

# Montana State University



## – MSU TOMORROW – A CAMPUS PLAN FOR THE FUTURE

Long Range Campus Development Plan  
2006

# Creating Campuses



# Ayers Saint Gross

## FIRM PROFILE



- ACADEMIC BUILDINGS
- CAMPUS PLANNING
- CULTURAL FACILITIES
- GRAPHIC DESIGN/3D/WRITING
- LANDSCAPE ARCHITECTURE
- STUDENT LIFE FACILITIES
- TOWN PLANNING

**AYERS  
SAINT  
GROSS**  
ARCHITECTS + PLANNERS



- Founded in 1915

Baltimore, MD

Washington, DC

Phoenix, AZ



# A Research Based Approach



**AYERS  
SAINT  
GROSS**  
Architects

## 2001 COMPARING CAMPUSES

Compare the overall layout of the great college and university campuses to a visual understanding of the campus layout for the past year. This is an excellent educational tool for students. It is difficult to describe the proportion, scale of an entire campus without a graphic tool. We have created this atlas to aid in the visual understanding of the campus layout. The overall campus and surrounding landscape are shown in the top left corner of each map. The overall campus and surrounding landscape are shown in the top left corner of each map. The overall campus and surrounding landscape are shown in the top left corner of each map.



**LOYOLA UNIVERSITY CHICAGO**  
Chicago, Illinois (Founded 1864)  
Campus Area — 1,276 Acres — 2,000 Total Student Population — 6,500  
Faculty — 800 Staff — 200 Total Campus Population — 6,200  
ON-CAMPUS HOUSING: Undergrad — 4,000 Graduate/Married — 2 Faculty — 4  
LAND USE: Buildings — 1,200,000 gsf Land — 10,000 acres Parking — 1,000 spaces



**DUKE UNIVERSITY**  
Durham, North Carolina (Founded 1838)  
Campus Area — 6,281 Acres — 4,500 Total Student Population — 15,000  
Faculty — 1,400 Staff — 200 Total Campus Population — 15,200  
ON-CAMPUS HOUSING: Undergrad — 12,000 Graduate/Married — 300 Faculty — 10  
LAND USE: Buildings — 1,500,000 gsf Land — 10,000 acres Parking — 1,000 spaces



**UNIVERSITY OF NOTRE DAME**  
Notre Dame, Indiana (Founded 1864)  
Campus Area — 3,075 Acres — 1,000 Total Student Population — 10,000  
Faculty — 1,000 Staff — 200 Total Campus Population — 10,200  
ON-CAMPUS HOUSING: Undergrad — 8,000 Graduate/Married — 200 Faculty — 10  
LAND USE: Buildings — 1,000,000 gsf Land — 10,000 acres Parking — 1,000 spaces



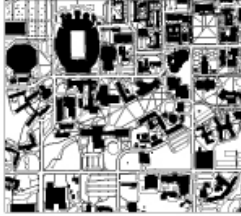
**WASHINGTON AND LEE UNIVERSITY**  
Lexington, Virginia (Founded 1776)  
Campus Area — 1,276 Acres — 300 Total Student Population — 2,500  
Faculty — 100 Staff — 200 Total Campus Population — 2,500  
ON-CAMPUS HOUSING: Undergrad — 200 Graduate/Married — 100 Faculty — 10  
LAND USE: Buildings — 100,000 gsf Land — 10,000 acres Parking — 1,000 spaces



**UNIVERSITY OF TEXAS - HOUSTON HEALTH SCIENCE CENTER**  
Houston, Texas (Founded 1962)  
Campus Area — 200 Acres — 1,000 Total Student Population — 3,000  
Faculty — 1,000 Staff — 200 Total Campus Population — 3,200  
ON-CAMPUS HOUSING: Undergrad — 1,000 Graduate/Married — 200 Faculty — 10  
LAND USE: Buildings — 1,000,000 gsf Land — 10,000 acres Parking — 1,000 spaces



**TEXAS A&M UNIVERSITY**  
College Station, Texas (Founded 1826)  
Campus Area — 30,000 Acres — 3,000 Total Student Population — 14,000  
Faculty — 2,000 Staff — 200 Total Campus Population — 14,200  
ON-CAMPUS HOUSING: Undergrad — 12,000 Graduate/Married — 200 Faculty — 10  
LAND USE: Buildings — 1,000,000 gsf Land — 10,000 acres Parking — 1,000 spaces



**UNIVERSITY OF FLORIDA**  
Gainesville, Florida (Founded 1863)  
Campus Area — 10,000 Acres — 10,000 Total Student Population — 10,000  
Faculty — 1,000 Staff — 200 Total Campus Population — 10,200  
ON-CAMPUS HOUSING: Undergrad — 8,000 Graduate/Married — 200 Faculty — 10  
LAND USE: Buildings — 1,000,000 gsf Land — 10,000 acres Parking — 1,000 spaces



**MCGILL UNIVERSITY**  
Montreal, Quebec, Canada (Founded 1827)  
Campus Area — 80,000 Acres — 4,000 Total Student Population — 10,000  
Faculty — 1,000 Staff — 200 Total Campus Population — 10,200  
ON-CAMPUS HOUSING: Undergrad — 1,000 Graduate/Married — 200 Faculty — 10  
LAND USE: Buildings — 1,000,000 gsf Land — 10,000 acres Parking — 1,000 spaces



**UNIVERSITY OF VICTORIA**  
Victoria, British Columbia, Canada (Founded 1858)  
Campus Area — 100 Acres — 1,000 Total Student Population — 10,000  
Faculty — 1,000 Staff — 200 Total Campus Population — 10,200  
ON-CAMPUS HOUSING: Undergrad — 1,000 Graduate/Married — 200 Faculty — 10  
LAND USE: Buildings — 1,000,000 gsf Land — 10,000 acres Parking — 1,000 spaces



**UNIVERSITY OF WINNIPEG**  
Winnipeg, Manitoba, Canada (Founded 1827)  
Campus Area — 100 Acres — 1,000 Total Student Population — 10,000  
Faculty — 1,000 Staff — 200 Total Campus Population — 10,200  
ON-CAMPUS HOUSING: Undergrad — 1,000 Graduate/Married — 200 Faculty — 10  
LAND USE: Buildings — 1,000,000 gsf Land — 10,000 acres Parking — 1,000 spaces

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**UNIVERSITY OF VIRGINIA**  
Charlottesville, Virginia (Founded 1819)  
**POPULATION:** Undergraduate — 12,440  
Graduate — 4,110 Total Student Population — 18,463  
Faculty — 1,817 Staff — 3,978  
Total Campus Population — 24,258  
**ON-CAMPUS HOUSING:** Undergrad — 5,971  
Graduate/Married — 573 Faculty — 110  
**LAND USE:** Buildings — 11,419,979 gsf  
Land — 1,809 acres Parking — 14,120 spaces

