MONTANA STATE UNIVERSITY

- MSU TOMORROW -

A CAMPUS PLAN FOR THE FUTURE

Long Range Campus Development Plan

2006
The Benefits of a Campus Plan
Original Campus Master Plan

The New York architect designed the campus in the Italian Renaissance style.
Future Planning can Inform and Shape Decision Making

Lack of Vision sets the stage for:

- Loss of opportunity and natural resources
- Buildings built in the wrong location
- Unnecessary invasion of open space
- Unexpected barriers to future expansion
- Inappropriate architecture on campus
The Essential Elements of a Plan are:

A “shared vision” to inform & shape decisions

Policy

A Conceptual Framework for future growth

A holistic planning process that meets the needs of the institution while considering the community at large

Guidelines
What MSU Gains with a Campus Plan:

- Opportunity
- Direction and Order
- Campus Sense of Place
- Sense of Community
- A long term vision protecting the mission & values of Montana State University
The Campus Plan Process

Observation & Information Gathering

Analysis

Guiding Principles & Concepts

Buildout Scenarios

Draft

Campus Plan for the Future

2006 Campus Design Guidelines
Guiding Principles

Examples:

Build on the best qualities of the overall campus and region by respecting tradition and encouraging invention.

Strive to embody the Principles of the Campus Plan in each individual project.

Respect the University’s unique setting and climate.
Goals

Example:

The Campus Plan should create an aesthetic quality appropriate to the campus as a whole and to specific areas, conserving and improving existing buildings, open space, and views on campus, while looking for opportunities to create additional open space.

Objectives

Example:

Designate important open spaces and views on campus and create policies to ensure their preservation and maintenance.
Campus Plan Goals

- Edges
- Gateways
Campus Plan Goals

• Edges
• Gateways
• Student Space
• Connections
Campus Plan Goals

- Edges
- Gateways
- Student Space
- Connections
- Open Space
Campus Plan Guidelines

Example:
Montana’s mountains and valleys represent one of MSU’s most important and “imageable” features. View corridors to the Bridgers, Hyalites, Tobacco Roots, Spanish Peaks and Sourdough Ridge should be mapped and protected from future development invasion.
Porticos, gables, cornices, columns, and dormers are not style-dependent architectural elements. Rather, they act as a kit of parts that can be used to help define the character of buildings and grounds by regulating scale, massing, and facade rhythm.
The above facades are all derivations of Gardner Hall (uppermost left diagram). Many deviations may be produced by simply transforming existing types. Individual elements or styles are less important than basic proportions, scales and rhythms. This exercise is very useful for new buildings where a strong context exists.
**Design Guidelines**

**Campuswide Design Guidelines**

**Campus Facade Elements**

### Entries
- Entries should be created by a hierarchy of openings.
- Terraces, porches and similar transitional devices should be considered.
- Main entrance should be proportional to entire facade.
- Consideration should be given to shade and overhead cover.
- Awning area in front of entry should be identified by landscaping and paving.

### Other Precedents

#### UNC-Chapel Hill
- [Image of buildings]

#### Other Precedents
- [Image of buildings]

### Windows
- Horizontal openings should not be treated as mullion windows. Ideally, window openings should be vertical.
- Acceptable materials for window frames are:
  - Wood (stained or clad) or metal.
  - Fiberglass should be operable (where technically feasible).
  - Frame color will vary throughout campus but will be compatible with exterior of building. (Sample panels will be developed for final approval, ideally during design development.)
  - Standard module should be vertical, organized with the facade tracts system of base, middle and top.
- Special windows (square, arch, round, etc.) should appear in base or arch.
- Tops of windows could be a lintel or an arch. (One case, the head and sill should be articulated, with lead either a jack arch or lintment/preset.)
- Clear glass is preferred. (Any colored glass should use sublightless colors. Non-refractive glass should be used.)
- Patient care facilities and historical renovations may require special exceptions. Tinted glass may be used when required for patient privacy.

#### UNC-Chapel Hill
- [Image of windows]

#### Other Precedents
- [Image of windows]
Design Guidelines

CAMPUSWIDE GUIDELINES

STREET TYPES

The portion of Franklin Street that runs through downtown Chapel Hill is an example of a street that satisfies many functions and typifies the intermediate level street. The 60-foot pavement on Franklin Street accommodates four traffic lanes and two parking lanes. Its width could easily deter pedestrians and create a barrier. However, the four lanes of moving vehicles (around 20,000 on a typical day, which is close to its traffic-carrying limits in peak periods) are mitigated by crowds of people on the adjacent sidewalks and parked vehicles on both sides that buffer pedestrians from traffic. The continuous building face, tree-lined street and parallel parking invite both the pedestrian and the motorist to slow down.

Motorists could speed along Franklin Street, but they rarely do. The street is posted at 25 miles per hour, but probably few motorists are aware of this. This can be attributed to the lively landscape, multiple traffic lights and pedestrians, which all deter speeding.

