Taylor Hall (10), Lewis Hall (11), Gatton Field Gate (12), Atkins Quadrangle “Quads” (13), original Student Union Building (14), Wool Lab (15), Danforth Chapel (16), Brick Breeden Fieldhouse (17), and original Renne Library (18) are significant historic structures and are under consideration. The Plan recognizes the history and importance these historic structures have to campus, and encourages their continued preservation and future use.

### HISTORICALLY SIGNIFICANT BUILDINGS AND STRUCTURES



## Landscaping

The George Carsley/Cass Gilbert Plan of 1917 was considered a “Beaux Arts” influenced plan based on axial and physical relationships between buildings and spaces. If fully implemented, its intent was to develop the campus landscape with large expanses of linear green space and open areas with creative vehicular and pedestrian spaces. Key components of the original plan still visible are in the formal spaces of Centennial Mall, Romney Oval, and the north lawn of Montana Hall.

Without a formal inventory or development plan, the landscape on campus has been installed as needed. Some formal landscape projects have been undertaken, such as Centennial Mall, which incorporates complementary pavement treatments that highlight spaces such as the Student Memorial. Planned landscaping has transformed otherwise ordinary spaces on campus through the use of tree-lined boulevards that change urban streets into satisfying pedestrian corridors, creating informal open spaces that unify buildings with the environment.

*Water from an underground warm spring supports the popular Duck Pond, which evolved from a former frog pond of the 1916 era. The Duck Pond, within Frank M. Harrington Park, continues to be a memorable place and natural respite on campus.*



Victoria Drummond

## Academics

### Academics (teaching and research)

The university consists of 10 colleges and many centers for learning that are committed to providing a high degree of excellence. Academics (teaching and research) has evolved from the original agricultural and engineering programmatic focus. MSU enters the 21st century with successful academic programs that prepare students for future professional employment and lifelong growth in many sectors, including agriculture, arts, architecture, engineering, nursing, and the sciences.

MSU is a research-intensive institution and is ranked in the top 100 U.S. institutions by the Carnegie Foundation (2007). Research is a vital part of university life and is integral to the success of academic programs, as well as the overall university. As these research-based programs have evolved, specialized facilities and programming such as labs, workrooms and storage areas have been created.

### Agriculture

As a Land Grant institution, one of MSU's founding premises is that agricultural teaching and research remain an integral part of its success. The 950 acres on campus

currently in use by MSU's College of Agriculture teaching and outreach programs and MAES agricultural research contribute to the effectiveness of the agricultural industry and the university's achievements. Changing land use surrounding the campus will require ongoing and long-term evaluation of future field-oriented agricultural research and teaching programs.

### Faculty and Staff

Recently Bozeman has experienced an apparent resurgence of reinvestment in downtown properties, renovation of homes near campus, and development of surrounding farmland. Young families, retirees and professionals have sparked a wave of growth within the local community which has caused property values to increase substantially over the last four years. The average cost of a home in most of the established and new neighborhoods adjacent to campus has generally exceeded the affordability level of the average MSU employee. With the current cost of living and property increasing yearly, faculty and staff have expressed an interest in living on or near university property, close to work in order to take advantage of the many lifestyle opportunities available on campus. There are currently no faculty or staff residences on campus.

*The university agricultural lands and the surrounding mountains offer unique and diverse academic "classrooms".*







## Agricultural Lands

Agricultural Research and Teaching Facilities



## Housing

*See referenced maps on following pages.*

Housing consists of residence halls and apartment-style graduate and family housing. Residence halls address the lifestyle and needs associated with recent high school graduates and provide more traditional on-campus accommodations and amenities. Residences for traditional students are located at North and South Hedges, Hedges Suites, Roskie Hall, Langford Hall, Johnstone Center, Hapner Hall, Hannon Hall and the Atkinson Quads. The residence halls near College Street have the advantage of being located near a commercial area that provides dining, office, gasoline, and service-related establishments. Additionally, four sororities and eight fraternities are authorized at the university and these residences are located adjacent to campus. These are privately owned, and maintained by the individual sorority or fraternity.

Graduate and family housing is collectively referred to as non-traditional student housing, and includes more

independent-type accommodations. Graduate and family housing includes Paisley Court, Peter Koch and Nelson Story towers, Branegan Court, McIntosh Court, Grant Chamberlain, and the 1950s houses. In total, graduate and family housing consists of 704 units that feature one, two, or three bedrooms arranged in a variety of floor plans within eight architecturally diverse neighborhoods.

With the exception of McIntosh Court, Paisley Apartments and Hedges Suites, MSU's housing was constructed between 1950 and 1979 and was configured to address market trends of those time periods. Currently, the average age of students at MSU is 22, but the non-traditional student cohort continues to increase. In general, incoming students have increasingly different expectations of campus housing than those of earlier decades. Housing on campus has been slowly adapting to the current market trends and will continue to do so in the future.

*Hedges North, Roskie Hall and the Hedges Suites represent examples of current housing for students on campus. The Hedges Suites (left photo) are representative of what students demand in current on-campus housing arrangements.*



MSU campus housing provides certain intrinsic advantages over private sector housing in the vicinity, and these are attractive to MSU students considering campus housing. These advantages include:

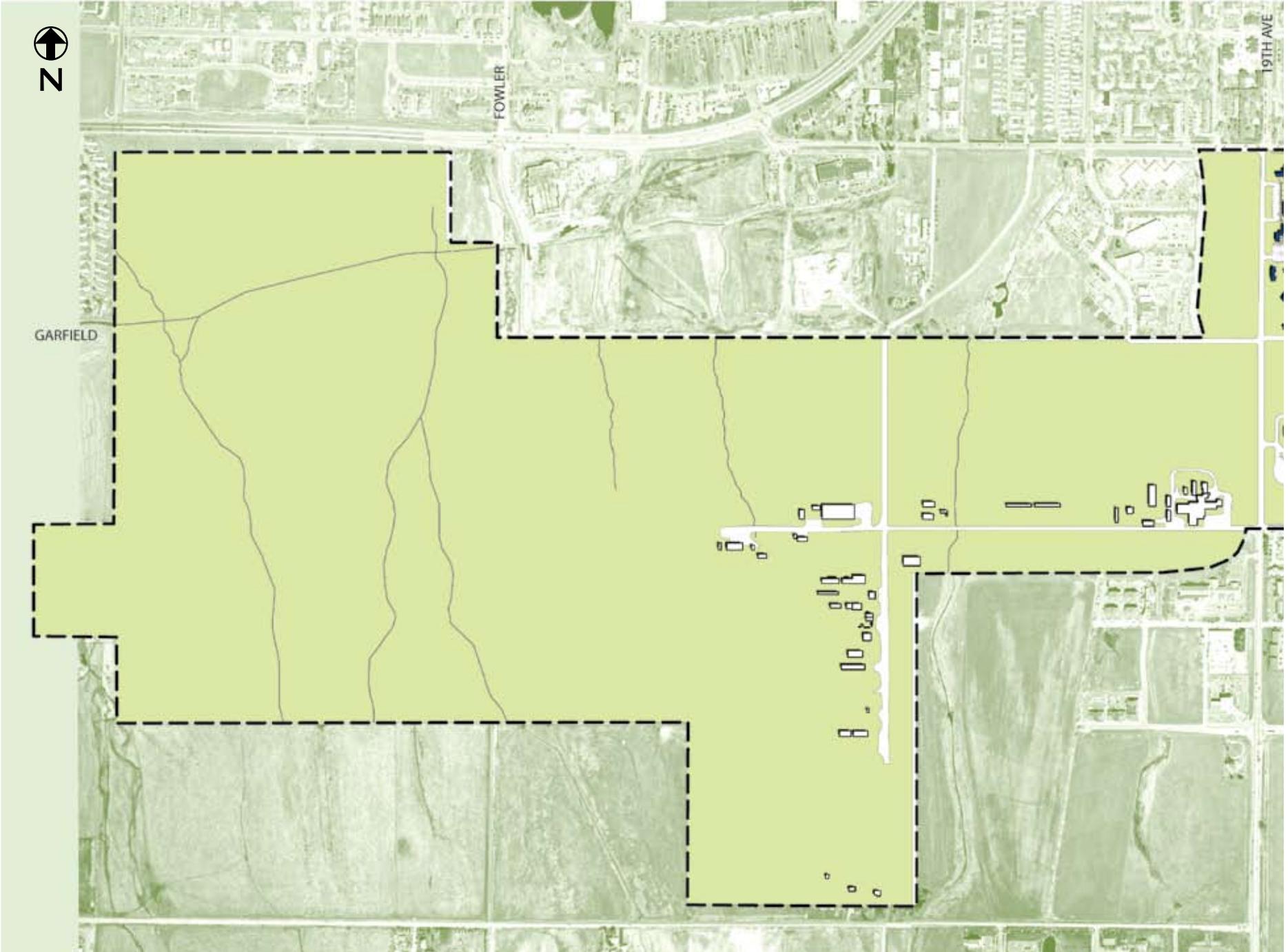
- Common gathering venues for socializing, studying, recreation, and dining.
- A strong sense of social connectivity and community with other MSU housing students, in close proximity to campus academic, research and events venues on campus.
- Convenient, centralized billing for all campus services including housing, fees, tuition, financial aid and food services.
- Educational and social opportunities focusing on such topics such as diversity, wellness and academics.