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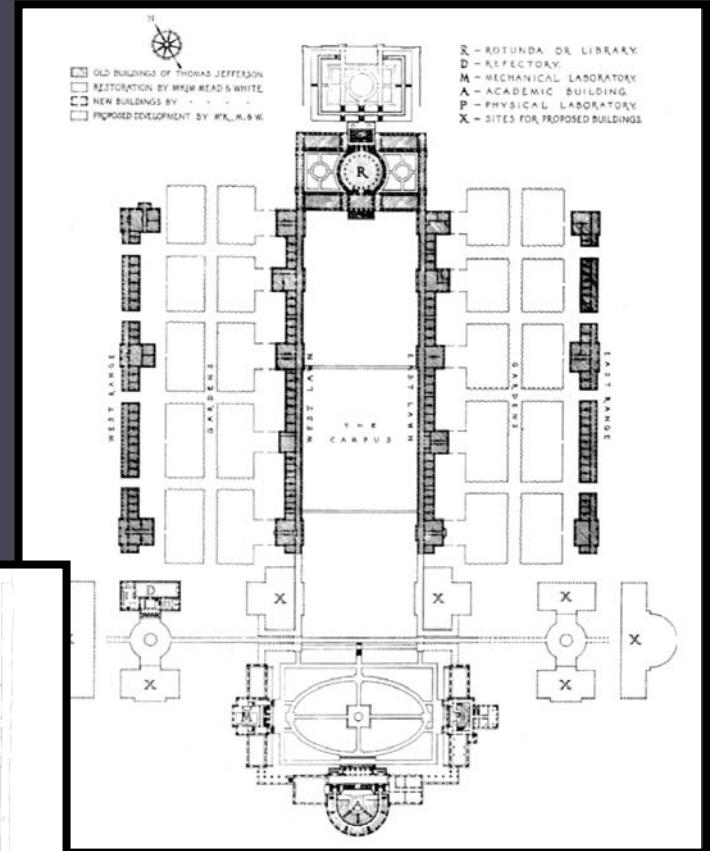
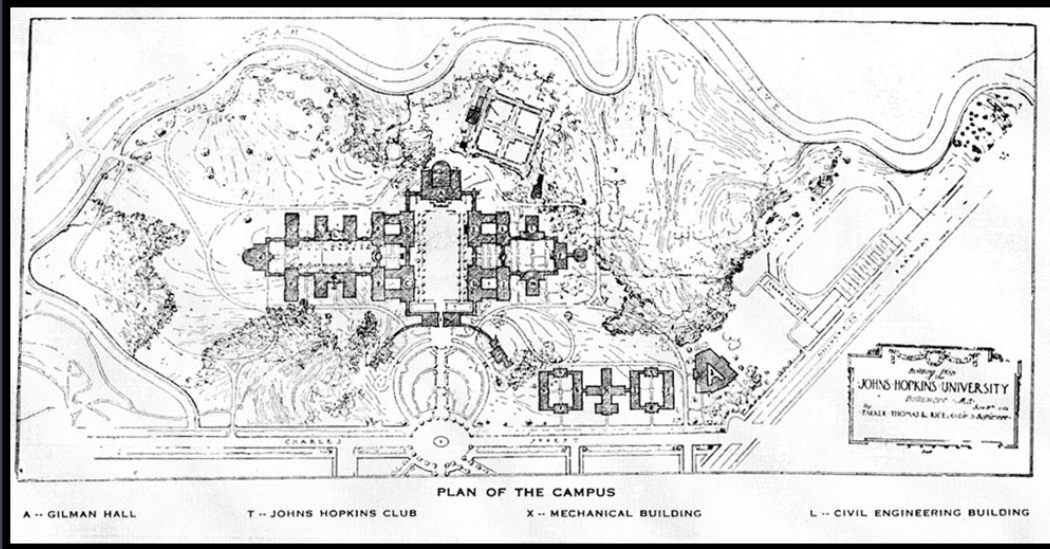
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**STANFORD UNIVERSITY**  
Stanford, California (Founded 1885)  
**POPULATION:** Undergraduate — 6,591  
Graduate — 7,553 Total Student Population — 14,144  
Faculty — 1,337 Staff — 8,029  
Total Campus Population — 23,510  
**ON-CAMPUS HOUSING:** Undergrad — 5,904  
Graduate/Married — 3,468 Faculty — 991  
**LAND USE:** Buildings — 11,700,000 gsf  
Land — 8,100 acres Parking — 19,361 spaces

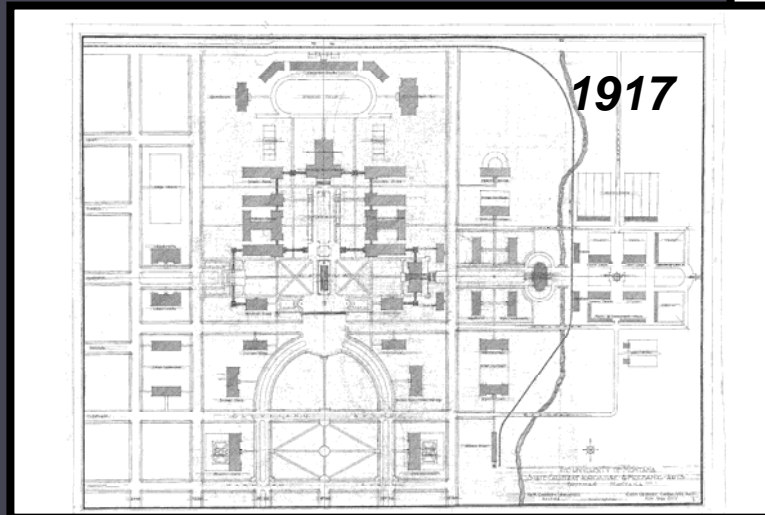
Local intranet

# Beginnings

Original plan of the Johns Hopkins University - 1914



Montana State University  
1893



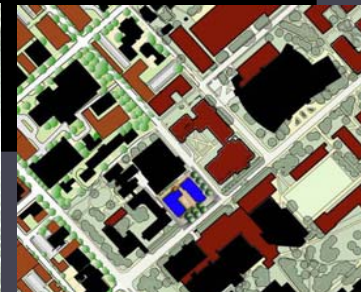
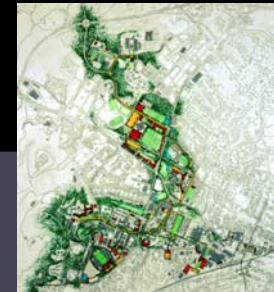
University of Virginia  
1819

