CAMPUS CAPACITY AND ASSESSMENT STUDY

Board of Visitors Presentation
September 29, 2017
Engineering Building Oval (EB Oval)

Budget: $137M
Estimated Completion: June 2020
Designer: Clark Nexsen
Construction Manager at Risk: Skanska USA Building
Plant Sciences Building

Budget: $160.2M
Estimated Completion: December 2021
Designer: Flad Architects
Construction Manager at Risk: DPR Construction
Carmichael Addition and Renovation

Budget: $45M
Estimated Completion: July 2020
Designer: Corley Redfoot Architects
Construction Manager at Risk: Frank L. Blum Construction Co.
Bureau of Mines Renovation

Budget: $6M
Estimated Completion: November 2019
Designer: Clearscapes
Construction Manager at Risk (CMR): Holt Brothers Construction
Academic Success Center at DH Hill Library

Budget: $9.3M
Estimated Completion: Spring 2020
Designer: Lord Aeck Sargent
Construction Manager at Risk: Holder Construction
Agenda

• Introductions
• What is the Campus Capacity and Assessment Study?
• Key Physical Planning Issues
• Guiding Principles and Strategies
• Application of Guiding Principles
WHAT IS A CAMPUS CAPACITY AND ASSESSMENT STUDY?
It is not a Master Plan

It complements the existing 2014 Master Plan and will inform the next plan

- High-level overlay and guiding document
- Does not include detailed solutions
It is a process that provides multiple lenses to help us deliver the highest and best use of University resources

- Aligns the physical campus with its mission and programs
- Reinforces the Strategic Plan goals
- Responds to physical opportunities and challenges
- Engages diverse stakeholders in a rich dialog
- Challenges assumptions about facilities and development strategies
- Helps inform decision making related to the physical campus and projects
Engagement

- Athletics
- City of Raleigh
- Colleges
  - College of Agriculture and Life Sciences
  - College of Design
  - College of Education
  - College of Engineering
  - The Graduate School
  - College of Humanities and Social Sciences
  - College of Natural Resources
  - Poole College of Management
  - College of Sciences
  - College of Textiles
  - College of Veterinary Medicine
- Division of Academic and Student Affairs
  - Fraternity and Sorority Life
  - University Housing
  - University Recreation
- Office of the Executive Vice Chancellor and Provost
  - NCSU Libraries
- Finance and Administration
  - Campus Enterprises; Dining, Student Centers
  - College/Division Business Representatives
  - Environmental Health & Safety
  - Facilities
  - Real Estate and Development
  - Transportation
- Hillsborough Street Community Service Corporation
- Local Design Community
- Research, Innovation and Economic Development
  - Partnerships and Economic Development
- Students
- University Advancement
- University Council

Process and Schedule

- DEFINE
  - Data Gathering
- ASSESS
  - Kick-Off & Focus Group Interviews
  - Analysis Summary Initial Themes
- ENVISION
  - Draft Principles & Concept Plans
- TEST
  - Final Principles & Concept Plan
- SYNTHESIZE
  - Final Documentation

SEPT 2017
Campus Capacity & Assessment Study

DEFINE KEY ISSUES
What are the issues and opportunities for the NC State Campus?

ESTABLISH GUIDING PRINCIPLES
What are the principles that will address these key issues and inform future development and decision making?

APPLY GUIDING PRINCIPLES
How can the guiding principles be applied to future decisions and opportunities?
KEY PHYSICAL PLANNING ISSUES
Key Issues

Physical
- Large campus
- Major roads and railroad tracks divide areas of campus
- Edges are inactive and lack consistent identity
- Non-contiguous land holdings

Programmatic
- Large, limited use/inactive land areas
- Four distributed academic cores
- Fragmentation of units
- Sprawling development
- Need to strengthen hubs
Key Issues

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Guiding Principles
- Strengthen Identity and Brand
- Enhance Stewardship of Campus Resources
- Connect the Campus
- Re-prioritize Circulation
- Promote Vibrancy
PRINCIPLES
& STRATEGIES
Strengthen Identity & Brand*

GUIDING PRINCIPLE

Strengthen the identity and brand of NC State by leveraging its location in the region, creating welcoming gateways for the surrounding communities, augmenting existing iconic spaces and buildings, and clarifying campus edges and gateways.
Strengthen Identity & Brand*

GUIDING PRINCIPLE

Strengthen the identity and brand of NC State by leveraging its location in the region, creating welcoming gateways for the surrounding communities, augmenting existing iconic spaces and buildings, and clarifying campus edges and gateways.

