# 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 longterm 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. 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

#### **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.

## Framework Plan: Districts Map



# Land Use

# 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 singlefamily 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

#### 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.



 $\cdot$  Create an agricultural endowment.

**Agriculture element strategies** 

· Locate University uses along the

protects and surrounds the

off-campus MAES locations.

agricultural uses.

property periphery as a buffer that

· Phase some agricultural operations to

· Create new academic (teaching and

research) facilities along Garfield

Street and South 19th Avenue.

include:

# 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.

# **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.

#### Districts and Neighborhoods continued

#### • 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 wellfunctioning 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

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

#### **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.



# 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, lowmaintenance, 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.*



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.* 



## 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 welldesigned, efficient and accessible.

## **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.

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.



#### **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 eastwest 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

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.

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



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







## **Proposed Community Linkages**

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## **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



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.