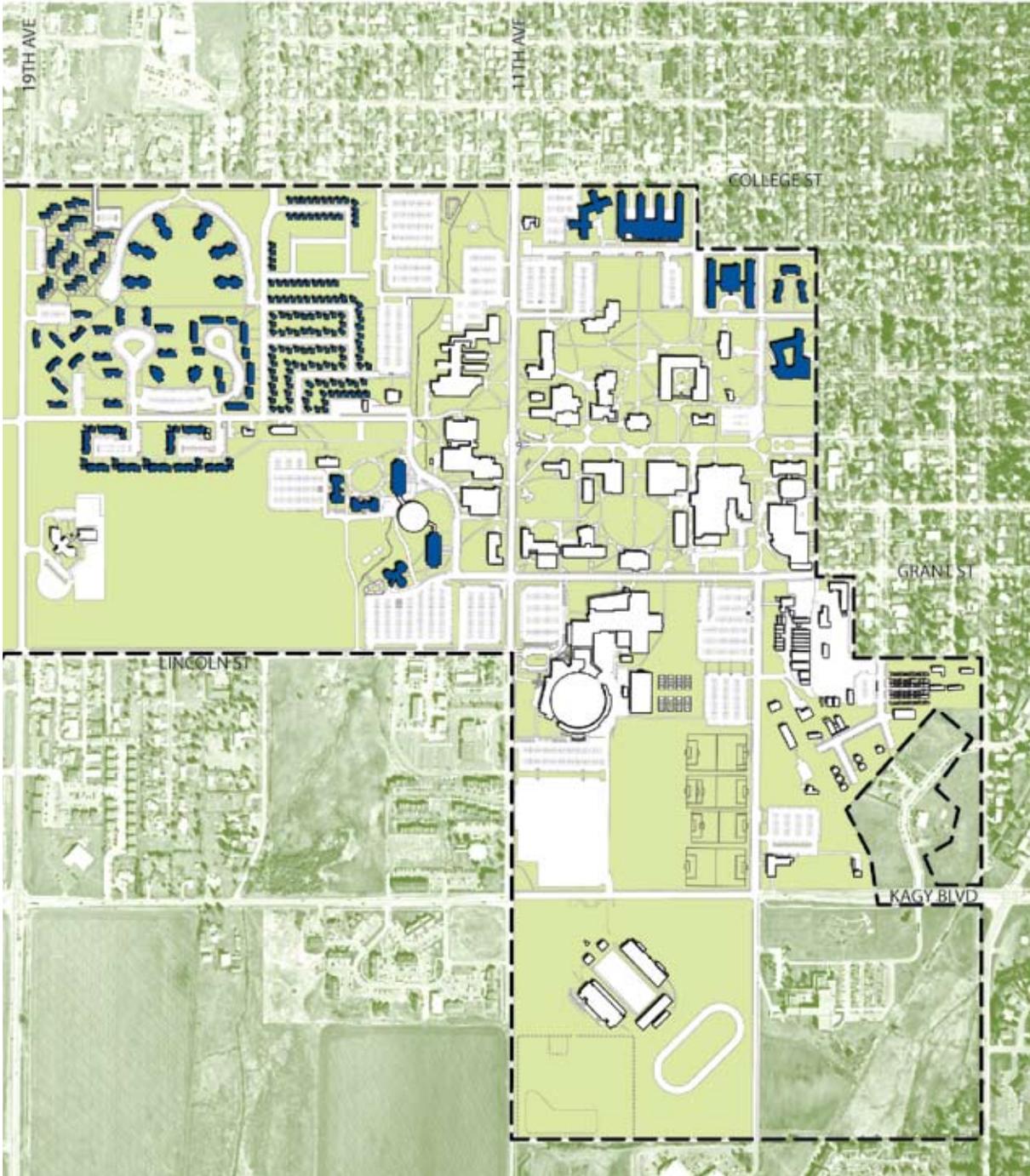
- Dedicated professional police protection for a much smaller geographic area than the community at large. The MSU police force is also specifically focused on serving the campus population through community policing activities.
- A higher level of safety and cultural connectivity for international students.
- A higher level of university-associated IT connectivity than is available in the community at large.
- Family amenities, such as children's playgrounds and day-care facilities.

*Family Graduate housing, built in the 1940's, will be replaced with modern housing such as that on Grant Chamberlain Drive, which is apartment style housing.*



Victoria Drummond





## Existing Housing

■ Existing Housing

## Sustainability

The university recognizes that along with effective long-range planning, a greater transformation is necessary to advance its commitment to environmentally, socially and economically sustainable decisions and choices.

Existing sustainable practices include:

- Construction of buildings that are intended to last a long time.
- Adaptive re-use of existing structures through renovations and alterations.
- Expansion of the utility tunnel system, which takes advantage of central utility distribution and the central heating plant.
- Self generate 6-7% of campus electrical needs with a co-generation steam turbine.

*Sustainability efforts have included analysis of water resources on campus. This includes the evaluation and restoration of sections of Mandeville Creek, which flows through campus.*



- Water conservation through its centrally controlled irrigation system with microclimate sensing.
- Use of indigenous vegetation and water-conservative landscaping.
- Replacement of equipment and lighting with energy-efficient technologies and automated energy-control systems.
- A broad range of recycling efforts.
- Installation of operable windows and natural light and ventilation in appropriate spaces other than laboratories.
- Demonstration of sustainable agriculture techniques that support local food production and community outreach.
- Support and promotion of community-based transit use and other alternative modes of transportation for students, faculty and staff.
- Become an active member institution of the US Green Building Council (USGBC).
- Become an active member institution of the Association for the Advancement of Sustainability in Higher Education.

# 4

## Elements and Principles of the Framework Plan

The Framework Plan

Land Use

Open Space

Landscape

Transportation and Circulation

Architecture

Housing

Sustainability

### The Framework Plan

To effectively guide generations of change, a long range campus development plan should be flexible yet maintain a structural framework. That structural framework, or framework plan, is an outline of the fundamental design standards, and philosophy of Montana State University's Long Range Campus Development Plan (Plan). Early in the public planning process, eight Planning Principles (see page 13) were established and used as a basis for the Plan's fundamental design. These eight principles are incorporated into the framework plan to ensure integration of future growth that respects the historic core of campus.

The identified Plan elements are critical components of an integrated campus vision. As an extension to the Plan, the framework plan strategies reflect the desired vision of a vibrant, pedestrian-oriented and environmentally connected campus. The framework plan's 10- and 25-year build-out scenarios depict guided growth towards the university's long term vision. The concepts within the plan allow for flexibility and adaptability, which keep the plan dynamic and facilitate adjustment to changing conditions.

## The Framework Plan *continued*

### Framework Plan Elements and Principles

The framework plan is a structure of interconnected elements. Although connected, each element has an independent set of values for the long-term vision. Framework plan elements are those remarkable features and characteristics that create form and function, and interlock with development principles and strategies.

These framework elements are:

1. Land Use
  - Districts and Neighborhoods
2. Open Space
  - Formal Open Space
  - Informal Open Space
  - Edges, Boundaries, Gateways, and Portals
3. Landscape
4. Transportation and Circulation
  - Pedestrian Circulation
  - Bicycle Circulation
  - Public Transit
  - Vehicle Circulation
  - Parking
5. Architecture
6. Housing
7. Sustainability

*A perspective sketch from Romney  
Gymnasium down to College Street.*



## Land Use

### Land use element strategies include:

- *Use sound planning and design principles to ensure well-conceived development.*
- *Honor and preserve the university's history, while supporting future aspirations.*
- *Establish a vision for the long-term physical development that is comprehensive, creative, useful, and inspiring.*
- *Create guidelines that allow flexibility to respond to changes and opportunities.*
- *Ensure that development is aligned with the University Land Grant mission and five-year vision.*
- *Institute efficient use of present and planned infrastructure.*
- *Support land-use decisions that enhance the university's sense of place and image.*

MSU's campus consists of approximately 950 acres. This includes College of Agriculture and Montana Agricultural Experiment Station lands. However, this resource is a finite and irreplaceable asset. The framework plan is intended to prevent short-term decisions that may impair long-term opportunities, and ensure that the university is making the most efficient use of its land.

The university has limited opportunity to expand its land holdings. Therefore, the framework plan focuses on the current boundaries of the Bozeman campus. Building site locations give physical form to open space, corridors and quads. Site locations within the plan are developed to preserve and create a physical environment of appropriate density that enhances the campus image and provides functionality.

*A perspective sketch of the future research quad east of South 19th Avenue.*



One consideration of land use is development density. Land used for agricultural purposes transforms from rural in appearance to urban with the increased concentration of uses. The character of an area evolves with land-use changes that shape its distinctiveness. Often the bordering local community influences land uses, but usually it is the efficiencies and economies of land use over time that dictate development.

Growth within the historic core has resulted in increased density. Uses at the periphery of the historic core, such as housing and recreation, have continued to maintain a medium density, and the area west of South 19th Avenue has remained relatively rural even though community development surrounding these areas resembles a more suburban character.

## Land Use *continued*

### Districts and Neighborhoods

The historic development pattern of MSU has loosely evolved in a manner that has clustered related functions. As areas of related uses expanded and changed over time, they established “neighborhoods.” Some existing neighborhoods include Arts and Architecture, Engineering and Family and Graduate Housing. The continued clustering of similar uses expanded and interconnected neighborhood groupings. The framework plan incorporates this distribution of land uses by formally recognizing the larger areas of academics, housing, support services and community venues as “districts,” and continues with the concept of identifying the smaller and more specialized uses within districts as “Neighborhoods” – a sub-category of land use.

A district defines the extent of intended land use and its location with the campus context. Neighborhoods are grouped uses within the district that create order and

a sense of place to the campus plan. The framework plan promotes the diversity of Districts and encourages landscape, architecture and infrastructure elements that articulate the activities and functions of the neighborhoods. The framework plan does not assume that all buildings, uses and functions within a District are exclusive to the broad district description.

**The framework plan identifies eight distinct districts:**

- Academic (teaching/research)
- Community Venue
- Campus Mixed-Use
- Campus Core Housing
- Campus West Housing
- Agriculture
- Support Services
- Enterprise Zones

*Parking lots on the outskirts of campus serve both day to day and special event parking needs.*



Stephen Hunts



## Land Use continued

### Academic element strategies include:

- *Create an academic presence along College Street between South 6th and South 19th avenues.*
- *Assemble similar uses in neighborhoods (Arts and Architecture, Engineering, Agriculture, and Student Services).*
- *Use open space and corridors to create linkage between the neighborhoods within the district and throughout the campus.*

### Community Venue element strategies include:

- *Enhance connection of Bobcat Stadium to the campus core.*
- *Identify and expand facilities and fields to meet the needs of the NCAA athletic programs, club sports and recreation programs.*
- *Enrich the community event experience with a pedestrian corridor (informally known as the “Walk of Victory”) that connects the campus with athletic neighborhoods.*
- *Create and enhance facilities that promote the university’s connection to the community.*

### Districts and Neighborhoods continued

#### • Academic District

Comprises neighborhoods and facilities that support the university’s academic (teaching and research) programs. The framework plan envisions expansion of the Academic District in the northwest and southeast directions from the campus core. Neighborhoods include teaching and research functions, administrative offices, student service functions, the library, and Student Union facilities.

*A perspective sketch of the proposed “Walk of Victory,” which would connect the campus with Athletic neighborhoods.*

#### • Community Venue District

Comprises several neighborhoods that support recreation, club, NCAA athletic functions, and public interface venues south of the Academic District. These buildings and fields make up the university’s athletic programs, campus recreation and community service interface neighborhoods. The existing public interface facilities are the Museum of the Rockies, Bobcat Stadium and Brick Breeden Fieldhouse. Future public interface facilities (yet to be determined) would be developed in this district to promote the community venue theme.



### **Campus Mixed-use element strategies include:**

- *Promote collaborative opportunities between the university and community to rejuvenate the College Street area between South 8th and South 11th avenues.*
- *Designate and keep vibrant an appropriate area for public-private partnership opportunities.*
- *Replace aging student housing and university office space with new facilities that integrate living, working and business opportunities along College Street boundaries.*
- *Open up the visual corridor into the historic core from College Street.*

### **Housing element strategies include:**

- *Replace existing housing along College Street (as it reaches its useful life span) with vibrant and market-competitive housing options.*
- *Integrate a variety of housing alternatives and living options to create interactive neighborhood communities.*
- *Create a community connection with campus housing proximate to commercial and residential development along Cleveland Street and Fowler Lane.*
- *Provide affordable living options to students, faculty and staff.*

### *Districts and Neighborhoods continued*

#### · **Campus Mixed-Use District**

This district is located in the northeast corner of campus and includes various neighborhood opportunities such as housing, academic, support-based operations, and collaborative commercial and retail opportunities with the private sector. A dynamic university-community interface is envisioned along College Street between South 8th and South 11th avenues.