# CAMPUS PLANNING



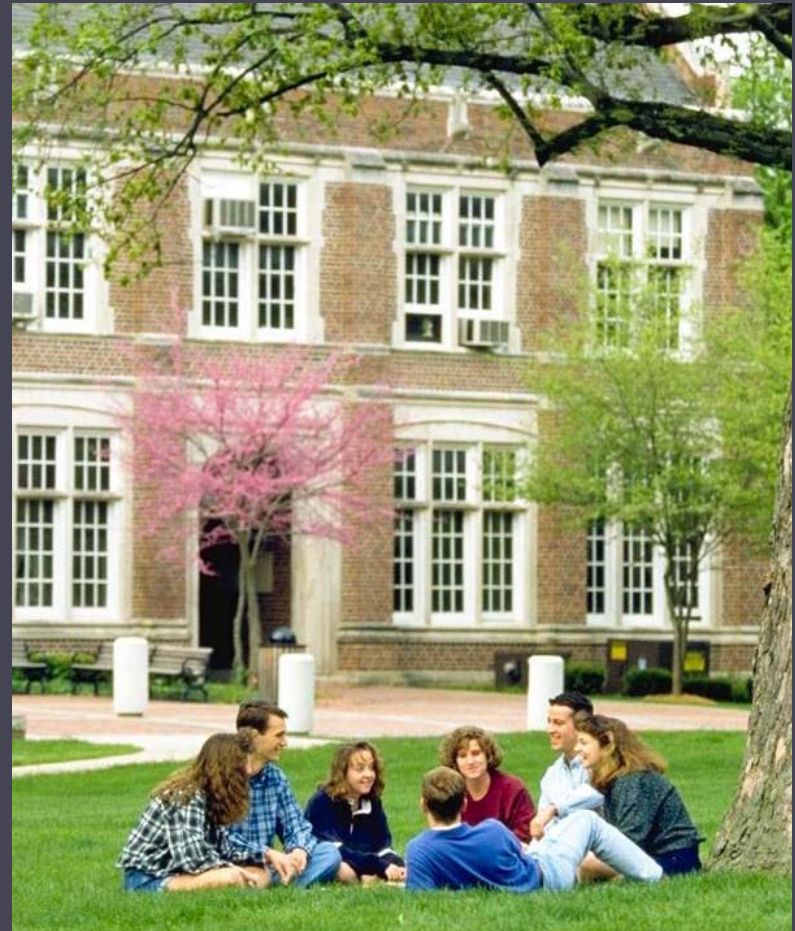
*“ASG’s campus planning method grows out of each institution’s academic mission and how that institution organizes buildings and grounds.”*

*Our goal always is to create a campus plan that combines tradition and innovation within the culture of each institution.”*



# Questions we hear when we start a campus plan

- Why are we doing a campus plan?
- Why do we need to grow? Isn't distance learning going to replace traditional campuses?
- How do we maintain a competitive edge?
- What about parking?
- How much housing do we need?
- What should our buildings & grounds look like?

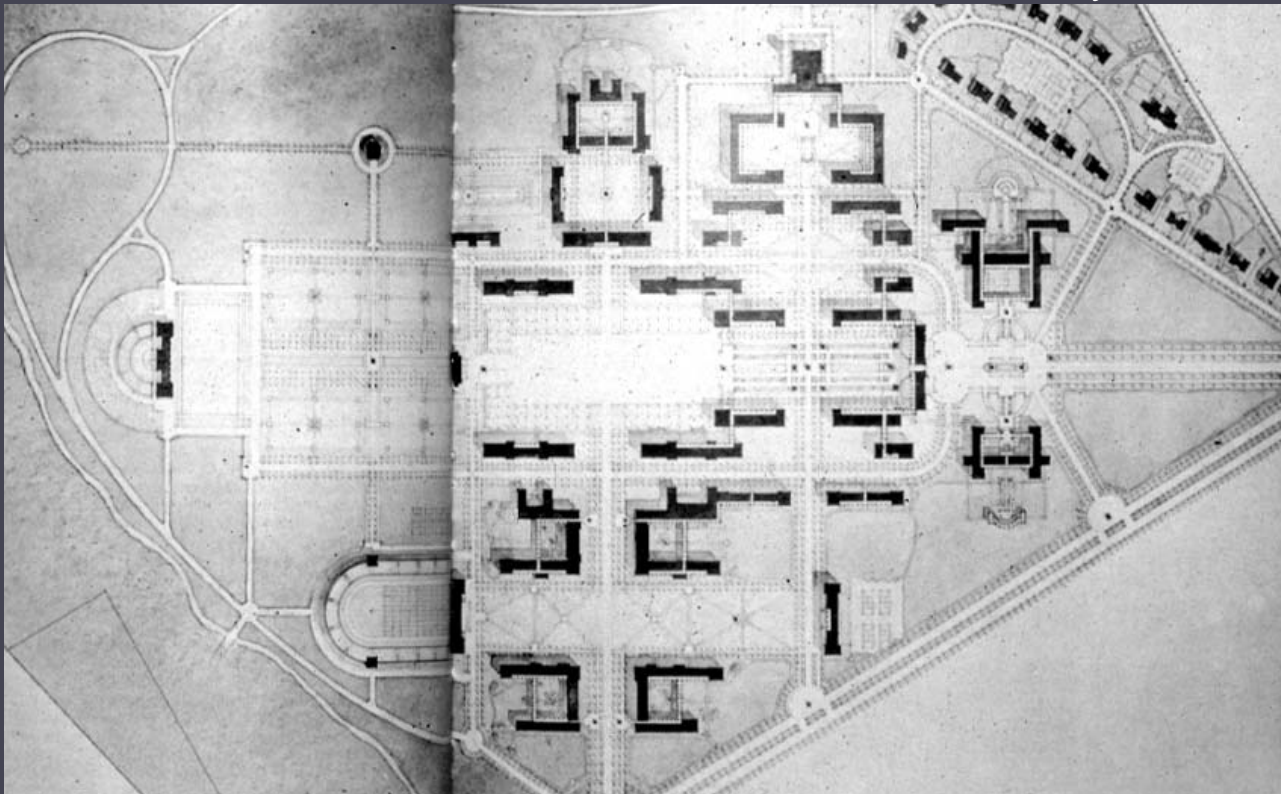




# Why Plan?

**“In the press of meeting current needs, many Universities lack a strong vision which looks over the horizon. Unlike corporations, great universities can never move their corporate headquarters. Therefore, in planning a campus, one must see individual decisions in the context of decades, not years. Within this profound lesson is an idea that no one building is more important than the campus as a whole.”**

Dean W. Currie – VP for finance - Rice University



# Why Plan?

Lack of Vision sets the stage for:

**Unorganized Growth**

**Buildings Built in the Wrong Location**

**Invasion of Sacred Open Spaces**

**Confusing Pedestrian Pathways**

**Inappropriate Vehicular Traffic System**

**Unplanned, Leftover Campus Spaces**

**Loss of natural Resources**

**Lack of “Sense of Community”**

# Why Plan?

The Essential Elements of a Plan are :

