



INTRODUCTION

HISTORY

PRINCIPLES

CONTENT

APPROACH

TRENDS

SUCCESS

*Campus  
Master Planning*

# MASTER PLANNING


NASHVILLE, TN

SEPTEMBER 2019



**JOE BILOTTA, JBA 1 INCORPORATED**  
**WWW.JBA1.COM    JOE@JBA1.COM**

**WHY DO WE DO IT?**



**INTRODUCTION**

HISTORY

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TRENDS

SUCCESS

Growth/Decline in Enrollments  
 Qualitative Issues/Renewals  
 Improve the Environment  
 Students Not Prepared  
 Success of the Programs  
 Community  
 Prepare Successors  
 Legacy (Person/Event/Place)  
 Mandated by Others

and the list goes on.....



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**CAMPUS DEVELOPMENT OVER TIME**



**INTRODUCTION**

**HISTORY/FACTS**


PRINCIPLES

CONTENT

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SUCCESS



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**GROWTH OVER THE YEARS**



**INTRODUCTION**

**HISTORY/FACTS**

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APPROACH

TRENDS

SUCCESS

- One Building
- Initial Growth
- Fire/Rebuild
- Land Grants
- Wars
- Sports
- 60's Explosion
- Lost Legacy
- Confusion/Investment
- Information Age



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**20,400,000 Enrolled (2017 NCES)**

- 62% Full Time
- 38% Part Time
- 28% Private
- 72% Public
- 85% Undergraduate
- 15% Graduate
- 56% Female
- 44% Male

**4,625 Degree Granting Institutions** (down from 4,724)



- 63% Four Year
- 67% Private
- 34% Public
- 37% Two Year
- 40% Private
- 60% Public

**9,424 Institutions of Higher Education**

- Wyoming 17
- California 1,246

**7,100 Total Institutions** (US Department of Education)

**WHERE ARE WE TODAY?**

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**LARGEST UNIVERSITY LANDS**

Berry College	27,000	Rome, GA
US Air Force Academy	18,455	Colorado Springs, CO
US Military Academy	16,080	West Point, NY
University of the South	13,000	Sewanee, TN
Penn State University	11,000	University Park, PA
Stanford University	8,180	Palo Alto, CA
Liberty University	7,000	Lynchburg, VA
Michigan State University	5,239	East Lansing, MI
Texas A&M University	5,115	College Station, TX
Tuskegee University	5,000	Tuskegee, AL



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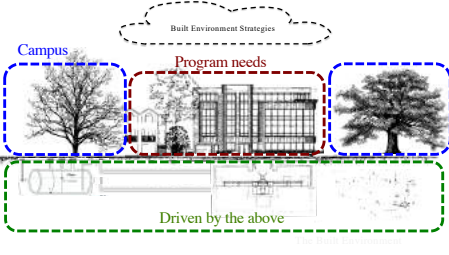
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**CAMPUS PLANNING PRINCIPLES**



Driven by the above

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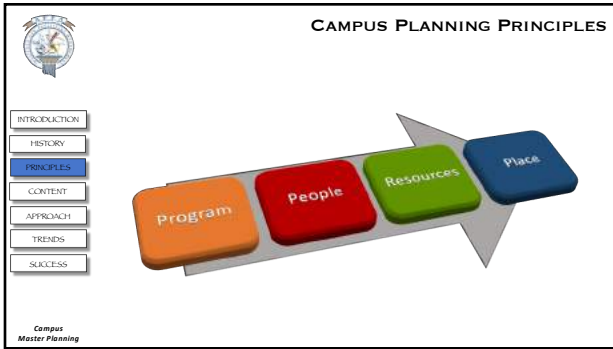
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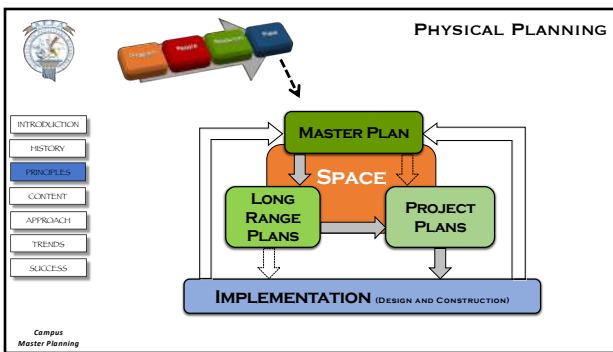
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**PHYSICAL PLANNING – LONG RANGE PLANS**