#### · **Campus Core Housing and Campus West Housing Districts**

These are distinct areas of housing; however, campus housing will also be located in the Mixed-Use District in order to offer the university community a variety of alternatives and preferences. The framework plan envisions a variety of diverse housing neighborhoods within these two districts.

*A perspective sketch of the proposed housing near Fowler Lane and Garfield street showing connective paths and parks.*



The **Campus Core Housing District** will be located near the Academic and Community Venues districts. The intent is to provide a variety of housing amenities to enhance the campus living experience and meet lifestyle expectations. Choices within this district may range from traditional campus residences to apartment-style housing, with access to campus open space and recreational opportunities.

The **Campus West Housing District** will create an energetic new housing alternative west of South 19th Avenue. The intent is to provide campus housing away from the campus core that provides increased independence and amenities comparable to local subdivisions. Housing choices within this district may range from apartment buildings and duplexes to single-family housing, and may accommodate students, faculty and staff. Residents would have access to less-formal recreation areas and increased open space connections to commercial developments along Huffine Lane.

## Land Use *continued*

### **Agriculture element strategies include:**

- *Locate University uses along the property periphery as a buffer that protects and surrounds the agricultural uses.*
- *Phase some agricultural operations to off-campus MAES locations.*
- *Create new academic (teaching and research) facilities along Garfield Street and South 19th Avenue.*
- *Create an agricultural endowment.*

### **Support Services element strategies include:**

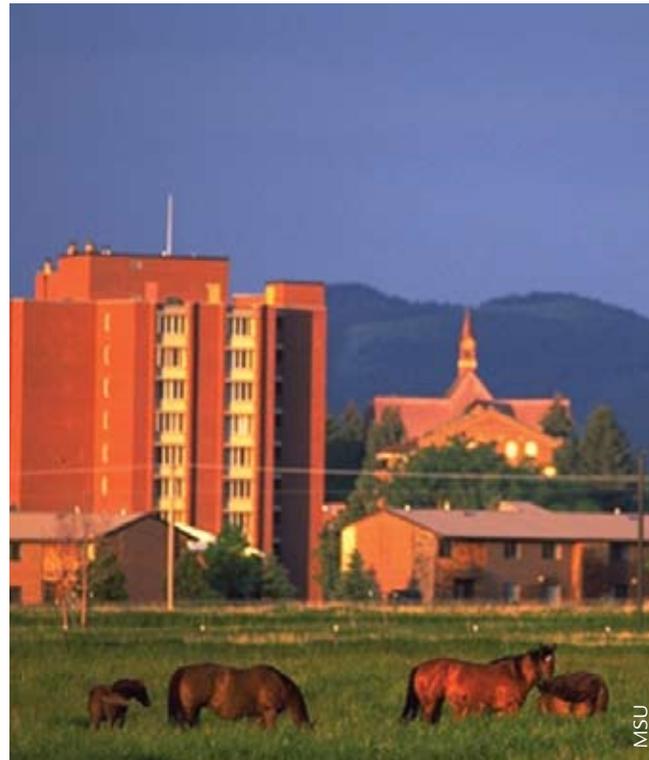
- *Relocate University's facilities operations west of South 19th Avenue.*
- *Create opportunity for a central receiving facility to reduce commercial traffic on campus, streets and service drives.*
- *Consolidate and relocate some ancillary support service functions to create growth opportunities within the campus core.*

### *Districts and Neighborhoods continued*

#### • **Agriculture District**

This district consists of the land west of South 19th Avenue, which is currently used for agricultural teaching and research programs for the College of Agriculture and the Montana Agricultural Experiment Station (MAES). To meet the future needs and goals of these programs, the framework plan preserves and protects a 250-acre area for the continuance of on-campus agricultural teaching and research. Some agricultural activities will transition to other MAES sites throughout the state. The framework plan proposes strategic placement of university uses along the property boundary. This will create a separation or buffer between agricultural uses and privately owned land, and reduce the potential for external impacts.

*Agricultural lands are home to farming and livestock.*



#### • **Support Services District**

This District includes the centralized operation of university facility services and ancillary support functions in a more peripheral location. The framework plan proposes consolidation and relocation of facilities and support services in order to create building sites for additional academic facilities within the campus core, where infrastructure exists or can efficiently be expanded.



*Districts and Neighborhoods continued*

**Enterprise Zone element strategies include:**

- Consider areas along Huffine Lane, west of the development on Fowler Lane for enterprise opportunities that enhance university housing in the area.
- Enhance the future major gateway entrance to the university (southwest corner of South 19th Avenue and College Street) with an appropriate partnership enterprise.
- Foster private/public partnership opportunities and create facilities that serve the university and local communities.

*The Advanced Technology Park, located just west of South 19th Avenue, is a center for private and public collaboration in research.*

*The Enterprise Zone just south of Huffine Lane, may offer similar dynamic, mixed-use development opportunities, like the Bozeman Gateway project, which is currently under construction.*

• **Enterprise Zone District (or districts)**

This district includes those areas with opportunities for the university to interface with the community and engage in entrepreneurial and collaborative partnerships. The framework plan envisions these areas to be at the edges of campus, providing increased visibility and accessibility near private commercial areas. Types of facilities within the district(s) will be influenced by economic development and partnership opportunities, but may include hospitality, retail, commercial, and residential.



*The Pickle Barrel eatery, located on College Street, has been a popular spot with students, faculty and staff for many years.*



## Open Space

### Open space element strategies include:

- *Develop new formal outdoor spaces that create a sense of place.*
- *Provide shade, pedestrian access, bike paths, sheltered seating areas, and trash receptacles within the open space network.*
- *Enhance the quality of the open space network through well-conceived architectural and landscape planning and design.*
- *Retain recreation fields as an integral component of the campus open space network.*
- *Incorporate open space and green corridors into the circulation network.*
- *Connect Centennial Mall to future open space and green corridors.*
- *Develop and enhance open areas and green corridors to reflect the characteristics of the neighborhood.*
- *Formalize the campus edges and gateways.*
- *Use design elements to distinguish gateways and portals on the campus.*
- *Construct gateways and portals that convey image and provide a sense of arrival.*

Open space has the power to shape the image of a campus. It is a central organizing element of the campus' physical environment. The thoughtful placement and design of buildings creates and frames open space. Thoughtful planning and use of open space transforms a collection of buildings and landscape elements into a well-functioning campus.

The framework plan identifies not only future building sites, but the orientation of the buildings so that collectively they form engaging outdoor spaces. The

plan expands the existing network of open space, parks, recreation fields, malls, green corridors, paths, and streets to link together the campus districts and neighborhoods. A network of interconnected open space characteristics unites the built and natural environments, defines the districts and neighborhoods and creates a recognizable sense of place. The framework plan proposes primary circulation paths within major green corridors and opens spaces, which then link a series of secondary pathways, streets and walkways.

*A perspective sketch of the proposed trail and open space linkage along Garfield Street, west of South 19th Avenue.*



## Open space fundamental elements include: *continued*

- *Develop gateways and portals that promote wayfinding through the campus.*
- *Provide informal open areas in and around housing areas.*
- *Create recreational opportunities within green corridors, connecting the campus core and area west of South 19th Avenue.*
- *Create public space and special places for recreation, social gathering, contemplative retreat, and interaction.*
- *Integrate parks into the circulation network.*
- *Create primary gateways at the corner of Garfield Street and South 19th Avenue that offer alternative circulation opportunities into and around campus.*

*A perspective sketch of the proposed open space corridor that stretches from Montana Hall west across South 11th Avenue.*

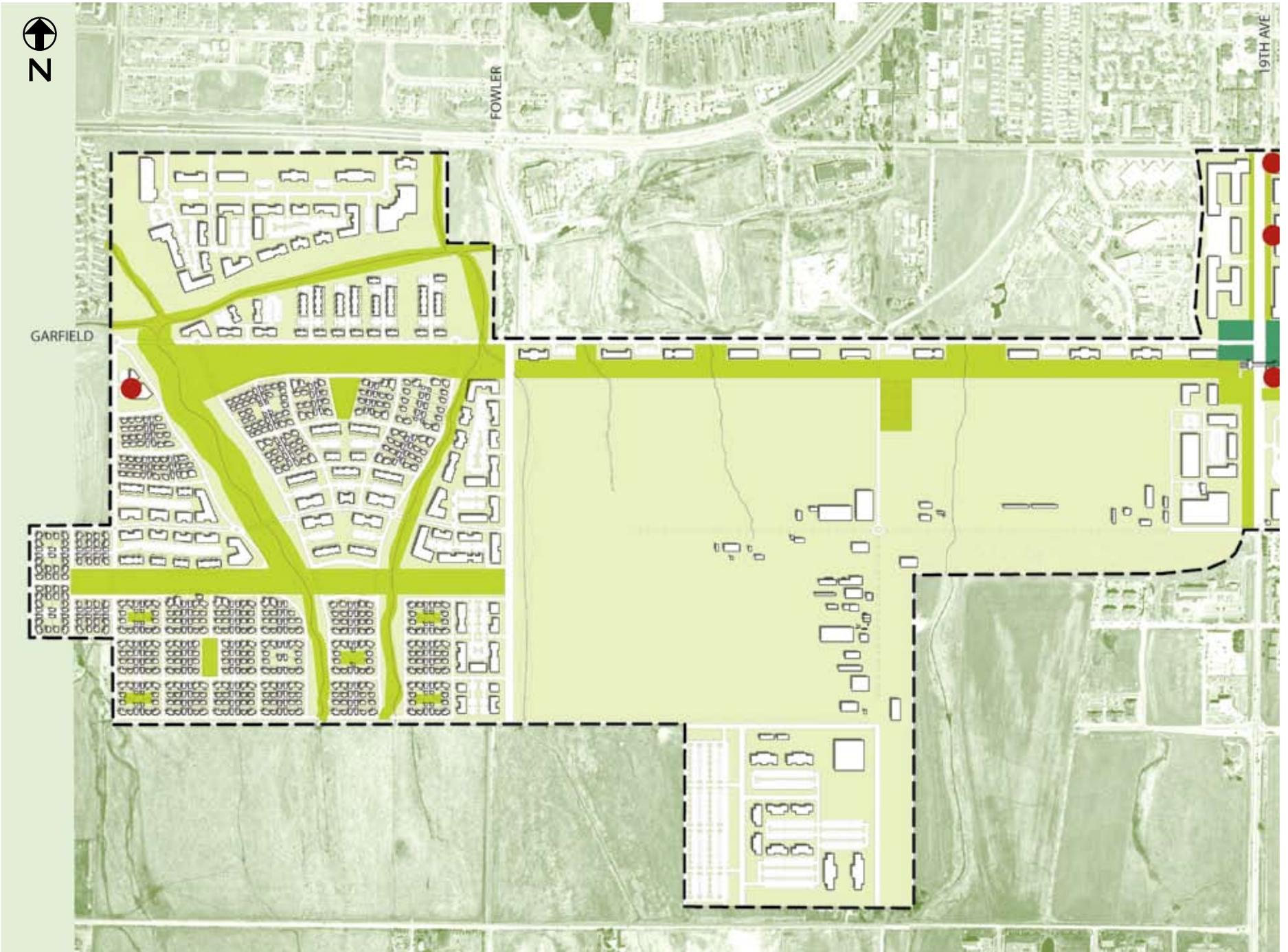
## Formal Open Space

An organizing element of open space is the formal network of malls, lawns and green corridors. Generally framed by prominent buildings, park-like green spaces of this formal network create the core of the non-vehicular circulation network that links the districts and neighborhoods. Open spaces within this network create a sense of place by providing outdoor social centers, circulation and gathering spaces. The historic core includes formal open spaces that will be preserved as critical elements of the framework plan. Significant formal spaces that over time become “places” on campus include:

- **Centennial Mall** functions as a major east-west green corridor and a place for campus events and social gatherings. Located at the midpoint of the mall, Montana Hall is a junction for the two major green spaces of the historic core and associated circulation corridors. This junction point also serves as a primary gathering area for the campus community. The framework plan strengthens the open space network by connecting Centennial Mall to a proposed green corridor along Garfield Street, which will link the area west of South 19th Avenue with the historic core of campus.