*A “Shared Vision”*

the Framework for Future Growth

Strategic Placement of Buildings

Defined Exterior Gathering Spaces

Clear Destination Points

Quality Open Space

Managed Parking and Traffic

# Spaces





# Parking





Existing entry to campus



New gateway to the campus



View of existing edge of campus



Proposed view of edge of campus

# Quadrangles







## Formal Entry



# Planning Process

## Observations – Fact Finding - Needs



## Principles & Concepts



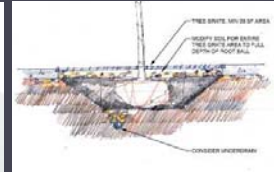
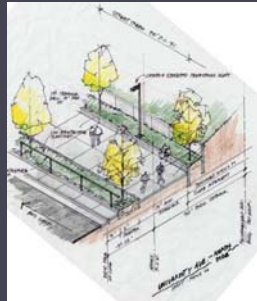
## Design Guidelines

	BUILDING TYPOLOGY					
	TRADITIONAL COLLEGIATE			URBAN COLLEGIATE		
	RESIDENTIAL	CLASSROOM/OFF	RESEARCH	RESIDENTIAL	CLASSROOM	RESEARCH
PLAN						
FACADE						
TO MIDDLE LEVEL						
GROUND PLAN						
SECTION						
AVION						