- INTRODUCTION
- HISTORY
- PRINCIPLES**
- CONTENT
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**Parking**  
**Circulation**  
**Landscape**  
**Bikeway**  
**Architecture/Design Guidelines**  
**Space Plans**  
**Land Acquisitions**  
**Facility Audit/Bldg. Revitalization**



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**PHYSICAL PLANNING – IMPLEMENTATION**



- INTRODUCTION
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- **Budget Requests/Funding Plans**
- **Life Cycle Ownership**
- **Funding Plans**
- **Design**
- **Construction**
- **Operate and Maintain**



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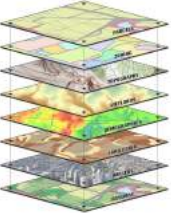
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**WHAT IS IN A MASTER PLAN?**



- INTRODUCTION
- HISTORY
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TOPOGRAPHY  
 OPEN SPACE  
 LAND USE /ACQUISITION  
 VISTAS AND VIEWPLANES  
 EDGES AND GATEWAYS  
 PATHWAYS  
 PARKING  
 ART DISPLAY  
 CAMPUS LANDSCAPE AND VEGETATION  
 WAYFINDING  
 BUILDING CONDITIONS  
 BUILDING USE/NEW BUILDINGS  
 ARCHITECTURE  
 HISTORIC CONTEXT  
 UTILITY DISTRIBUTION AND PRODUCTION  
**AND THE LIST GOES ON.....**



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**GOALS ON OBJECTIVES**

- Accommodate Programs
- Pedestrian Oriented
- Sense of Community
- Safe and Secure
- Reduce Travel Sequence
- Improve Land Use
- Collegiate Atmosphere
- Links With Community
- Student Centered
- Improve Identity
- Improve Planning Processes



INTRODUCTION  
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**DESIGN PRINCIPLES**

- Create distinctive physical image
- Enrich the experience for all
- Maximize value of physical assets
- Provide facilities to support programs
- Implement plan in a timely manner
- Develop strong foundation
- Complete pedestrian ways
- Increase density
- Introduce more gathering places
- Historic preservation
- Connect multi-modal transportation
- Redistribute parking
- Develop landscape guidelines
- Turn attention away or toward buildings
- Improve campus edges



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**FOUNDATION/Framework**



**Must Exist**                      **Perpetual Existence**

**Base to all Urban Design Decisions**                      **Can NOT be Compromised**

INTRODUCTION  
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**LAND USE**



- INTRODUCTION
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**Academic Areas**  
**Student Services**  
**Parking**  
**Residential**  
**Others**  
**Recreation, Athletics and Open Space**  
**Service and Maintenance**





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**OPEN SPACE**



- INTRODUCTION
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**Quadrangles/Lawns**  
**Walkways**  
**Athletic/Recreational Fields**  
**Plazas(hardscapes)**  
**Surface Parking Lots**  
**Streets/Service Routes**  
**Campus Edges/ Gateways**  
**Fields/Parks**  
**Lakes/Ponds/Rivers**  
**Conversation Spaces**  
**Gardens/Arboretums**  
**Paths**  
**Vistas**  
**Other**



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**CIRCULATION**



- INTRODUCTION
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**Vehicular**  
**Public Service**  
**Commercial**  
**Mass Transit**  
**Bus**  
**Train/ Light Rail/ Subway**  
**Shuttles**

**Golf Carts**  
**Bicycles**  
**Pedestrian**  
**Mobility Impaired**  
**Specific Paths**  
**Historic Walks**  
**Walk of Fame**  
**Art**  
**Recreation/Public**