- **Montana Hall** has a significant lawn north of the building. The lawn was originally part of the formal entry to MSU. The 1917 George Carsley/Cass Gilbert Plan created a two-block wide ceremonial green entry spanning the area from South 8th Avenue to South 10th Avenue and terminating in front of Montana Hall. Decades of campus construction altered this open space considerably, but its significance to the historic core of campus still remains. The framework plan strengthens the significance of this lawn as it reintroduces the visual and pedestrian portal from the north edge of campus to the historic campus core. The lawn becomes the anchor for a new east-west green corridor created with the expansion of the Academic District west of South 11th Avenue.
- **Romney Oval** is a noteworthy formal open space within the historic core. It is a tree-shaded green space venue area used spontaneously and for planned events. It is anchored by historically significant buildings: Montana Hall to the north and Romney Gym to the south. The lawn is used for recreation and respite within an active area of campus. The framework plan continues to emphasize the importance of the area as a linkage to Centennial Mall, the Marga Hosaeus Fitness Center and the Athletics District.
- **Parks** also contribute to the network of formal open space. Notable parks are Veterans Park, Danforth Park, Wally Byam Park, and Buckingham Park. The framework plan highlights these areas and improves their visibility as special places on campus.





## Proposed Open Space Linkages

- Informal Outdoor Spaces
- Formal Outdoor Spaces
- Special Nodes and Structures

*Note: This map is based on the Long Term Vision map (reference page 95).*

## Open Space *continued*

### Informal Open Space

Informal open space unifies the campus framework plan and plays a central role in establishing the overall character of campus. The majority of green space within campus is general open areas, but informal open space includes circulation, intended connectivity and activities. Informal open space includes:

- **Secondary green corridors**, which are vital green elements within the campus open space network. The corridors weave between buildings and formal open areas, providing pedestrian connections and circulation throughout campus.
- **Athletic and Recreation Space**, which consists of open areas designed for outdoor NCAA athletic programs, club sports and intramural uses. In addition, this open space network includes informal recreation opportunities within grassy areas, playgrounds, pedestrian and bicycle paths, mixed-use courts, and the creek corridors. The

framework plan emphasizes the development of new facilities and continued improvement and expansion of the existing facilities. The framework plan proposes enhancement of the recreational spaces and intramural playing fields near campus housing. Outdoor practice facilities for NCAA Athletics and club sports will continue to evolve in the Community Venues District. Formal and informal recreational open spaces will continue to develop, particularly to the west of South 19th Avenue, to complement the Campus West Housing District.

- **Agricultural Lands** are vital to MSU's agricultural research and teaching programs. The lands function as outdoor laboratories, classrooms and research facilities. Within the framework plan, the land currently in use west of South 19th Avenue will evolve to serve the needs of the institution's mission and goals. Development of other university facilities around the agricultural lands is intended to extend and insulate their use from adjacent private developments.

*Tailgating is a popular pastime during football season. Informal open spaces are often used for staging such seasonal events.*



Stephen Hunts

## Edges, Boundaries, Gateways, and Portals

Well-defined edges and boundaries identify and differentiate the university from its neighbors. MSU exhibits a variety of different edge conditions, and while some edges are distinct, others lack definition and blend into their surroundings. Campus edges and boundaries should be welcoming. The framework plan proposes refinement of the edges and boundaries using architectural elements, signage and landscaping.

Openings through edges and boundaries are gateways and portals. They provide entry, a sense of arrival and views into the campus. Proper design and location of gateways provide orientation points as well as entry. The framework plan proposes primary gateways as formal entries, which include notable signage and information kiosks that accommodate vehicles and pedestrians. Less-prominent gateways and portals are intended to provide more passive entry points that are primarily used by those familiar with the campus. Through integrated design, the edges, boundaries, gateways, and portals will actively engage the surrounding community with the campus.

*College Street has the potential to become an even more dynamic corridor. The collaboration between public and private enterprise could create improved outdoor spaces, opportunities for dining, shopping and beautiful streetscapes as illustrated in this perspective.*



# Landscape

## Landscape element strategies include:

- *Implement design solutions that reinforce the landscape and its importance.*
- *Enhance existing landscape with complementary furnishings.*
- *Create interesting and enjoyable outdoor spaces that accentuate the built environment.*
- *Use sensible design practices and indigenous vegetation to create sustainable, drought-tolerant, low-maintenance, and durable landscapes.*
- *Ensure landscape designs reflect the unique character of districts and neighborhoods.*
- *Use landscape to emphasize campus gateways and edges.*

*Ornamental trees and landscape plantings are an integral part of the treatment of open space on campus. Spring foliage frames Montana Hall's south facade.*

The landscape fabric of a campus has a significant impact on its image. Landscape elements enhance the natural environment and establish the quality of open spaces. The appearance of the campus landscape provokes memorable images that create immediate and lasting impressions. Landscape is what a visitor to the campus experiences first. Landscape represents the values and quality of life within the campus, and reflects a commitment to the campus in its entirety.

*Seasonal flowers are planted to add color during the short Montana summers.*



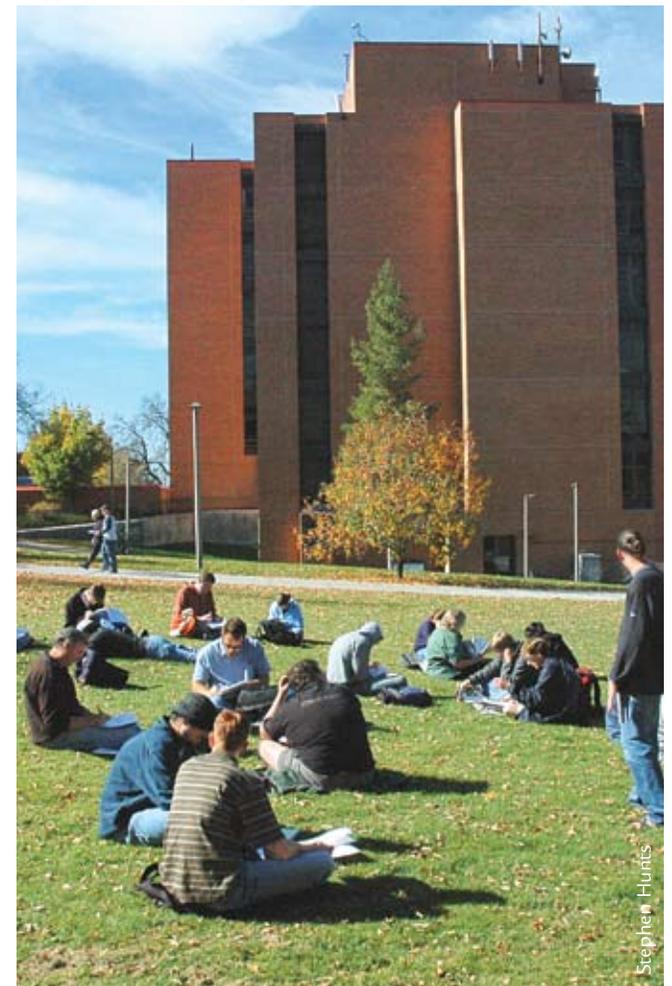
Candace Mastel



Stephen Hunts

The framework plan establishes a basis for the development of well thought out landscapes that creates a beautiful setting and unifies the physical elements within the campus. The intent is to balance the placement of buildings with landscape elements to create a vibrant and more memorable campus. Maintenance of campus landscapes is critical to its success in making positive lasting impressions.

*Students enjoy the lawn between Leon Johnson Hall and Wilson Hall.*



Stephen Hunts

# Transportation and Circulation

## Transportation and circulation element strategies include:

- *Locate primary gateways, community linkages and parking structures adjacent to major corridors and streets, and integrate them with pedestrian circulation.*
- *Limit campus core access to service, emergency and special event vehicle use.*
- *Direct visitor traffic toward the gateways and parking areas located off South 19th Avenue and College Street.*
- *Direct Community Venue District traffic toward gateways and parking areas along Kagy Boulevard.*
- *Develop discrete service drives and courts that serve multiple buildings.*
- *Incorporate surface color and paving textures for crosswalks that calm traffic and increase pedestrian awareness.*
- *Integrate primary pedestrian circulation routes with open space and green corridors.*
- *Interconnect secondary pedestrian paths to primary pathways, parking facilities, and alternative transit systems.*

*South 19th Avenue will continue to become a more heavily used arterial street. This perspective illustrates a potential solution to the pedestrian and car conflict; a catwalk over the street.*

Efficient transportation infrastructure and a multimodal circulation are reflections of a well-designed and functional campus. The 950-acre campus poses opportunities and challenges for effective transportation and circulation. The campus environment is intended to be experienced differently by the pedestrian, bicycle and trail user, and motor-vehicle operator. A successful network is multimodal, convenient, easily understood and interpreted, interconnected and accessible. The framework plan continues to enhance the pedestrian-oriented campus core by proposing an integrated network of alternative modes of transportation, such as bicycle and public transit, improved vehicle circulation and parking facilities.

## Pedestrian Circulation

The pedestrian experience is meant to invoke a connection to the academic atmosphere of the campus as well as the local environment. Logical pathways

interlinking the campus districts and neighborhoods socialize the pedestrian to a variety of experiences and campus environments. The framework plan promotes a pedestrian-oriented campus. It integrates pedestrian circulation with the campus gateways, open spaces, green corridors, streets, and malls to create a stimulating circulation network through campus, into the surrounding community, and connected to trail systems. Primary pedestrian routes incorporate green corridors and open spaces to take advantage of views and natural features. Secondary pedestrian routes move pedestrians between buildings and along streets. Seating areas, public art, gardens, and natural elements enhance the routes. Views internal to campus are intended to be preserved and pathways will have clear destination points. The pedestrian circulation system will be integrated with the public transit system and vehicular parking areas, and will direct campus visitors from perimeter parking facilities to campus destinations.



