NC STATE UNIVERSITY

CAMPUS CAPACITY AND ASSESSMENT STUDY

Analysis Summary | May 9, 2017
Agenda

- Introductions
- Project Goals and Process
- What We Heard
- Analysis
- Initial Themes
- Next Steps
- Discussion
Planning is a Process

History, Culture, and Values

Mission and Strategic Plan

Programs

Community Engagement

Sustainability

Shared Vision

- Responds to today’s challenges and sustains momentum of existing plans and strategic initiatives
- Enhances this iconic place for future generations
Strategic Plan Goals

To Enhance:

• student success through educational innovation
• scholarship and research by investing in faculty and infrastructure
• interdisciplinary scholarship to address grand challenges of society
• organizational excellence by creating a culture of constant improvement
• local and global engagement through strategic partnerships
Create a shared vision that supports:

- 2014 Physical Master Plan
- Strategic Plan Goals
- Decision-making
- Communication
- Partnership development
- Financial feasibility
- Sustained implementation across all land holdings
Process


Data Gathering

1  Kick-Off & Focus Group Interviews
2  Analysis Summary Initial Themes
3  Draft Principles & Concept Plans
4  Final Principles & Concept Plan

Final Documentation

2017  APR  MAY  JUN  JUL  SEPT
Process

DEFINE

ASSESS

ENVISION

TEST

SYNTHESIZE
Previous Studies

• 2014 Master Plan
• College and Unit Master Plans
• 2011 Campus Bicycle and Pedestrian Plan
• 2010 Cates Master Plan
• Spring Hill and Centennial Study
• City and Regional Studies
Campus Paths and Shared Open Spaces

Each Campus Neighborhood’s buildings’ location and orientation is critical to defining the six distinct types of Shared Open Spaces: Campus Greens, Courtyards and Plazas, Campus Streets, All Campus Paths, Campus Edges and Natural Avenues. These spaces are the focal points of neighborhoods and are nurtured by or created by all projects.

Individual Campus Neighborhoods and their Shared Open spaces are woven together into a coherent whole by a hierarchical system of pedestrian paths, scaled to move people efficiently through campus. All Campus Paths, Connector Paths, and Neighborhood Paths. "The All Campus Paths are the campus’ most lively pedestrian movement zones and connect all parts of the campus and major Exterior landscapes. Their design includes amenities and landscaping that add to the pedestrian experience. The All Campus Paths will continue to be enhanced as a major design characteristic and an outdoor amenity for the university.

Legend

<table>
<thead>
<tr>
<th>EXISTING</th>
<th>FUTURE</th>
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<tbody>
<tr>
<td>All Campus Path</td>
<td>All Campus Path</td>
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<tr>
<td>Connector Path</td>
<td>Connector Path</td>
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<tr>
<td>Neighborhood Path</td>
<td>Neighborhood Path</td>
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<tr>
<td>Multipurpose Path</td>
<td>Multipurpose Path</td>
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<tr>
<td>Shared Open Space</td>
<td>Shared Open Space</td>
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<tr>
<td>Major Pedestrian Entrance</td>
<td>Major Pedestrian Entrance</td>
</tr>
<tr>
<td>Building</td>
<td>Building</td>
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<tr>
<td>Property Line</td>
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</tbody>
</table>

Legend

- Red: All Campus Path
- Orange: Connector Path
- Purple: Neighborhood Path
- Blue: Multipurpose Path
- Light Green: Shared Open Space
- Green: Major Pedestrian Entrance
- Gray: Building
- Property Line: Property Line
- Tunnel/Bridge: Tunnel/Bridge
- Red: All Campus Path
- Orange: Connector Path
- Purple: Neighborhood Path
- Blue: Multipurpose Path
- Light Green: Shared Open Space
- Green: Major Pedestrian Entrance
- Gray: Building
- Property Line: Property Line
- Tunnel/Bridge: Tunnel/Bridge
2014 Master Plan Guiding Principles

Commitment to the Master Planning Process
Decisions about space allocation and management, capital priorities, designer selection, building design, and landscape planning, are based on the Physical Master Plan, which is derived from a participatory campus-wide effort that is revisited on a regular basis.

Integrated Planning
Physical planning that works in concert with the university’s strategic, academic, programmatic, space and enrollment plans, enhances the mission of each campus unit and encourages the exchange of ideas.

Hallowed Places
Preserving irreplaceable buildings, landscapes, and natural settings that have accrued special meaning over time celebrates the university’s heritage.

Sustainability
Design and construction that creates lasting value for the campus community and the state of North Carolina reduces the university’s environmental impact.

Pedestrian-Oriented Campus
A path and transit network that safely and comfortably links campus destinations reduces dependency on single-occupancy vehicles.

Human-Scaled Neighborhoods and Paths
An environment that is made up of a series of human-scaled units, rather than monolithic spaces or structures, creates a comfortable campus environment.