Franklin Street also accommodates larger vehicles, hosting both buses and trucks. It is one of the few successful urban streets in the Triangle and an example of how a busy street, if carefully designed, can satisfy all its users.

Cameron Avenue

Cameron Avenue represents the ideal street. It gracefully satisfies the needs of all users, motorists and pedestrians alike. Its design and streetscape subtly alert motorists to pedestrians. Motorists know that it is not the route to take in a hurry. Using Cameron Avenue adds to the pleasure of the day.

Cameron Avenue is two-way but only about 20 feet wide, with low granite curbing and trees with branches that form a canopy over the street. Sit behind the trees that line the street, there are sidewalks on each side. The buildings are set close to the street and add to the streetscape. The speed limit is 25 miles per hour, reinforced by several mid-block stop signs. At any time of the day, large volumes of students pour across the street with little fear for their safety.

Cameron Avenue primarily serves short local trips. While no traffic count is available, the volume is probably less than 10 vehicles a day. This represents the environmentally sound capacity of the street, given its importance in fulfilling its non-vehicular needs.

Typical Section

Typical Section
Bollards

- Manufacturer: Sternberg, Vintage Lighting
  7401 Oak Park Ave.
  Niles, IL 60714
  Phone: 847.588.3400
  Fax: 847.588.3410

Model: 6201
Size: 3/4" x 1'
Pole/Color: Welded Cream
Special Features: Welded for single unit construction
Removable
- or similar -

Guardrails

- Traditional Guardrail:
  - Materials: 6" x 3/4" (150 x 20 mm) extruded aluminum
  - Height: 3' (900 mm)
  - To comply with the requirements of the Americans with Disabilities Act (ADA), all guardrails are mounted at 4' (1200 mm) above the floor or deck level.
  - Installing a handrail above the guardrail is required.

- Ornamental features:
  - The ornament should be the same for all guardrails.
  - Brute railings are preferred.
  - Painted steel is acceptable.

Retaining Walls

- Seat Walls

- Plan View

- Elevation

- Section: Retaining Wall

- Cross Section

Walkways

New walkways should be carefully planned to connect major destinations and offer pedestrians safe, accessible, and relatively direct travel. These new walkways should be indicated on the schematic design and plans. Steps and features hazardous to the visually impaired should be avoided. Special consideration should be given to locations where pedestrian pathways cross vehicular routes. On campus-controlled roads, brick paving material should continue across the vehicular route where pedestrian traffic is meant to dominate. Existing brick paving materials and patterns should be matched. Brick walls should be dry-laid (see Standard detail). Brick walls that provide service or emergency vehicle access should be built on a concrete base. Consistent widths should be maintained across the campus.

- Standard widths:
  - Major pedestrian corridors: 16 ft. wide
  - Major pedestrian walls: 8 ft. wide
  - Minor walls: 6 ft. wide

Some Trends in Education

The decade since 1993 has seen college enrollments grow by 15% with minority students now making up nearly 30% of the total undergraduate population.

The percentage of male students has declined and is projected to continue to do so.

Less tax revenue is available for capital projects at public universities.

Partnerships across universities, government agencies, and private industry will increase with shared space.

How will this affect physical planning at Universities?

The Journal of the Society for College and University Planning
Some Trends in Education

Adolescents, including college students, have different bio–cycles than children & adults –

They experience a 2nd alert cycle in the late evening & don’t experience waking alertness until mid–morning

Future changes for campus libraries –

Traditional library will remain while the definition is changing: annex concept – “campus living room” – “work center”

University–linked retirement communities is a growing trend in the US –

By 2050 the proportion of older people will have double while the proportion of children will have declined.

Baby boomers retiring will be 20 % of the total population by 2030.

Percentage of adults age 55+ participating in educational activities has increased from 6 % to 38 % (2001)

(United Nations Population Division)

How will this affect physical planning at Universities?

The Journal of the Society for College and University Planning
MSU Trends in Education

Grow to 13,000 students from 12,200 in next 5 years – half of growth is graduate students, half through retention

Increase Native American and International students

There will be a premium for space for graduate students and upper division undergraduates – research space, living space, etc.

Faculty and staff will grow proportionately with enrollment and research.

There will be increased pressure for offices, growth in research space and increased parking demand.

Integration of learning and discovery – students will interact with senior faculty.

Academic offerings will be increasingly interdisciplinary

*How will this affect physical planning at Universities?*
Meetings are scheduled throughout the day

Wednesday Jan. 25th

and

Thursday January 26th.

Today – Needs, Wants, Vision Ideas, Complaints

Comments and suggestions will be anonymous.

Be sure to sign the Sign-In sheet for future communications.
What to do about getting to Campus?

PEANUTS By Charles M. Schulz

WHAT ARE THOSE ROUND THINGS?

PEOPLE FACES...

I'M DRAWING A FOOTBALL STADIUM FILLED WITH SIXTY-THOUSAND FANS...

I ONLY SEE TEN...

PARKING WAS A PROBLEM...

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