## Transportation and Circulation

*continued*

### Transportation and circulation element strategies include:

*continued*

- *Provide pathways that have clear destination points.*
- *Preserve and enhance visual corridors and vistas.*
- *Enhance pedestrian corridors and parking garages with landscape, public art, sculpture, and seating areas.*
- *Utilize landscape elements to shape and shelter pathways.*
- *Design destination pathways to accommodate a five-minute walking distance to parking facilities.*
- *Separate pedestrian corridors from service drives.*
- *Ensure that crosswalks and transition points are clearly defined and integrated, providing obvious priority to pedestrians.*
- *Provide shelters at public transportation stops and other appropriate transition points to protect and promote pedestrian and bicycle circulation.*
- *Provide outdoor bicycle storage facilities and racks that are well-designed, appropriately located and incorporated into the landscape.*
- *Provide sheltered bicycle storage areas within the parking structures or other facilities as appropriate and demand-driven.*

## Bicycle Circulation

Bicycles are a critical element of an integrated transportation system that promotes alternative transportation. In general, pedestrian paths and corridors are shared with bicycles. The framework plan promotes the use of bicycles through a comprehensive network of off-street paths, on-street marked bicycle lanes, shared paths with pedestrians, and bicycle storage areas. Bicycle routes will be coordinated with the community bicycle plan to ensure that campus and community transitions are well-designed, efficient and accessible.

*Bike parking in front of Cobleigh Hall serves a large number of bike users. Support of bicycling is a main priority of the transportation and circulation strategies.*



Victoria Drummond

## Public Transit

An essential component of the transportation and circulation network for a pedestrian-oriented campus is public transit. Current local public transit serving MSU and surrounding communities is new and developing an increasing ridership. The framework plan promotes public transit. It links parking facilities, intra-campus shuttle and city routes with the circulation system on campus. Formal and informal planned bus stops with shelters will be provided at key locations, including parking structures within the campus infrastructure.

## Transportation and circulation element strategies include: *continued*

- *Provide bicycle commuters with bike storage located near an accessible shower facility.*
- *Locate parking structures and surface lots at the perimeter of neighborhoods.*
- *Integrate wayfinding systems with a campus transportation and circulation system that is pedestrian in scale.*
- *Control access to and enforce prohibition of public parking in service drives and courts.*
- *Reduce the parking space FTE ratios to balance increased alternative transportation choices.*
- *Plan opportunities to accommodate appropriate accessibility throughout the parking system.*
- *Design parking structures that include architectural characteristics and include mixed-use opportunities.*
- *Provide energy-efficient lighting throughout the transportation and circulation system that also promotes dark-sky policies.*
- *Coordinate pedestrian and bicycle routes with sheltered bus stops.*
- *Coordinate public transit system stops with parking facilities.*
- *Design handicap access and accommodations to ensure that the public transit system is accessible.*

## Vehicular Circulation

The campus transportation network is influenced by several existing public vehicle corridors. South 11th and South 19th avenues are two major public north south corridors that will continue to bisect the campus. Kagy Boulevard is an east-west corridor which passes through the Community Venue District. College Street is a major east-west corridor along the north border of campus. Because public transportation is still limited and the preference for individual independency is strong, it is expected that a significant portion of the campus community will continue to use personal vehicles in the foreseeable future. To accommodate this traffic, the framework plan provides primary gateways and secondary entries around the perimeter that are integrated with the major public corridors. Vehicular traffic will continue to use city and campus infrastructure to access key destination points. Vehicles will be concentrated toward the perimeter of the districts and neighborhoods, emphasizing pedestrian and public transit systems as primary methods of serving the core areas of campus.

*Parking lots are strategically located to serve most needs while making the least amount of impact to the campus core.*



## Parking

Parking availability directly affects the campus visitor's image of the university. Strategically placed parking structures can improve the aesthetic of the campus core, decrease pressure to develop open space and enhance gateways and entries. Future parking facilities will be fully integrated into the overall campus transportation system to effectively reduce congestion at peak times.

The framework plan proposes creating parking facilities at the perimeter of the campus, close to major streets and adjacent to primary campus gateways. Parking will be designed and placed so that most campus destinations will be located within a five-minute walking distance from a parking facility. Desirable parking will remain convenient and accessible. In many cases the parking facilities will be combined with other uses, such as police services and retail establishments. Parking facilities will serve as transition points from vehicle routes to intra-campus transportation systems such as transit and pedestrian pathways.

*The Streamline bus service provides routes that connect MSU to Belgrade, Four Corners and throughout Bozeman.*



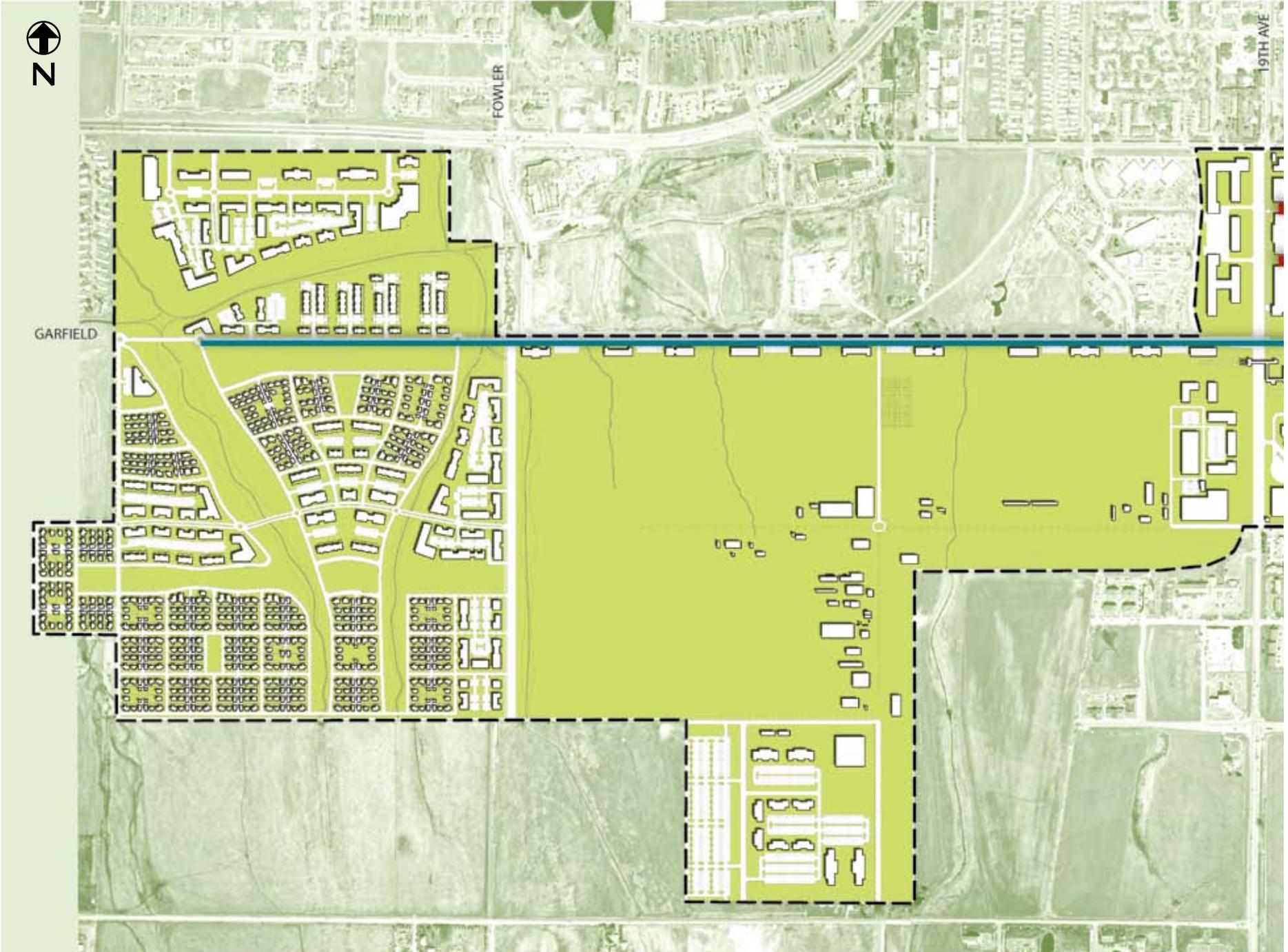


## Proposed Community Linkages

-  Community Linkages
-  Trails



*Note: This map is based on the Long Term Vision map (reference page 95).*



# Proposed Services

- Service Vehicle Routes
- Service Courts



*Note: This map is based on the Long Term Vision map (reference page 95).*

## Architecture

### Architecture element strategies include:

- *Cultivate the eclectic spirit of architectural building design.*
- *Use architectural elements to enhance the continuity of campus.*
- *Design buildings that interact with and reflect their surroundings.*
- *Encourage architecture that outwardly represents internal activities.*
- *Use building mass to create well-defined outdoor spaces.*
- *Enhance the value of heritage buildings with sensible adaptive re-use renovations.*
- *Design shared building service drives and accesses.*
- *Plan and design environmentally responsive building footprints that respect the proposed building sites, setbacks and configurations.*
- *Plan flexibility and growth into building designs.*
- *Respect existing buildings, rooflines and heights to ensure visual integration of new structures.*
- *Conceal ground and rooftop mechanical systems.*
- *Use of regionally appropriate building materials.*
- *Preserve significant views of campus and viewshed opportunities from campus.*
- *Orient main building entries toward prominent open space.*
- *Use sustainable building practices.*
- *Design and construct buildings to enhance the pedestrian experience of campus.*
- *Implement enhanced energy efficiency programs and protocols.*

Campus architecture has evolved over the last 100 years to represent the ideas, values and vision of the university. Eclectic in nature and design, building styles have evolved with each decade and reflect the inspiration and goals of the era in which they were built. The recurring use of regional building materials, such as brick, articulates an image of strength, perseverance and academic achievement. Well-planned design guidelines and construction standards for future buildings will continue this view into the 21st century.

The campus includes many historically significant buildings, some of which are identified as Heritage Properties by the Montana Board of Regents. Past renovations and expansions of historical buildings and sites have sometimes infringed on the original architectural integrity and character of the structure in order to increase occupancy or make functional improvements. The framework plan acknowledges these historic buildings as recognizable icons of the campus and living connections to the state's heritage, but also notes that they require significant investment to remain functional. Therefore, the plan proposes sensible adaptive re-use and renovation, to preserve heritage value and ensure their continued contribution to the campus aesthetics, founding principles and ongoing mission.