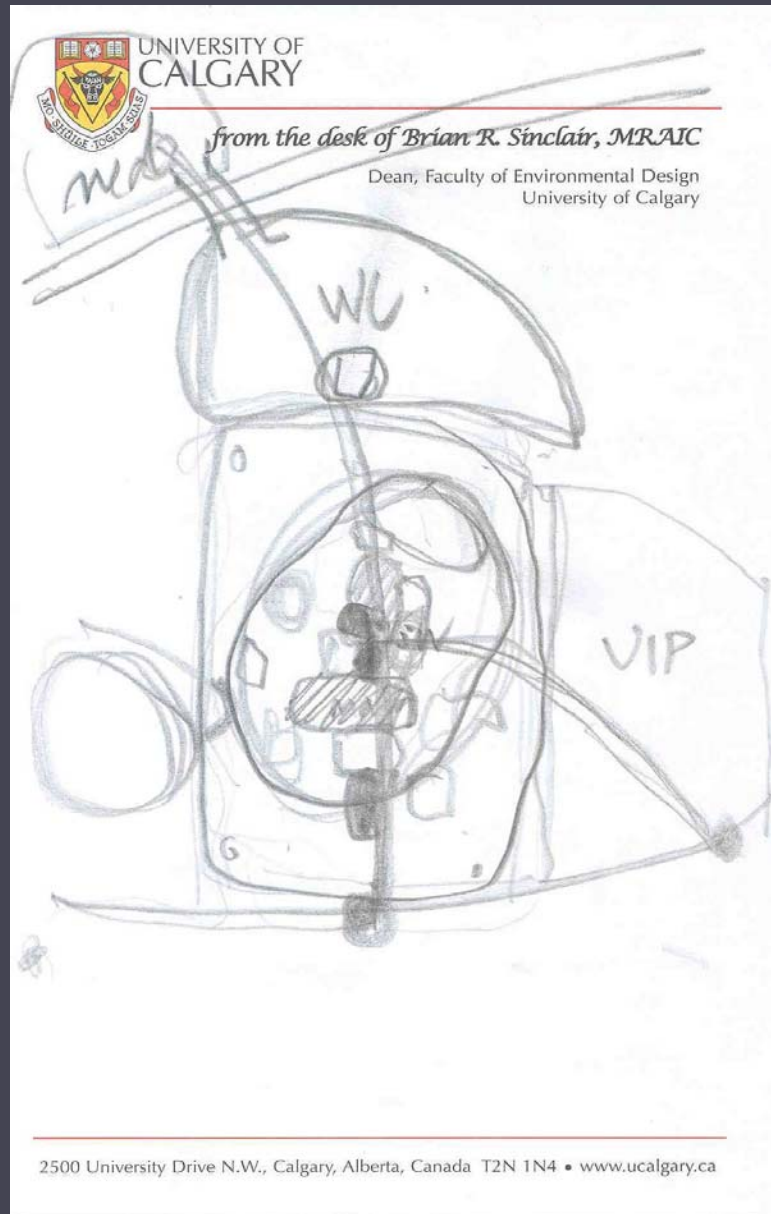
## Final Plan



## Precinct Studies



# Develop Planning Principles and a Big Idea

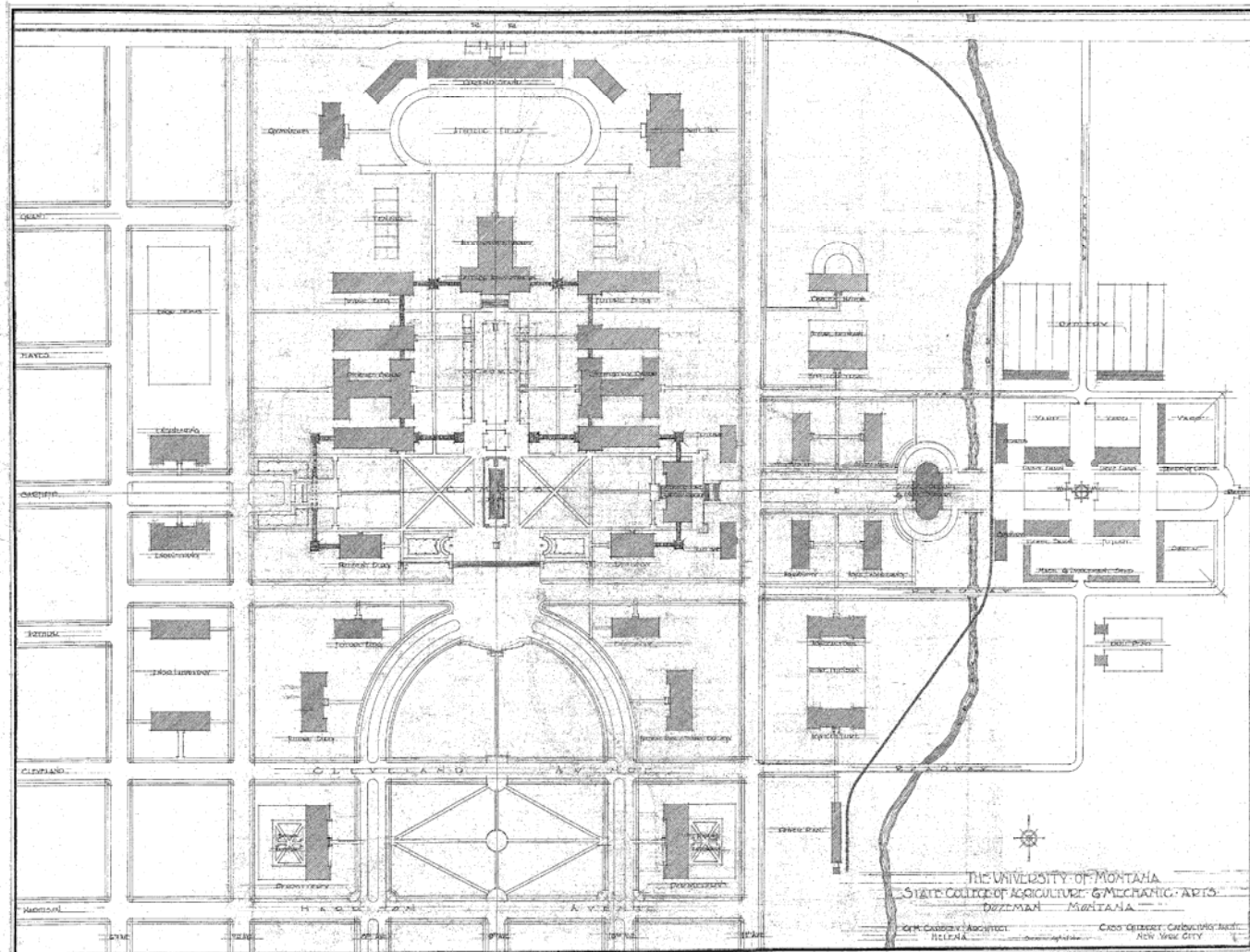


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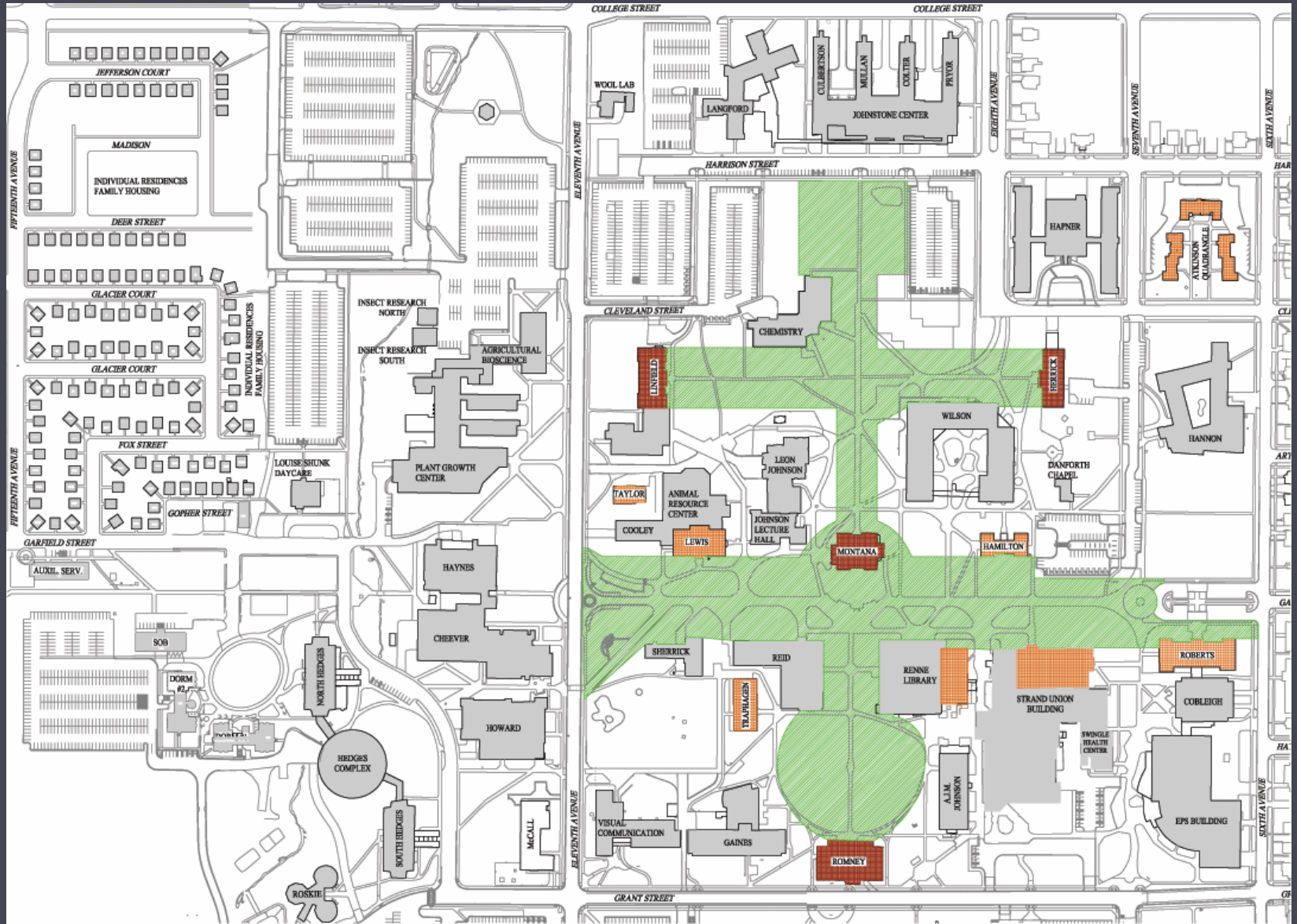