Campus Safety and Security
Campus buildings, grounds and paths foster a safe, secure and healthy community where people can thrive.

Design Harmony
Architecture that arises from the study of and response to neighborhood context results in strong and attractive visual unity.

Universal Design
The campus is built and retrofitted so that environments are usable by all people to the greatest extent possible.

City Context
Weaving the university into the fabric of surrounding neighborhoods improves the shared, larger community and facilitates mutually beneficial goals.

Mixed-Use Activities
The integration of a variety of activities and functions within neighborhoods encourages interaction and extends the use of space beyond standard class and work schedules.

Visible Neighborhood Activities
Views into neighborhoods and buildings soften the boundaries between places, help to inform people, and invite them to engage with one another.
Stakeholder groups we met with:

- University Council
- City of Raleigh
- Students
- Provost’s Office
- Research, Innovation and Economic Development
- DASA; Housing, Dining, Student Centers, UREC
- Finance and Administration
- Athletics
- Transportation
- Colleges
  - College of Agriculture and Life Sciences (CALS)
  - College of Design
  - College of Education
  - College of Engineering
  - College of Humanities and Social Sciences
  - College of Natural Resources (CNR)
  - Poole College of Management
  - College of Sciences
  - College of Textiles
  - College of Veterinary Medicine

(Ongoing engagement with other groups throughout the process)
Open House Summary

Over 150 people in 2 hours in Talley Student Union

• 100+ students
• 20+ staff
• 10+ community
• Less than 10 faculty
Open House Summary

Favorite Place on Campus

- Majority on Talley Student Union and Rec Center (both students and staff)
- Hunt Library, DH Hill Library, and Court of North Carolina also received a lot of votes
- Great places to relax, study, gather, good services, make friends, relieve stress

Least Favorite Place on Campus

- Range of answers but most in CALS core, Winston/Caldwell/Tompkins, Lee Res Hall and dining
- Housing/Dining: quality of food and living experience
- Surface parking: hard to find, ugly
- Facilities: hard to navigate, dull, bad class experience
Open House Summary

Where do you study/collaborate?

- Majority on Hunt Library, DH Hill Library, Talley Student Union (staff mostly Talley)
- Other locations included academic buildings – engineering
- Some residence and dining halls

Where do you live?

- On campus include all areas including Centennial
- Group of students in private housing next to Nelson Hall
- Off-campus towards the south; many along Gorman street corridor
If you could do one project on campus what would it be?

- Place to showcase/bring colleges together to share ideas
- Better interface with Hillsborough Street – sidewalks, streetscape, retail
- Have buses run on the weekends
- Pedestrian bridge over Western Blvd; better connection to Centennial
- Activate Centennial campus
- Atrium open on the weekends
- Better lighting for walking at night
- Better/healthier food options on campus; more dining on Centennial
- Compost in campus apartment areas; better waste management
- Pool tables around campus; more social spaces
- Variety in study areas – mobile options (treadmill, bikes)
ANALYSIS
NC State Stats

33,755 students
- 22,346 undergrads
- 9,115 graduate
- 2,294 non-degree

9,070 Employees

12 Colleges

2,100 Acres

5 Campus Precincts

15+ million GSF
- 8+ million ASF

460+ buildings
Setting and Context

Strengths:
• An urban, land-grant institution close to airport and other major academic and research institutions

Challenges:
• Competition for state funding, students, partnerships
Setting and Context

Strengths:
• 1.5 miles from State Capitol
• Growing population and economy
• Good relationship with the city

Challenges:
• Don’t know when you have arrived to campus, especially from west
Setting and Context

**Strengths:**
- Large landholdings are a powerful asset

**Challenges:**
- Campus land is distributed over a large area
- Landholdings are disconnected, confusing and support separation of uses rather than vibrant mix of uses
Gateways and Edges

Strengths:
• Recent gateways have a consistent identity for campus

Challenges:
• Campus has a lot of edges and points of entry
  • Difficult for a visitor to navigate
  • Difficult to maintain a consistent brand and identity
• Lack of porosity into campus along Hillsborough Street
Circulation - Transit

**Strengths:**
- Wolfline covers majority of campus
- City bus routes cover the edges of campus
- Bus ridership has been increasing each year

**Challenges:**
- Limited connectivity to West campus; no connection to south Centennial campus
- Alignment with class schedule/high demand times
Circulation – Bike Paths

Strengths:
• Increased interest in biking – culture change?
• Multi-purpose paths are well used

Challenges:
• Bike network within campus is limited; few dedicated bike lanes in the North precinct
• Topography between precincts makes biking more challenging
• Limited bike activity on campus currently
Circulation - Pedestrian

Strengths:
• Each precinct has a walkable core

Challenges:
• The campus is large and walking distances are long
• Pedestrian routes can be hard to understand, inconsistent, or disconnected.
• Varying degrees of pedestrian-friendliness across precincts
Parking