*The contrast between old and new architecture: Linfield Hall in the distance and the new Chemistry and Biochemistry Building in the foreground.*

The framework plan focuses on the current boundaries and development of campus neighborhoods and does not propose land acquisition. Adherence to identified building sites and general configuration is necessary to promote efficient use of land and also provide assurance that the architecture will form beneficial open space and connecting corridors. The framework plan encourages broad-ranging design opportunities that foster creative, inspiring and sustainable design solutions for future buildings, which enrich the eclectic nature of the campus.

Districts and neighborhoods use architecture to emphasize sense of place and their unique function and contribution to the campus. The framework plan supports planning, design and construction of new buildings for permanence, ease of maintenance, diverse functionality, and adaptability. Existing buildings should be evaluated as candidates for conservation and renovation as part of the historic context of campus, its overall aesthetics and usefulness. The framework plan accommodates new construction, adaptive re-use, and retirement of obsolete facilities.

Subsequent phases of the long-range planning process will include campus design guidelines to manage the general characteristics of new buildings and renovations, as well as coordinate their integration into the campus setting and its system.



# Housing

## Housing element strategies include:

- *Develop housing choices and amenities to meet market demand.*
- *Use feasible sustainable practices in new building construction and renovation.*
- *Locate housing with access to recreation opportunities and facilities.*
- *Plan and develop housing Neighborhoods that offer a variety of housing options and amenities.*
- *Construct housing to accommodate accessibility.*
- *Configure housing to provide adequate privacy.*
- *Connect campus circulation systems to housing neighborhoods.*
- *Design housing that enables community interaction.*
- *Configure housing developments and units that provide a sense of privacy.*
- *Foster private/public partnership opportunities to construct on-campus affordable housing options for students, faculty and staff.*

*A perspective of proposed housing expansion west of the existing campus core housing. The adjacent east-west green corridor connects this part of campus with the Campus West Housing District.*

Students increasingly express the desire for on-campus living arrangements and amenities similar to those available in off-campus housing, or to those they are accustomed to at home. These varied amenities on campus have been traditionally offered only in Family and Graduate Housing. MSU offers varied living amenities in the Family and Graduate Housing facilities; however, higher education trends suggest offering more diverse living arrangements to all students, and including housing options for faculty and staff.

Current trends indicate that on-campus housing demands for dormitory style residence halls is increasingly being surpassed by demand for apartment-style units with single rooms, private baths, expanded living and storage space, adjacent parking, and accessible outdoor areas. MSU has experienced increased demand for family housing units by non-family occupants due to their amenities and population diversity.

The framework plan identifies existing and future housing as neighborhoods within three distinct districts: Campus Core Housing, West Campus Housing, and Campus Mixed-Use Housing. The intent is to provide diverse housing choices ranging from traditional residence halls and apartments to duplex and single-family homes that accommodate a variety of lifestyle expectations.

Future housing will be developed based on market and business trends. Student-to-housing ratios are projected to remain relatively constant with the campus population growth. The framework plan proposes relocating a portion of new housing as existing units are retired. The framework plan proposes housing choices located within various districts that support collaborative efforts for affordable student, faculty and staff housing.





## Proposed Student, Faculty and Staff Housing

- Existing Housing to Remain
- New Housing
- Mixed Use



*Note: This map is based on the Long Term Vision map (reference page 95).*

# Sustainability

## Sustainability element strategies include:

- *Develop a practical and achievable energy policy.*
- *Adopt national sustainability construction and operations standards.*
- *Site buildings with access to infrastructure.*
- *Orient buildings to take advantage of natural daylighting and heating.*
- *Use regionally available building materials.*
- *Develop standards for water and energy conservation.*
- *Implement practical resource conservation measures.*

*Sustainability efforts have become a major focus on campus. Community supported agriculture was initiated at MSU in 2006.*

The university’s mission to educate future generations of leaders includes the readiness to transform the campus using sustainable practices. Leadership in sustainable practices will attract research funding and opportunities, as well as improve the quality of living and working spaces desired by faculty and students. The framework plan proposes incorporating environmentally responsible technologies and “green building” designs as conventional stewardship efforts on campus.

Subsequent phases of the Plan include development and implementation of a comprehensive university

Sustainability and Energy Policy. The policy will include guidelines for energy conservation, new and renovation construction criteria, water conservation, transportation, purchasing, and recycling, with goals to reduce the university’s impact on the environment.

The framework plan anticipates future development to include efficient use of natural materials, smart buildings and technologies, energy-efficient systems, non-polluting products, and strategies.



Jennifer Odermann

# 5

## Implementation and Plan Phasing

Introduction

Plan Review and Update Process

Implementation of Build Out

10-year Projected Build Out

25-year Projected Build Out

Long Term Vision

University Facilities Planning Board

The Long Range Campus Development Plan Committee

Relationship to Other Planning Efforts

### Introduction

A useful and enduring campus development plan must be flexible and able to adapt to the institution's evolving needs. Chapter 4 identified framework elements that are vital to a successful development plan, and Chapter 5 builds in the flexibility required for successful implementation of MSU's Long Range Campus Development Plan (Plan). Flexibility includes the phased implementation approach and the formal, regular review of the process of the Plan.

MSU will revisit the Plan on a cyclical basis to ensure that its principles, elements and fundamental strategies remain consistent with university's vision. Development and construction of the campus in the next decade will focus on the establishment of the fundamental elements of the framework plan. Subsequent stages of implementation of the Plan will continue to build upon and refine these fundamental elements and strategies. Recurring review of the Plan ensures that all future development continues to evolve with the university's mission and goals, while still achieving a long-term vision. Campus planning and design projects will be reviewed by the University Facilities Planning Board to ensure that they contribute to the context of the campus and the Plan principles.

## Plan Review and Update Process

### Review and Update Cycle

Scheduled review and cyclical updating of the Plan is critical to keeping the documents relevant and viable in guiding the decisions pertaining to the campus' physical environment. The plan includes a specified cycle of review and production of an updated document every five years.

An updated plan will be distributed in 2012 and every five years thereafter. The process provides future administrations with a planning tool that is adapted regularly to meet the university's aspirations and needs.

### Review Process

The revision process will begin with Montana State University's Facilities Planning, Design and Construction (FPDC) office. In its role as the steward of the campus facilities planning and construction efforts, FPDC will initiate the cyclical review and update process. Direction from the UFPB, university stakeholders, advisory bodies and administrators will be sought to give guidance to the Plan. The process will also encourage continued communications with and input from the City of Bozeman, local and state officials and the local community.

Facilities Planning Design and Construction will routinely collect information regarding physical changes to the campus and demographic data. In year four of the five-year process, the data will be analyzed for trends and anomalies or deviations from the Plan. The information will be reviewed, translated and appropriately distributed to assist the university in making informed adjustments and modifications to the Plan. The fifth year will be devoted to working with UFPB and a LRCDP Advisory Committee to determine if any adjustments and modifications to the Plan are necessary. Updating the Plan will be supervised by FPDC, and the revised publication will be re-issued at the end of the fifth year.

To ensure that the cyclical update is comprehensive, the collected data may include the following:

- University enrollment
- Administration policy
- Legislative decisions
- Physical modifications to the university campus
- Review Long Range Building Program projects that have increased/decreased in priority, or may have been eliminated
- University Major Maintenance and Capital Improvement Plan, funding streams and budgets
- University capital campaigns
- University strategic plans, including the Five-Year Vision
- City and county building permits
- City and county zoning changes
- City and county platted subdivisions
- City and county planning projections
- Municipal transportation network plan modifications
- Notation of unanticipated economic, public service, utility, campus or municipal modification that was not factored into the Plan

## Implementation of Build Out

Phased implementation is necessary to successfully achieve realization of the Plan. The Plan proposes an incremental approach to implementing the principles, elements and fundamental strategies of the framework plan. Vital factors such as student population growth, academic plans, research, five-year vision goals, and logical development of the campus districts will have a bearing on the programmatic needs of the campus physical environment.

The Plan is an investment in the future of the institution. It is a useful tool in linking the university's mission and vision to the physical learning environment and is a quantitative tool for assessing the university's growth strategy.

*A view of campus, looking east toward the foothills of the Bridger Mountains (2005).*



Stephen Hunts

## 10-year Projected Build Out

*See referenced maps on following pages.*

*View of campus and Bozeman from the "Campus M" foothills trail (2006).*

The primary purpose of the first 10-year projected build out is to establish the foundations of the various fundamental strategies of the framework plan elements. The 10-year build out primarily focuses on infill within the campus core and establishment of the fundamental strategies of the Plan elements such as formalization of

the districts, open space concepts, and transportation and circulation objectives. There are numerous appropriate buildings in close proximity to existing infrastructure which expand program opportunities within designated neighborhoods, and which complement and define intentional open spaces and landscape.



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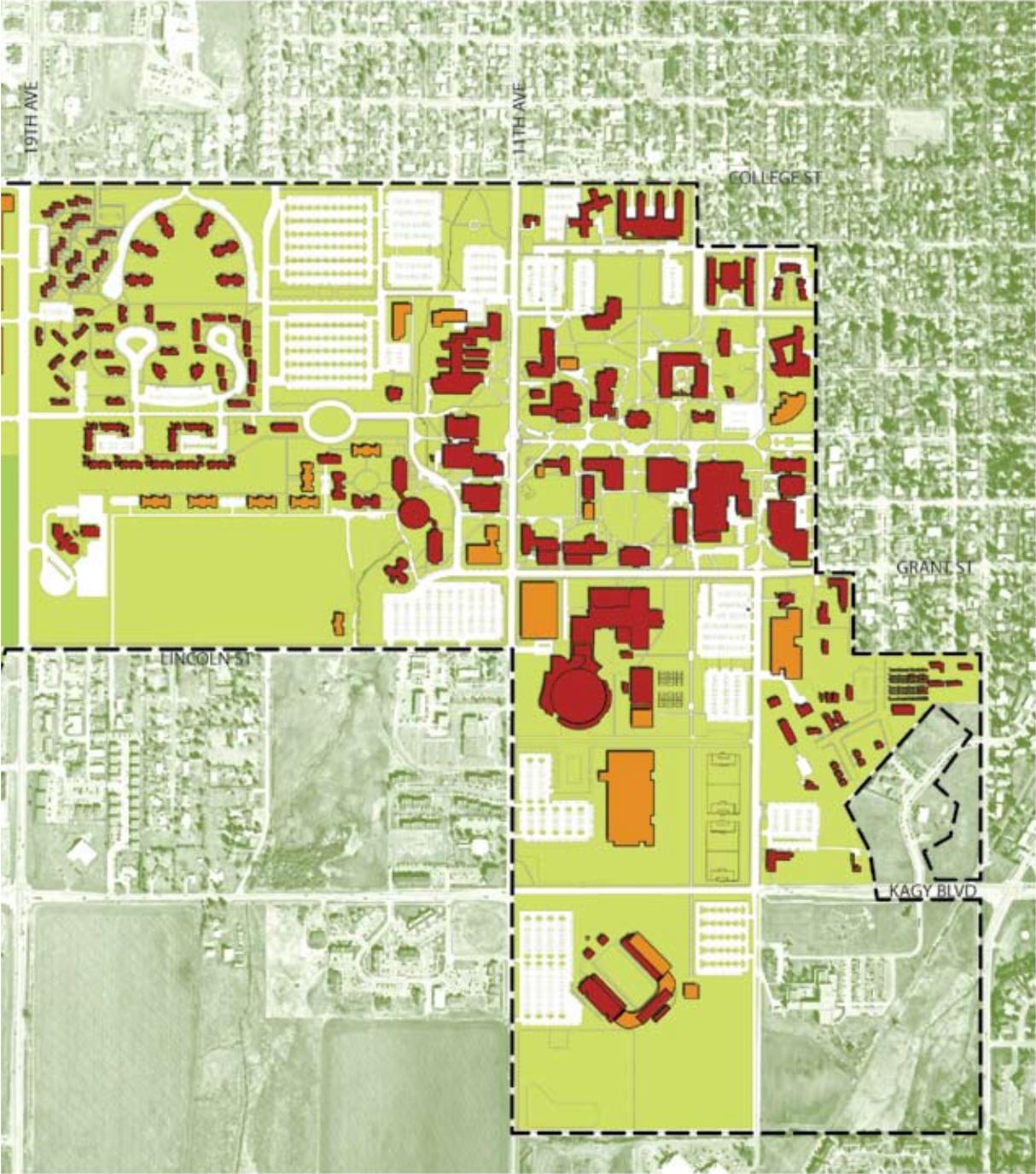
## Ten-Year Projected Build Out Profile