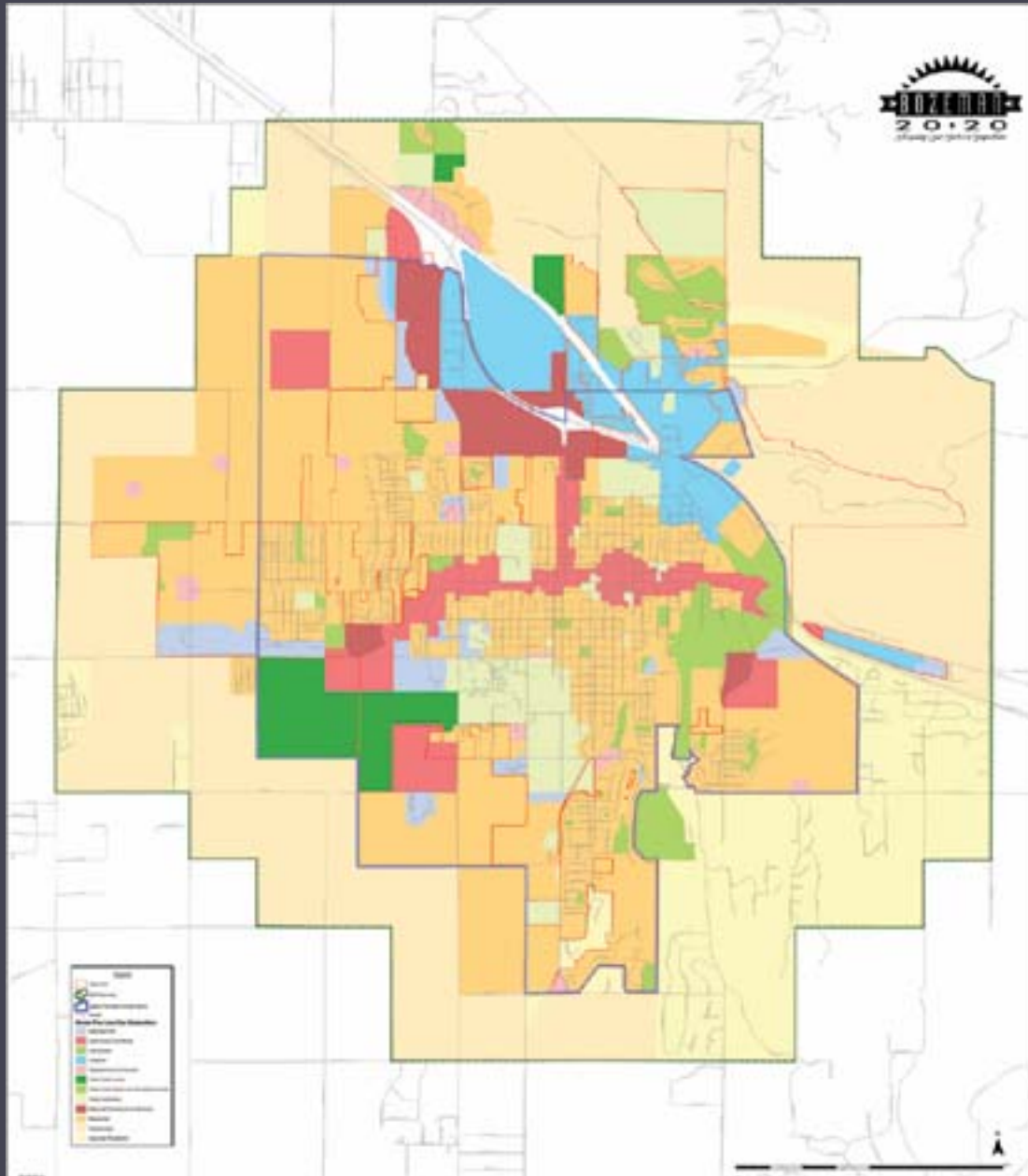






# Governing Principles

1. Promote MSU's commitment to a contemporary mission of the Land Grant Institution through the physical integration of teaching, research, and outreach.
2. Coordinate College and Departmental visions 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 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 campus environment that enhances the personal experience of the University community through a spatial network which promotes human interaction.
7. Be exemplary stewards of our physical resources.
8. Continue a comprehensive approach to campus planning to guide the University's future development.



City of Bozeman 2020 Community Plan Master Plan Land Use Designations



### Campus Land and Building Data

Campus Acreage:	952 Acres
Campus Building Area:	4,110,000 Gsf
Peak Decades of Construction:	
1890's thru 1940's	792,000 Gsf (19.3% of campus)
1950's	832,000 Gsf (20.2% of campus)
1960's	839,000 Gsf (20.4% of campus)
1970's	815,000 Gsf (19.5% of campus)
1980's thru 2003	832,000 Gsf (20.2% of campus)
Projected Growth 2005 thru 2035	1,500,000 Gsf (36.5% of current campus)

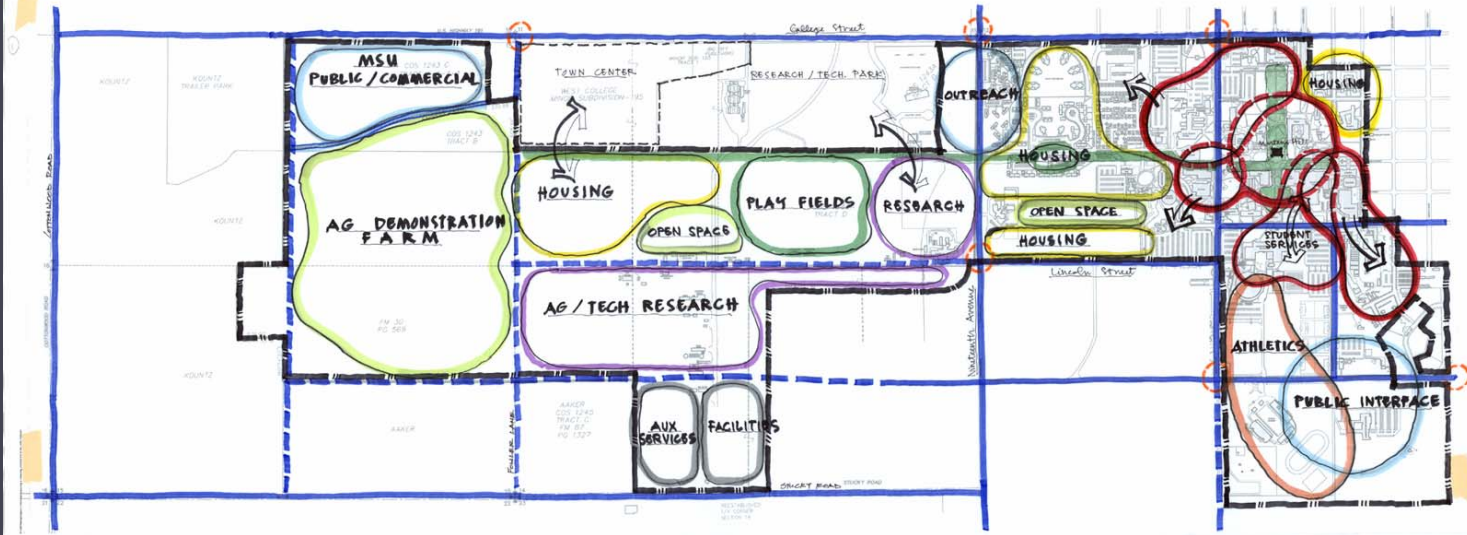
# Student Enrollment Data

Year	FTE	Enrollment	% inc. FTE	% inc. Enrollment
1980	10294.36	10745		
1985	10058.60	10710	-2.29%	-0.33%
1990	9654.20	10392	-4.02%	-2.97%
1995	10007.25	11267	3.66%	8.42%
2000	10223.65	11761	2.16%	4.38%
2005	10614.78	12250	3.83%	4.16%
	% Increase since 1980		3.11%	14.01