STRATEGIES

1. Create a consistent quality and character for all major gateways
2. Prioritize Western Boulevard gateways and streetscape for improvement
3. Engage Hillsborough Street with active uses and streetscape while creating a more welcoming, porous edge to the campus
4. Identify strategic partners to help enhance neighboring landholdings and streets that are critical to the University’s mission, identity, interface, and connectivity
Enhance Stewardship of Campus Resources

GUIDING PRINCIPLE

Enhance campus stewardship by ensuring the highest and best use of land and resources, excellent teaching and research facilities, and quality of and connectivity between, the University’s diverse landscapes.
Enhance Stewardship of Campus Resources

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STRATEGIES
1. Improve adjacency, utilization, and condition of facilities through strategic renovation, demolition, and new construction
2. Prioritize infill development to densify campus and promote collaboration and innovation
3. Enhance, connect, and create vibrant, iconic landscapes throughout campus
4. Incorporate working landscapes and visible stormwater management systems where appropriate throughout campus to support sustainable initiatives and educate the campus community
5. Capitalize on partnership opportunities to improve campus edges and programmatic connections between campuses and to deliver additional facilities in a financially sustainable manner
Connect the Campus

GUIDING PRINCIPLE

Advance the culture of collaboration and interdisciplinarity by improving programmatic adjacencies and mobility, and creating strong connections between University landholdings.
Connect the Campus

GUIDING PRINCIPLE

Advance the culture of collaboration and interdisciplinarity by improving programmatic adjacencies and mobility, and creating strong connections between University landholdings.

STRATEGIES

1. Increase programmatic connections by strategically locating interdisciplinary facilities
2. Provide dedicated pedestrian, bike, and bus routes throughout campus
3. Provide direct and fast transit connections between campus precincts
4. Activate campus corridors and public streets to shorten perceived walking distances and to add vibrancy
5. Create a bridge between North and Central Precincts to mitigate topography, reducing travel time and distance
6. Connect Nazareth Street, Morrill Drive, and Broughton Drive to create a strong pedestrian path from Hillsborough Street to Centennial Campus
7. Enhance Western Boulevard pedestrian connections by adding key bridges, tunnels, or caps (i.e., tunnel top-surface requirements/amenities)
Re-Prioritize Circulation

GUIDING PRINCIPLE

Create a closer campus community between geographically-dispersed units by re-prioritizing modes of circulation on and around campus to provide a safe, healthy, and active campus supported by consistent and reliable transit. PeDESTRIANS > BIKE > BUS > VEHICLE
Re-Prioritize Circulation

GUIDING PRINCIPLE

Create a closer campus community between geographically-dispersed units by re-prioritizing modes of circulation on and around campus to provide a safe, healthy, and active campus supported by consistent and reliable transit. **Pedestrians > Bike > Bus > Vehicle**

STRATEGIES

1. Enhance on-campus pedestrian crossings
2. Eliminate/reduce surface parking in the campus core
3. Keep vehicular access and parking at campus edges
4. Encourage a ‘park once’ mentality by adjusting the parking management system
5. Support alternative means of transportation; improve bikeways and pedestrian pathways
6. Re-envision Cates Ave and redirect traffic south to remove vehicular congestion in an active pedestrian area
7. Encourage shared parking between different uses on Centennial Campus
Promote Vibrancy

GUIDING PRINCIPLE

Promote a vibrant campus by creating spaces for collaboration and gathering, concentrating activity and density, and ensuring a mix of uses in each precinct.
**GUIDING PRINCIPLE**

Promote a vibrant campus by creating spaces for collaboration and gathering, concentrating activity and density, and ensuring a mix of uses in each precinct.

**STRATEGIES**

1. Export the energy of the Central Precinct to other parts of campus by blending uses and creating critical mass at key campus crossroads

2. Develop shared spaces and hubs to inspire community, collaboration, and innovation like Park Shops, Hunt Library, Talley Student Union, Carmichael Recreation Center, and Hillsborough Street

3. Renovate or build new interdisciplinary facilities that bring people together to collaborate, innovate, and address complex problems

4. Improve adjacencies and concentrate activity in strategic locations
Guiding Principles

- Strengthen Identity and Brand
- Enhance Stewardship of Campus Resources
- Connect the Campus
- Re-prioritize Circulation
- Promote Vibrancy
APPLYING THE PRINCIPLES
How can we use the principles to weigh future decisions/opportunities?

Some strategies have a positive correlation with a principle (+), some a neutral correlation (○), and others a negative correlation (−). Future decisions should either positively influence a principle or be neutral to it. They should not be detrimental to or negatively impact any of the principles.