- Remove the 1950s housing units between Jefferson Street and Garfield Street, and replace with transitional surface parking lots.
- Construct additional apartment-style housing in the Housing Neighborhood on Garfield Street.
- Create additional residence hall housing near existing North and South Hedges housing.
- Develop infrastructure and begin initial implementation of faculty, staff and student housing near Fowler Road.
- Increase density within the existing core.
- Further establish districts and identify neighborhoods.
- Initiate the migration of Facilities Services west of South 19th Avenue.
- Establish collaborative development of College Street and South 19th Avenue Enterprise Zone.
- Initiate development of Huffine Lane and Fowler Road Enterprise Zone.
- Support evolution of agricultural programs through building and facility improvements.
- Establish gateways, edges and boundaries of campus.
- Initiate development of the Mixed-Use District.
- Establish concepts for pedestrian crossing of South 19th Avenue at Garfield Street.
- Initiate modifications to establish Garfield Street as a primary entrance to campus.
- Incrementally develop transportation and circulation network elements.
- Establish concepts for pedestrian crossing at South 19th Avenue, connecting the Garfield Street and Centennial Mall corridors with west campus.
- Initiate implementation of parking strategies, such as construction of parking garages at key locations that serve universal use, such as athletic, auxiliary and academic areas.
- Establish the fundamental concepts of the future open space network, such as connecting Garfield Street to the Centennial Mall.
- Formalize the lawn north of Montana Hall.
- Create the east-west green corridor through the future academic district west of South 11th Avenue.
- Initiate restoration of Mandeville Creek (natural flow, vegetation and building setbacks).
- Create and implement a campus landscape master plan.
- Implement athletics facilities improvements such as stadium expansion and practice facilities (Athletic District).
- Create an entry to Fieldhouse and Athletics' Indoor Practice Facility (Athletic Neighborhood).



# 10-year Projected Build Out

- Existing Buildings
- New Buildings
- Agricultural Research and Teaching Facilities



## 25-year Projected Build Out

*See referenced maps on following pages.*

*View of campus from South 19th Avenue (2005).*

The 25-year projected build out anticipates development to occur between years 11 and 25. The focus of this part of the plan is to continue to refine and advance the principles, elements and strategies of the framework plan established during the first 10 years. Primary goals will include the continued growth of the districts with an emphasis on the expansion of the Academic District to the west.



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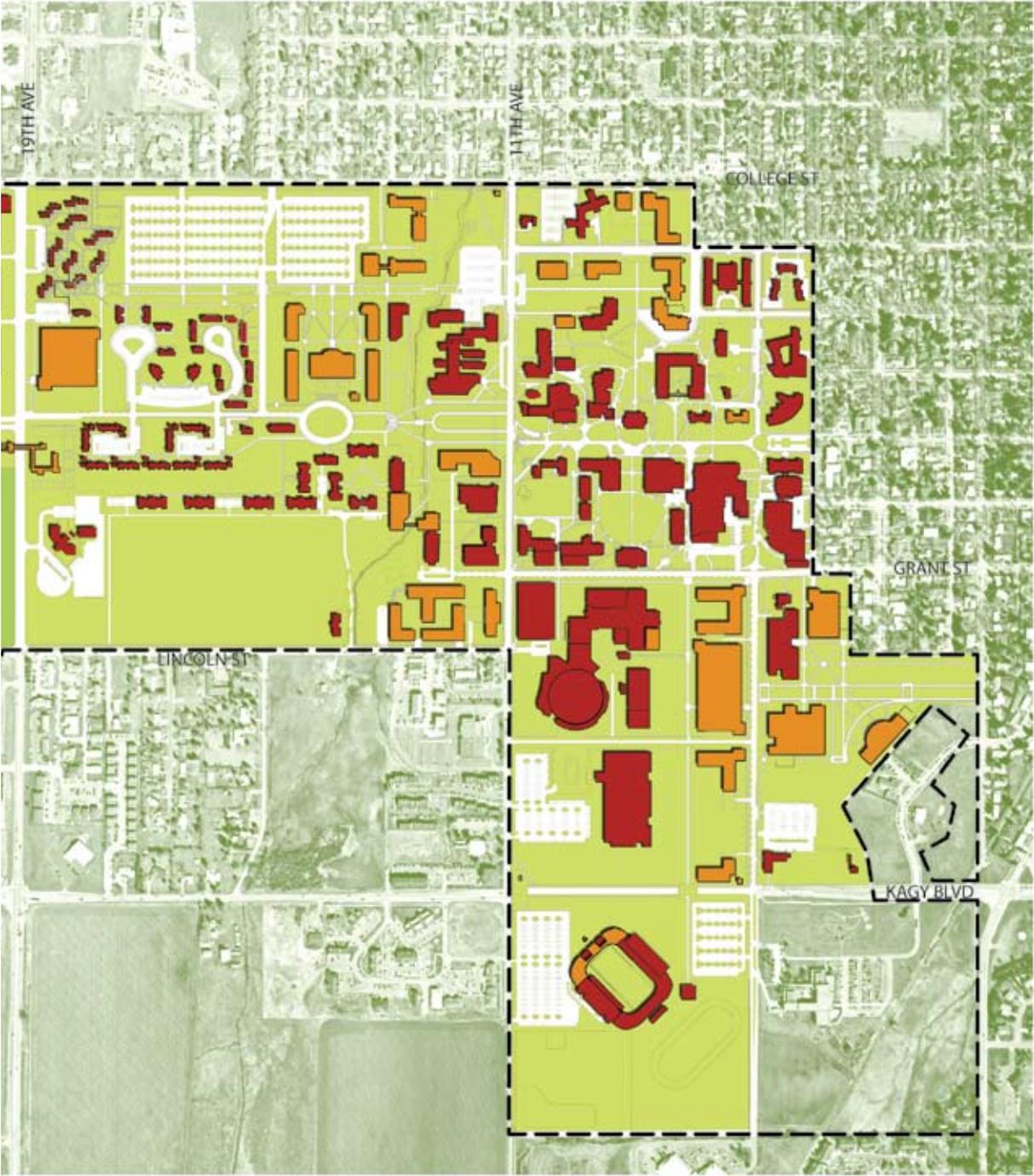
## 25-year Projected Build Out Profile

- Remove Grant Chamberlin Family Housing units and replace with transitional surface parking.
- Develop apartment-style housing incorporated with parking garage at Lincoln Street and South 11th Avenue (Housing Neighborhood).
- Complete second stage of faculty, staff and student housing near Fowler Road.
- Continue to infill within the campus core.
- Complete migration of Facilities Services west of South 19th Avenue.
- Continue development of Enterprise Zones.
- Transition use in South 6th Avenue and Grant Street area created by Facilities Services vacancy (increase Academic and Public Venue neighborhoods).
- Replace Marsh Laboratories, partially or completely.
- Remove Haynes Hall and open pedestrian connection between South 11th Avenue and South 19th Avenue.
- Replace Cheever Hall with a new building that has a smaller footprint.
- Replace McCall Hall with a new building.
- Continue implementing development along Garfield Street, west of South 19th Avenue.
- Replace Johnstone Center with mixed-use housing and retail.
- Replace Branegan Court Housing with parking garage for Housing, Academics and Enterprise Zone districts.
- Replace surface parking lot with parking garage at South 6th Avenue (Athletic Neighborhood).
- Develop pedestrian/bicycle bridge over South 19th Avenue.
- Open Harrison Street for transit connection from South 8th Avenue to South 11th Avenue.
- Develop parking lots at South 12th Avenue and Antelope Street.
- Complete Garfield Street pedestrian connection between South 11th Avenue, and Centennial Mall following removal of Cheever.
- Complete restoration of Mandeville Creek (return it to more natural flow, increase indigenous vegetation and establish building setbacks).
- Develop athletics “Walk of Fame” that connects Athletics Neighborhood south of Kagy Boulevard and the campus core.



# 25-year Projected Build Out

- Existing Buildings and Proposed Buildings from 10-Year Buildout
- New Buildings
- Agricultural Research and Teaching Facilities



## Long Term Vision

The projected final build out is a vision of how the campus physical environment could evolve if the university adheres to principles and framework strategies of the Plan. Although the vision may evolve over time, a continued focus on the framework elements of the Plan will result in a dynamic and well-conceived campus that is conducive to teaching and learning.

The critical element of the framework plan is infrastructure, and more specifically that the appropriate infrastructure is located where it needs to be for connection and access, and that it is in place prior to the development. Infrastructure guides the development and accommodates and organizes the buildings and their access throughout campus and the community.