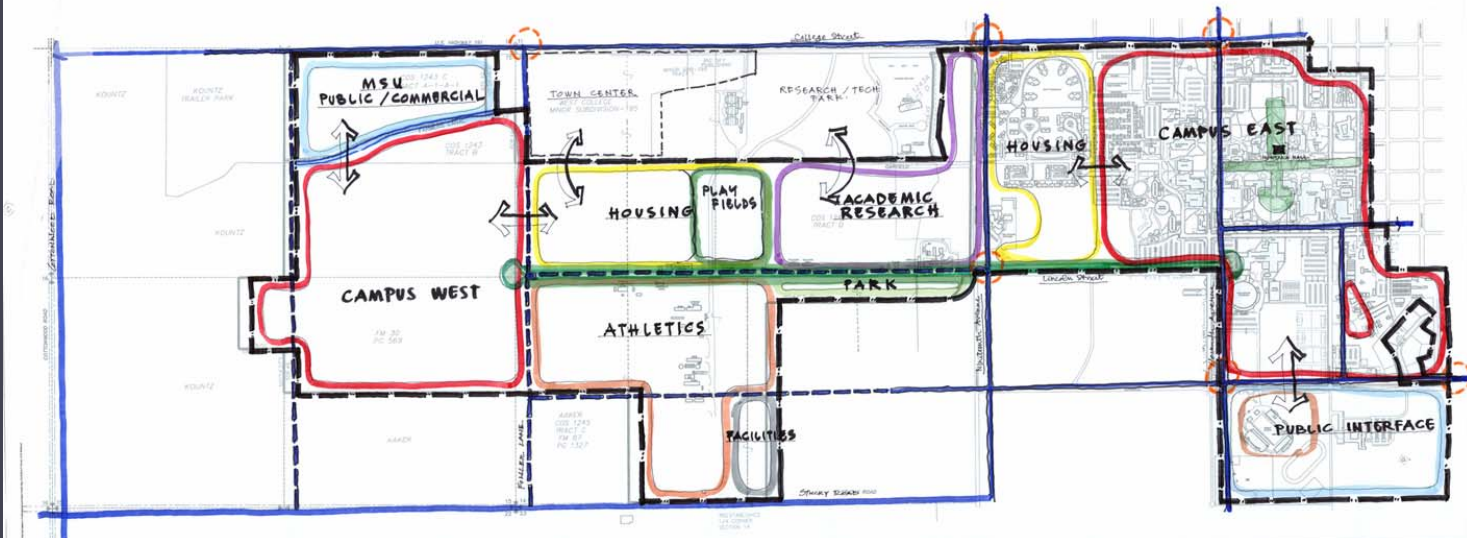
## Student/Faculty Ratio

1980	19:01	1995	18:01
1985	16:01	2000	17:01
1990	17:01	2005	16:01

# Draft 1

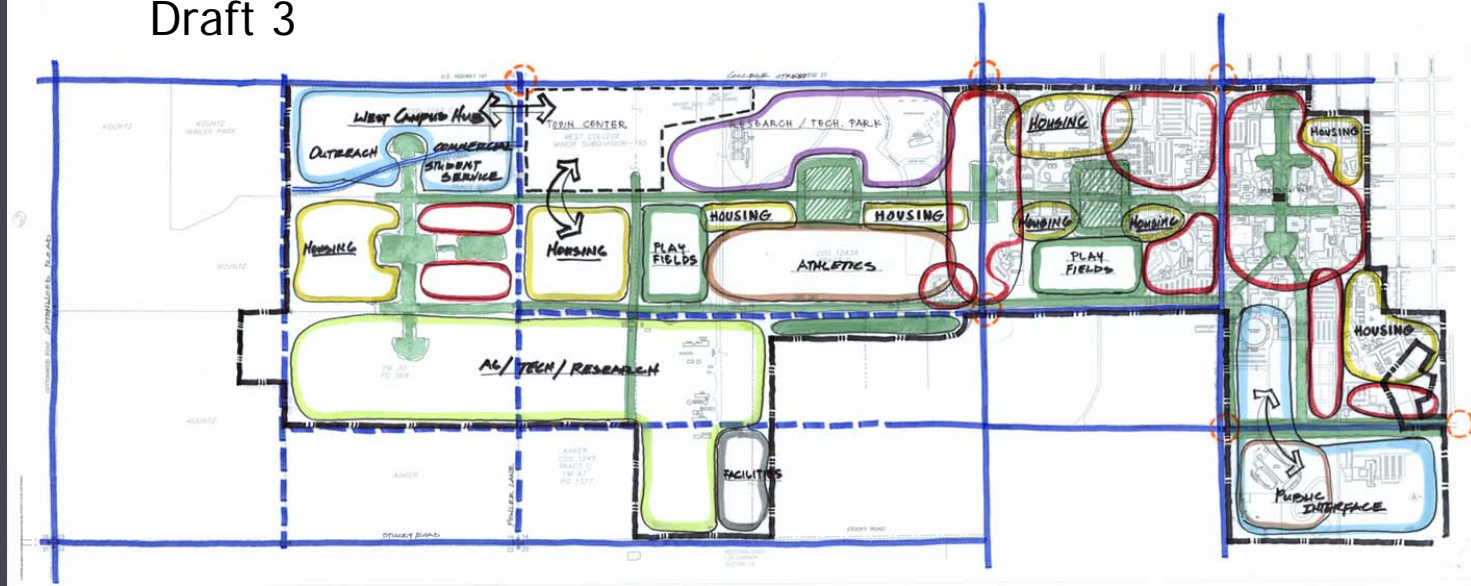


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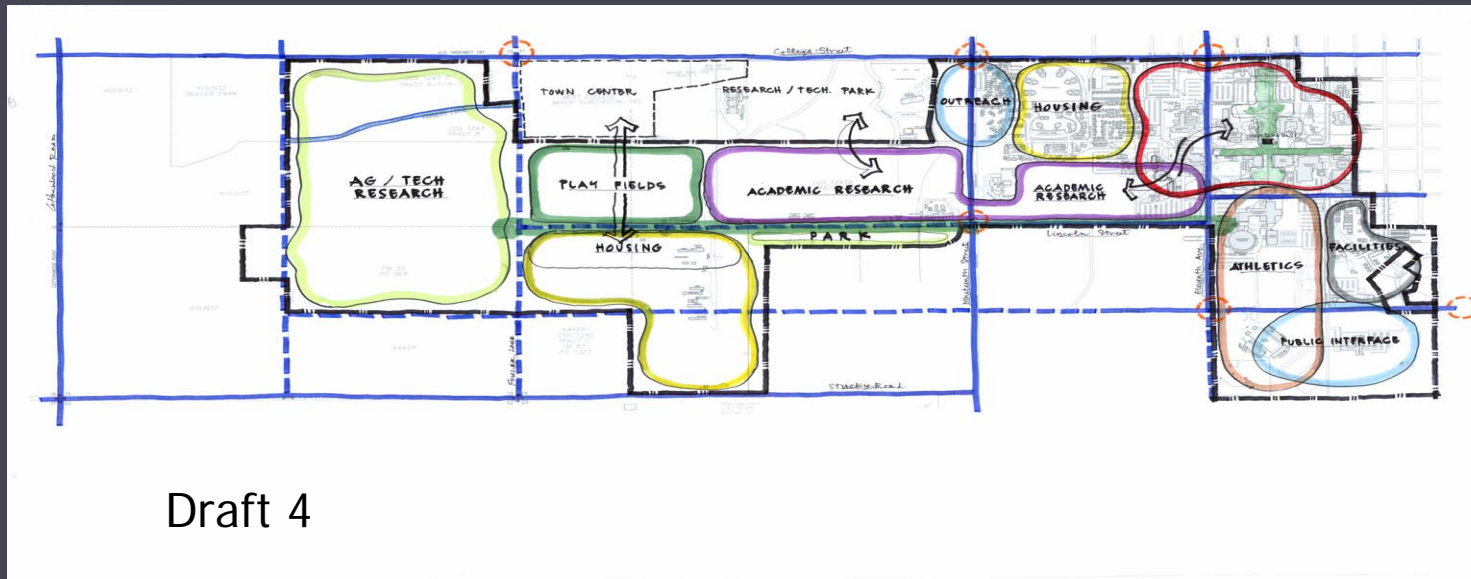