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**BIKEWAYS**





- INTRODUCTION
- HISTORY
- PRINCIPLES
- CONTENT
- APPROACH
- TRENDS
- SUCCESS

**Types of Routes**  
 Paths  
 Lanes  
 Routes

**Dismount Zones**  
**Connectivity w/ Community**  
 Signage  
 Rules and Regulations

**Parking**  
 Racks  
 Lockers  
 Locations  
 In Buildings

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**PARKING**



- INTRODUCTION
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- APPROACH
- TRENDS
- SUCCESS

**Faculty, Staff, Students**  
**Public**  
**Mobility Impaired**  
**Service Vehicles**  
**Commercial Vehicles**  
**Bicycles**  
**Mass Transit**

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**ACCESSIBILITY**






- INTRODUCTION
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- CONTENT
- APPROACH
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- SUCCESS

**Mobility Impaired**  
 Dimensions

**Audio Impaired**  
**Visually Impaired**  
 Sensory Clues

**Other Issues**  
**Relationship to the Americans with Disabilities Act (ADA)**  
**Universal Accessibility**

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**LANDSCAPE**

- Scale of Open Space
- Layering
- Vegetation
- Site Furniture
- Signage
- Wayfinding
- Art
- Lighting
- Architectural Décor
- Landmarks
- Slacking?????

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**EDGES AND GATEWAYS**

- Link to Community
- Identity/Image
- Gateways
- Access Points
- Varying Circulation Systems
- Informal/Formal

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**SITE FURNISHINGS**

- Usable
- Consistency
- Help Architecture
- Durability/Vandalism
- Low Maintenance
- Attractiveness
- Cost
- Trash Receptacles
- Smoking Urns
- Dumpsters and Compactors
- Waste Sites

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**ART IN PUBLIC PLACES**



- INTRODUCTION
- HISTORY
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- CONTENT**
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- TRENDS
- SUCCESS



Gardens  
Wayfinding  
Space Definition/  
Interest  
Education  
Maintenance  
Funding  
Repair  
Vandalism



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**SIGNAGE AND WAYFINDING**



- INTRODUCTION
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Destination Hierarchy  
freeway to destination  
Special Events  
kiosks, billboards, posters  
Lighting  
Signs  
Security/Comfort  
Sense of Place  
Architectural icons  
Landscape Features  
Vistas




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**ARCHITECTURE**



- INTRODUCTION
- HISTORY
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Buildout/Massing  
Landmarks  
Design Guidelines  
Signature Buildings  
Pallet of Materials  
As Urban Design Tool  
Space Planning





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**UTILITY INFRASTRUCTURE**

Chilled Water  
Compressed Air  
Electric  
Power  
Lighting  
Natural Gas  
Sanitary Sewer  
Steam  
Storm Sewer  
Telecommunications  
Copper  
Fiber  
Wireless  
Water  
Irrigation  
Potable

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**BASIC APPROACH**

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**WHAT DRIVES THE PLAN?**

<ul style="list-style-type: none"> <li>People           <ul style="list-style-type: none"> <li>Students</li> <li>Faculty</li> <li>Staff</li> <li>Visitors</li> </ul> </li> <li>Teaching/Research</li> <li>Methodologies</li> <li>Business Procedures</li> <li>Technology</li> <li>Environment</li> <li>Student Life</li> </ul>	<ul style="list-style-type: none"> <li>Mission, Goals, and Objectives</li> <li>Funding/Resources</li> <li>Politics</li> <li>Community</li> <li>Facility Conditions</li> </ul>
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**What side of the bed your boss woke up on!**

Now who do you think the expert is?