- Strengthen Identity and Brand
- Enhance Stewardship of Campus Resources
- Connect the Campus
- Re-prioritize Circulation
- Promote Vibrancy
Applying the Principles: Redevelopment of E.S. King Village
Applying the Principles: Redevelopment of E.S. King Village

Current development is low density and poor physical condition

Gorman Street is a barrier between campus landholdings; also an ill-defined campus edge

Existing student housing community at Wolf Village

Site is far from north academic core

Site is far from the majority of student life facilities

Site is far from central academic core (and Centennial Core)
Applying the Principles: Redevelopment of E.S. King Village

A partner wants to redevelop E.S. King into high density student housing

- **Strengthen Identity and Brand**
- **Enhance Stewardship of Campus Resources**
- **Connect the Campus**
- **Re-prioritize Circulation**
- **Promote Vibrancy**
Applying the Principles: Redevelopment of E.S. King Village

A partner wants to redevelop E.S. King into high density student housing

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Applying the Principles: Redevelopment of E.S. King Village

A partner wants to redevelop E.S. King into high density student housing

- Strengthen Identity and Brand: Neutral
- Enhance Stewardship of Campus Resources: Detrimental
- Connect the Campus: Detrimental
- Re-prioritize Circulation
- Promote Vibrancy
Applying the Principles: Redevelopment of E.S. King Village

A partner wants to redevelop E.S. King into high density student housing

<table>
<thead>
<tr>
<th>Principle</th>
<th>Score</th>
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<tbody>
<tr>
<td>Strengthen Identity and Brand</td>
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Applying the Principles: Redevelopment of E.S. King Village

A partner wants to redevelop E.S. King into high density student housing

<table>
<thead>
<tr>
<th>Strengths and Benefits</th>
<th>Positive</th>
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<tr>
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<tr>
<td><strong>Strengthen Identity and Brand</strong></td>
<td>Creates stronger campus edge and identity along Gorman Street</td>
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<td><strong>Enhance Stewardship of Campus Resources</strong></td>
<td>Spreads campus resources; reduces adjacency and the opportunity for density in the campus core</td>
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<td><strong>Connect the Campus</strong></td>
<td>Further separates land holdings by placing a large groups of students across a physical campus barrier (Gorman Street)</td>
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<td><strong>Re-prioritize Circulation</strong></td>
<td>Removes student parking from the campus core; requires more reliable transit to move students safely around campus</td>
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<td><strong>Promote Vibrancy</strong></td>
<td>Adds vibrancy and critical mass to E.S. King site, but removes activity and vibrancy from campus core</td>
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Applying the Principles: Cates Avenue Corridor
Applying the Principles: Cates Avenue Corridor – Identify Key Issues

Lee, Sullivan and Bragaw need to be addressed in the next 5-15 years

Conflicts between cars, buses, bikes, and pedestrians

Railroad creates a major barrier between the North and Central Precincts

Back section of parking garage needs to be addressed in next 5 years

Difficult intersection

Inactive/limited use street frontage

Poor campus gateway
Applying the Principles: Cates Avenue Corridor – Explore Possible Solutions

- Close portion of Cates Ave to vehicular traffic (service and emergency vehicles only)
- Build a bridge between the North and Central Precincts – connect to Talley Student Center
- Redirect traffic south to remove vehicular congestion in an active pedestrian area
- Relocate parking and replace with student housing – addresses housing swing spaces needs and activates street
- Improve campus gateway
Applying the Principles: Cates Avenue Corridor – Explore Possible Solutions

Existing Cates Avenue

- Two-way vehicular traffic
- Parking on both sides of the street
Applying the Principles: Cates Avenue Corridor – Explore Possible Solutions

Possible Future Cates Avenue

- Incorporate the NC State identity
- Close a portion of Cates Ave to vehicular traffic (service and emergency vehicles only)
- Incorporate stormwater management into streetscape
Applying the Principles: Re-envision the Cates Avenue Corridor

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Applying the Principles: Re-envision the Cates Avenue Corridor

- Strengthen Identity and Brand: +
- Enhance Stewardship of Campus Resources: +
- Connect the Campus: +
- Re-prioritize Circulation: +
- Promote Vibrancy
Applying the Principles: Re-envision the Cates Avenue Corridor

- Strengthen Identity and Brand: Positive
- Enhance Stewardship of Campus Resources: Positive
- Connect the Campus: Positive
- Re-prioritize Circulation: Positive
- Promote Vibrancy
Applying the Principles: Re-envision the Cates Avenue Corridor

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## Guiding Principles

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<th>Makes a favorite part of campus more recognizable; student activity corridor with an opportunity to further incorporate the NC State identity</th>
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<td>Adds higher density and better utilization of land resources; Incorporates stormwater management into streetscape</td>
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<td>Connects campus land holdings with a new bridge that mitigates topography reducing travel time and distance; better programmatic connections between student service facilities</td>
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<td>Increases pedestrian safety; remove cars and parking from active pedestrian and bike corridor on campus</td>
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<td>Adds greater vibrancy and critical mass to a campus hub with the opportunity to activate ground floors and increase number of places for collaboration and gathering</td>
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NEXT STEPS
Next Steps

Complete Capacity Study Process (September – October)

• Receive feedback from ALM group
• Finalize content and deliverables

Implementation of Capacity Study

• Evaluate ideas and projects through this lens
• Ensure the highest and best use of campus resources