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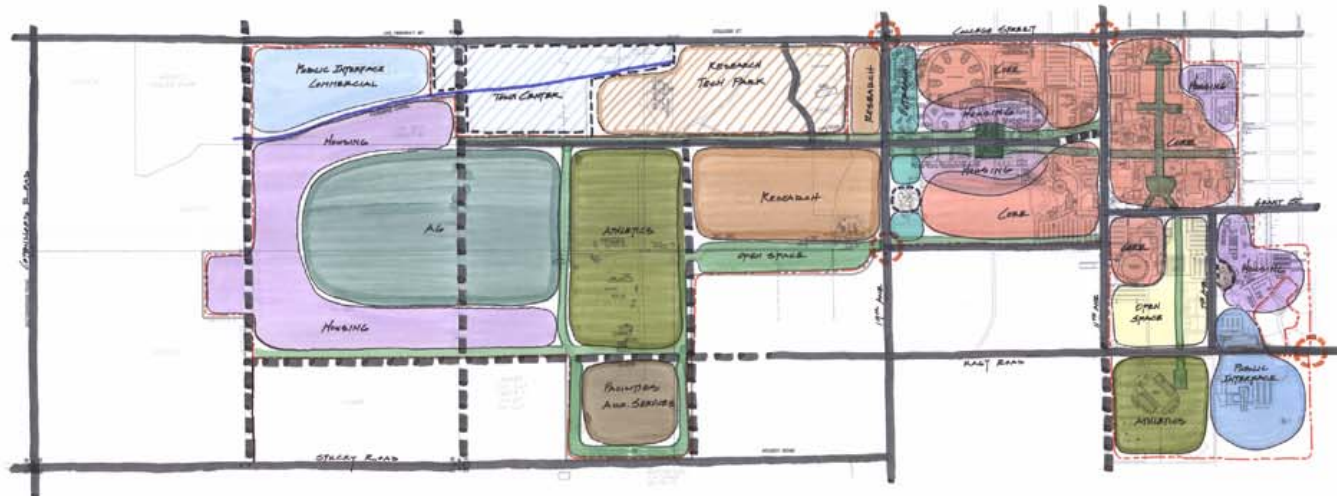


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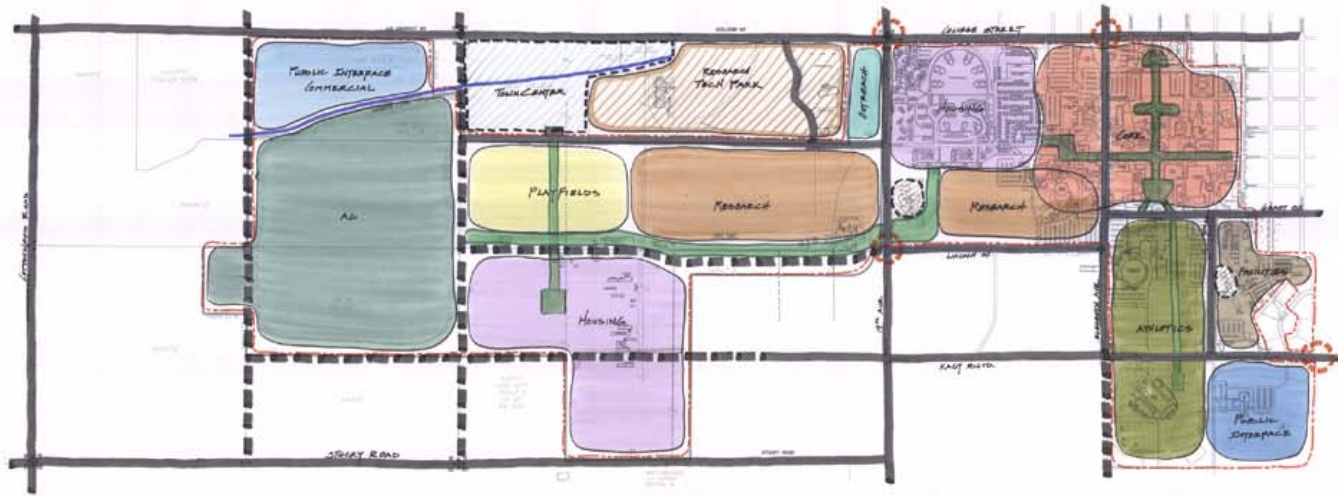




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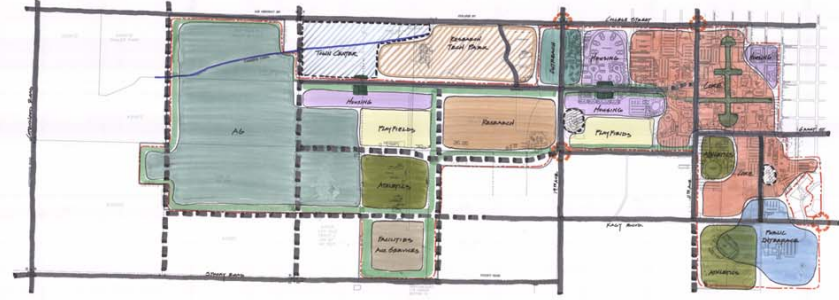


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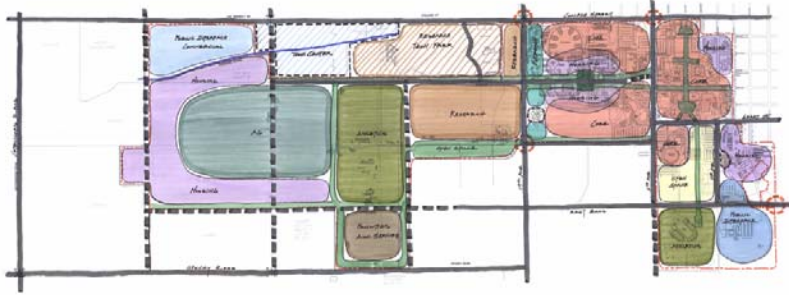


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