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**CHANGING PARADIGMS**



- INTRODUCTION
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Campus Master Planning <http://www.youtube.com/watch?v=zDZFcDGpL4U>

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**THE DATA RICH CAMPUS**

**Business Intelligence  
Data Warehouses  
Linking Data Sets  
GIS Systems**



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**AUBURN UNIVERSITY**

**College of Agriculture Planning Considerations**  
Comprehensive Campus Master Plan 2013 Update  
3/24/13 (Rev. 6/2013)

Item Number Project Name	College/School/Unit Planning Considerations			Impact on the Master Plan		
	Status	Type	Description	Impact	Type	Description
026 CMAF Update		Building	The location of Agriculture at Auburn University is an excellent teaching, research and service location. The current location is well-served by the existing infrastructure. The new location is well-served by the existing infrastructure.			
027 CMAF Upgrade		Building	Participate in a national research network that will create a new and unique research environment for the College of Agriculture.			
028 CMAF Update		Building	One of the College's strategic initiatives is to become a premier research institution.	B		Current location is not ideal
029 CMAF Update		Building	Affordable housing is a key goal for the College of Agriculture. The College of Agriculture will be working with the University to create a new and unique research environment for the College of Agriculture.			
030 CMAF Update		Building	The College of Agriculture is a key partner in the Auburn University research and educational mission. The College of Agriculture will be working with the University to create a new and unique research environment for the College of Agriculture.	B		The land use and building should be consistent with the University's master plan.
031 CMAF Update		Building	The College of Agriculture is a key partner in the Auburn University research and educational mission. The College of Agriculture will be working with the University to create a new and unique research environment for the College of Agriculture.			Consider the potential impact of the College of Agriculture on the University's master plan.

Link to Strategic Plan

Strategic Plan

College Planning

Facilities Plans & MP

**Key to Impact on Physical Environment**

F = Faculty    S = Students  
P = Staff    V = Visitors  
S = Site      B = Building  
O = Other    U = Utilities

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**THE MASTER PLAN MUST**



- INTRODUCTION
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- SUCCESS

**Have Campus Involvement**

**Have a Good Design or Scheme**

**Appeal to All**

**Be Understandable**

**Be Timeliness**

**Be Flexibility**

**Be Fundability**

**Have Little Conflicts**

**Be Dynamic vs. Static**

**Be Comprehensive**

**Be Integrated**

**Have Community Buy-in**

**Have State/Board/Trustees Buy-in**

**Be Programmatically Driven**

**Be Politically Acceptable**

**Ownership, Achievable, and Continuous Process**

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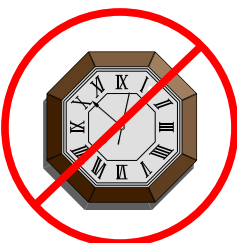
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**TIME**



- INTRODUCTION
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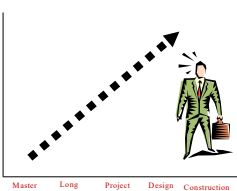
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**CONSULTANTS**



- INTRODUCTION
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**Use of Outside Consultants**



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**MEETINGS AND SPECIAL APPROACHES**



**The good, the bad, and the ugly!**  
**80% Rule**

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**ORGANIZATION OF THE PLANNING**

**Reference Information**  
Program Information  
Enrollment Plans  
Site Data  
Space Model  
Building Data

**Campus Maps and Plan**  
Goals and Objectives  
Design Principles  
The Foundation  
Illustrative Plan  
Physical Components

**Advantage of Web Based System**  
Mapping Attributes (GIS)  
Data Linkages  
Reduced Costs  
Real Time Information/Updates  
Improved Access and Ownership  
Varying Stages of Complexity  
Accountability  
Modeling

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**VARYING PLANNING WINDOWS**




**Academic**                      **Facilities**

**We Must Realize The Tail Wags the Dog**

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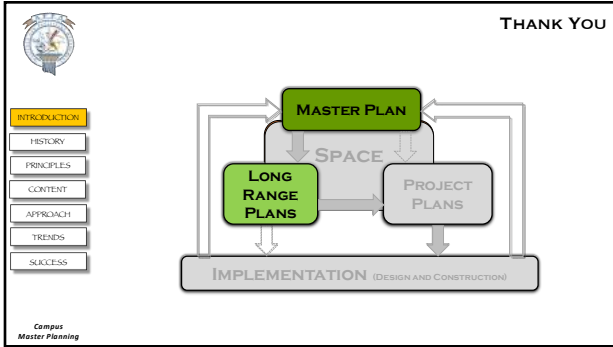
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