Strengths:
• Spaces are convenient to users

Challenges:
• Surface parking remains in the campus core interrupting bike, pedestrian, and open space areas
• Current systems promote driving around campus

20,000+ Parking Space Inventory
9 parking decks = 7,020 spaces (35%)
Approx. 13,000 surface spaces (65%)
Parking

Total Campus Acres: 2,112
- Total parking = 350 acres
- Parking is 16% of land holdings

Precincts
West = 479 acres
- Parking = 21% of land holdings

North = 93 acres
Central = 300 acres
South = 123 acres
- Parking = 33% of land holdings

Centennial = 1,117 acres
- Parking = 7% of land holdings; 25% of urban core
Circulation Conflicts

**Strengths:**
- Strong improvements to pedestrian amenities in some areas

**Challenges:**
- There is a lack of flow
- You have to **think** about how to navigate within areas of campus; few options exist on routes between major areas or precincts
- Conflict areas where parking, roads, and paths intersect
Topography

Strengths:

• Provides variety in landscape
• Provides views and vistas across campus and to downtown

Challenges:

• Creates challenges for connectivity and accessibility
• Increases walk times
• Reduces desire to walk or bike around campus
Hallowed Places

**Strengths:**
- Diverse, beloved areas around campus
- Promote identity and brand; recognizable

**Challenges:**
- Need more memorable, vibrant places on campus – not necessarily additional Hallowed Places
Open Space

**Strengths:**
- Variety of landscapes throughout campus
- Strong improvements to landscape amenities in some areas

**Challenges:**
- Some areas remain inconsistent and not fully or easily connected
Character

Strengths:
• Recent projects that combine programming and design in very deliberate ways are successful – Hunt, Talley, the Park Shops, Hillsborough St.

Challenges:
• Not enough of vibrant buildings; many are interior locations that have low visibility
Character

Strengths:
• Recent projects that combine programing and design in very deliberate ways are successful – Hunt, Talley, the Park Shops, Hillsborough St.

Challenges:
• Not enough of vibrant buildings; many are interior locations that have low visibility
• Large inventory of ‘soldier’ buildings and landscapes
Primary Land Use

Strengths:
• Central precinct has the most vibrancy and energy – mix of uses
• Clear ‘work’ and ‘play’ areas

Challenges:
• Large land holdings result in segregated uses and variable densities across precincts
• Distribution does not result in a vibrant 24/7 campus
Housing and Dining

8,934 total beds

Strengths:
- Variety of housing types and different price points
- Majority of housing is in good condition

Challenges:
- Some housing is isolated/lacking a larger community; low density
- Facility condition and accessibility issues need to be addressed
Classroom Space Distribution
Class and Open Lab Space Distribution
Research Space Distribution

- Research (10,000 ASF)
College Locations

Strengths:
- Most colleges are clustered together

Challenges:
- Some colleges and departments are fragmented across too many buildings
  - CALS
  - Engineering
  - Sciences
- Limited number of interdisciplinary buildings on campus

25,000 ASF
- College of Agriculture and Life Sciences
- College of Design
- College of Education
- College of Engineering
- College of Humanities
- College of Management
- College of Natural Resources
- College of Sciences
- College of Textiles
- College of Veterinary Medicine
THEMES
STRENGTHEN IDENTITY & BRAND

Leverage location in region

Clarify gateways and edges

Build off of iconic spaces and new successful projects
CONNECT THE CAMPUS

Mitigate topography to reduce travel distance and time

Support alternative means of transportation; improve bikeways and pedestrian pathways

Increase programmatic connections through interdisciplinary facilities
SIMPLIFY CIRCULATION

Provide direct and timely connections between campus precincts

Keep vehicular access on the edges of campus and reinforce gateways

Eliminate/reduce surface parking in the core; park once
ENHANCE STEWARDSHIP

Ensure highest and best use of land and resources

Enhance quality and connectivity among diverse landscapes

Improve adjacency, utilization, and condition through strategic renovations, demolition, and new construction
PROMOTE VIBRANCY

Concentrate activity and density; ensure a mix of uses in each precinct of campus.

Expand energy of Central precinct to other parts of campus.

Add areas that promote collaboration and gathering like Park Shops, Hunt, Talley, rec center, Hillsborough St.
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<tr>
<td><strong>Connect the Campus</strong></td>
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<td><strong>Simplify Circulation</strong></td>
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<td><strong>Enhance Stewardship</strong></td>
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<td><strong>Promote Vibrancy</strong></td>
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NEXT STEPS
Next Steps:

- Incorporate feedback from May workshop
  - Update analysis and themes

June Workshop

- Develop draft Guiding Principles
- Develop concepts for discussion
  - Land use strategies
  - Circulation opportunities
  - Programmatic opportunities
NC State