*Sunrise campus panorama with Spanish Peaks in the background (2007).*

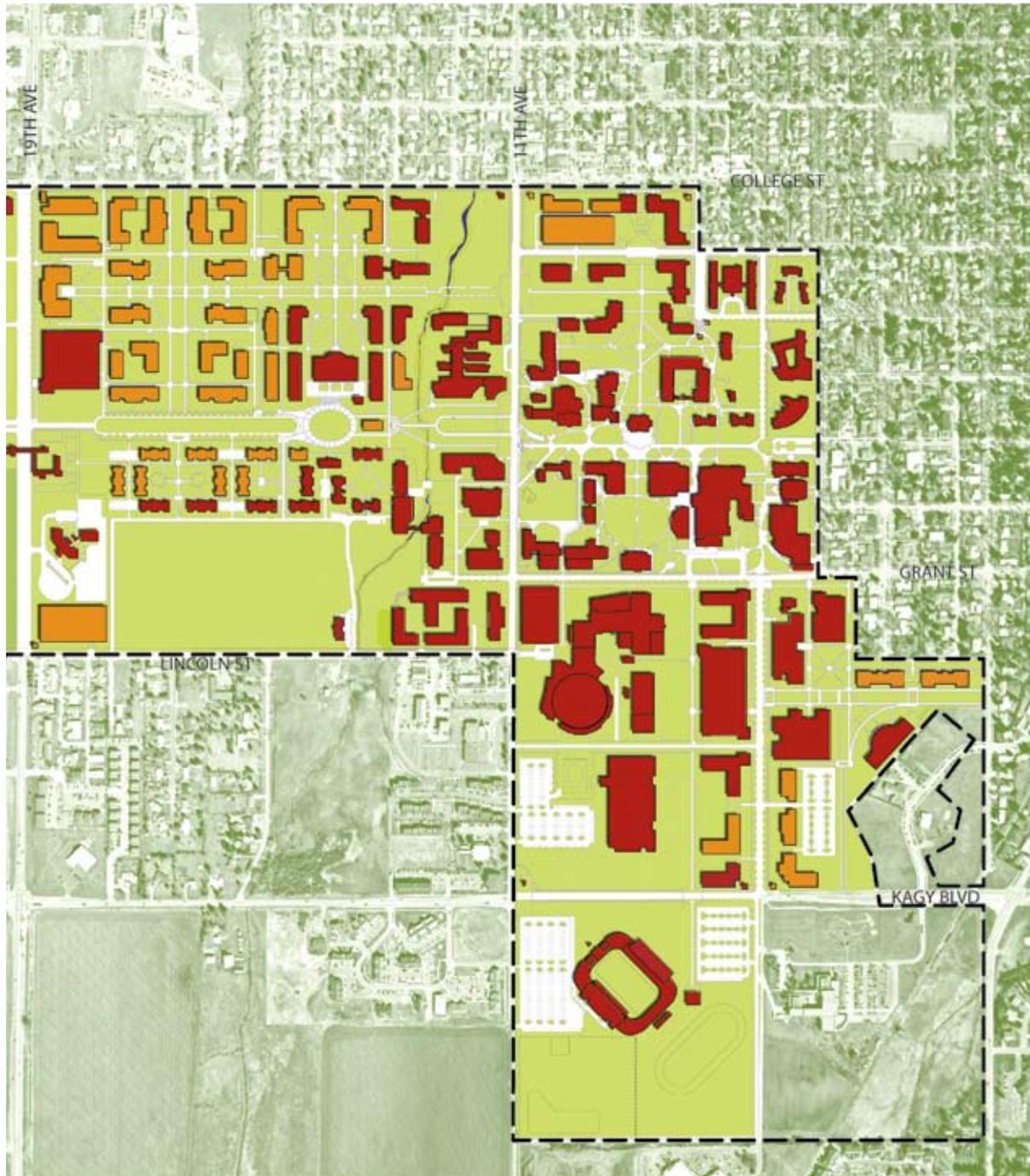


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## Long Term Vision

-  Existing Buildings and Proposed Buildings from 25-Year Buildout
-  New Buildings
-  Agricultural Research and Teaching Facilities



## University Facilities Planning Board

Successful implementation of the Plan relies on involvement and oversight by its campus constituents. The University Facilities Planning Board (UFPB) has had an active role in advising the president and administration in guiding the development of the campus' physical environment. UFPB will continue to be a significant contributor in advancing the implementation of the principles and concepts of the Plan.

In its current role, UFPB serves in an advisory capacity to the president for design projects related to the development and utilization of campus facilities and grounds. The UFPB board will review design projects with respect to the Plan principles and elements, with an emphasis on quality of open space, land use, landscape, architectural form, and exterior and public space

appearance, as well as the project's relationship and contribution to the campus context. The charge of the board will include:

- Review and advise on the implementation, review cycles and modification of the Plan.
- Review and recommend action on the development of the Campus Design Guidelines.
- Review and participate in establishing priorities for the MSU Long Range Building Program.
- Review and recommend action on the development of new building programs and the siting of all new buildings and structures.

*The students are an integral part of all university planning efforts. Their input is sought for short term improvements and long term endeavors.*



Stephen Hunts

## The Long Range Campus Development Plan Advisory Committee

- Review and recommend action on all remodeling requests that necessitate changes in physical configuration of space in major public areas.
- Review and recommend action on all proposed changes to the campus grounds, including pedestrian, vehicular, parking, lighting, and signage systems.
- Provide conceptual architectural review of projects to assure consistency with overall campus development.
- Review and recommend action relating to any issues that may affect public spaces or the exterior campus environment.

The Long Range Campus Development Plan Advisory Committee is an oversight body representing campus constituents and administration. The committee's responsibilities will be to guide and advise FPDC and UFPB in the cyclical revision of the Plan documents with respect to changes in the university's aspirations and goals.



*Students walking along the Centennial Mall.*

Stephen Hunts

## Relationship to Other Planning Efforts

1. Five-Year Vision Strategic Plan
2. Major Maintenance and Capital Improvement Plan
3. Long Range Campus Building Program
4. Utility Infrastructure Plan
5. Parking Plan
6. Construction and Design Guidelines
7. Campus Landscape Plan
8. Wayfinding and Signage Plan
9. Student, Faculty and Staff Housing Plan

# 6

## Acknowledgements

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**MSU – Special Collections**

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**MSU Students**

**MSU alumni, parents and friends**

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**Bozeman City Commission**

**Bozeman Department of Planning and Community Development**

**Bozeman Chamber of Commerce**

**Bozeman Neighborhood Associations** (Southeast Neighborhood Association, South Central Association of Neighbors, Northeast Neighbors Association, New Hyalite View Neighbors, Cascade Association of Neighbors, Bozeman Creek Neighborhood Association)

**Local and regional utility providers**

**Gallatin County Planning Department**

**Montana Department of Transportation**

**Montana Fish, Wildlife and Parks**

**United States Geological Service (USGS)**

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# 7

## Glossary

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### ADA

The abbreviation for Americans with Disabilities Act.

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### ASMSU

The abbreviation for the Associated Students of Montana State University, which is the student government association serving as the elected voice of the students of Montana State University at the Bozeman campus. This association is charged with the mission of enhancing the overall educational experience of students by providing leadership and employment opportunities for students and by cost-effectively providing diverse student-oriented, non-academic programs and services through responsible fiscal management of student activity fees.

---

### Campus Core

This term has referred to the same general area of campus over the last 100 years; however, the size and configuration has differed slightly over the decades. The campus core is generally the area of campus bounded on the north by College Street, west by South 11th Avenue, south by Grant Street, and east by South 6th Avenue.

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### Cogeneration

The use of a heat engine or power station to simultaneously generate both electricity and useful heat.

---

### Districts

A district is an area of concentrated similar use. The framework plan recognizes Academics, Community Venue, Campus Mixed-Use, Campus Core Housing, Campus West Housing, Agriculture, Support Services, and Enterprise Zones as districts. Districts emerge from the clustering of related but distinct uses referred to as neighborhoods.

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## Glossary

*continued*

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### **Eclectic**

Specifically referring to architecture in this Plan, this term describes how the campus contains many different styles of architecture and how their components, materials and building techniques relate directly to the era in which they were designed and constructed.

---

### **Enterprise Zone**

An Enterprise Zone is an area of campus which has great opportunities for development via a collaborative relationship between the public and private sectors. The public sector in this case would be Montana State University. The private sector includes collaborative business enterprises that partner with MSU for opportunities sharing assets.

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### **Formal bus stop**

A formal bus stop is one designated for regularly scheduled bus service stops by public, campus or combination transit services.

---

### **FPDC**

The abbreviation for the Facilities Planning, Design and Construction department within University Services.

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### **FTE**

The abbreviation for the term “Full Time Equivalent,” as it refers to students, faculty and staff as a unit of calculation.

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### **Green Building**

Green building is a term often used to describe a building or a construction project which employs any number of sustainable design and construction techniques meant to reduce the impact the project has on energy, water and other resources.

---

### **GSF**

The abbreviation for the term Gross Square Footage, which is the sum of all areas on floors of a building included within the outside faces of its exterior walls.

---

### **Historic Campus**

The historic area of campus is described as the area occupied by some of the original campus buildings, dating back to the late 1890s and the early 1900s, including Montana Hall, Hamilton Hall, Lewis Hall, Traphagen Hall, Herrick Hall, Linfield Hall, the Heating Plant, Roberts Hall, the S.O.B. Barn, Romney Gym, and the Student Union Building.

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**Land Grant**

MSU, as the first state-supported institution of higher learning in Montana, was created as a result of the Morrill Land Grant Act of 1862, which granted 6.3 million acres of federal lands to endow and support at least one college in each state, where the leading objective would be “to teach agriculture, military tactics, the mechanic arts and home economics, not to the exclusion of other scientific or classical studies,” so that members of the working classes might obtain a practical college education.

Each eligible state received 30,000 acres of federal land for each member of congress the state had as of the census of 1860. Montana’s land trusts are held by the state and managed by the Department of Natural Resources and Conservation for the purpose of generating income for the trust beneficiaries. Over the years, MSU has expanded education opportunities to meet society’s changing needs and developing economy, while continuing to demonstrate the relevance of the original land grant mission.

---

**LRBP**

The abbreviation for the Long Range Building Program, which provides the deferred maintenance data used for acquiring funding, and supports expansion, renovation and new construction decisions.

---

**LRCDP**

The abbreviation for the Long Range Campus Development Plan; also referred to in this document as the “Plan.”

---

**MSU**

The abbreviation for Montana State University.

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**Multi-modal transportation**

Multi-modal refers to transportation options that include a variety of modes including but not limited to walking, biking, riding a scooter, taking public or university-based transit, or driving a car. Ideally, combined multi-modal transportation systems are optimal in order to provide options for users.

---

## Glossary

*continued*

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### Neighborhood

A neighborhood refers to the smaller, tight-knit areas of similar land uses, functions and resource needs. They are geographically connected in most cases, concentrate use in one area of campus and are distinctive sub-groups of a larger district.

---

### Pedestrian Corridors

Physical connections or paths of travel that are reserved for pedestrians.

---

### Transit shelter

A transit shelter is a strategically placed structure as a shelter for transit or bus users. These shelters are usually placed in accessible areas on campus, near centers of activities that are multi-modal transportation hubs, such as the Student Union.

---

### UFPB

The abbreviation for the University Facilities Planning Board. The board consists of representatives of campus constituencies who are charged with reviewing development issues and recommending choices to the university president for approval.

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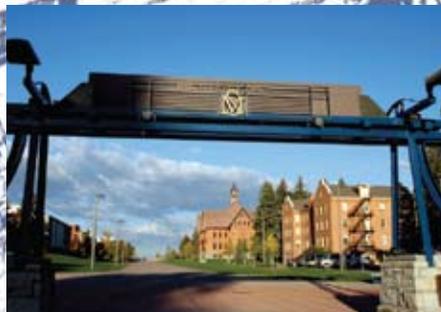
### University

Used in this document as another term for Montana State University.

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