

## Clemson University FRAMEWORK PLAN



#### Project Schedule

Task	Jun	J ul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	J ul	Aug	Sep	Oct
	2016						2017										
Phase 1: Discovery & Analysis																	
Review of Preliminary Analysis Findings																	
Phase 2: Framework Plan Alternatives																	
Preliminary Draft Framework Plan Review																	
Phase 3: Framework Plan Development																	
Final Plan Presentation																	



- Analysis Updates
- Guiding Principles
- Concept Alternatives

# ANALYSIS UPDATES

Postcard by Jonathan Balcombe



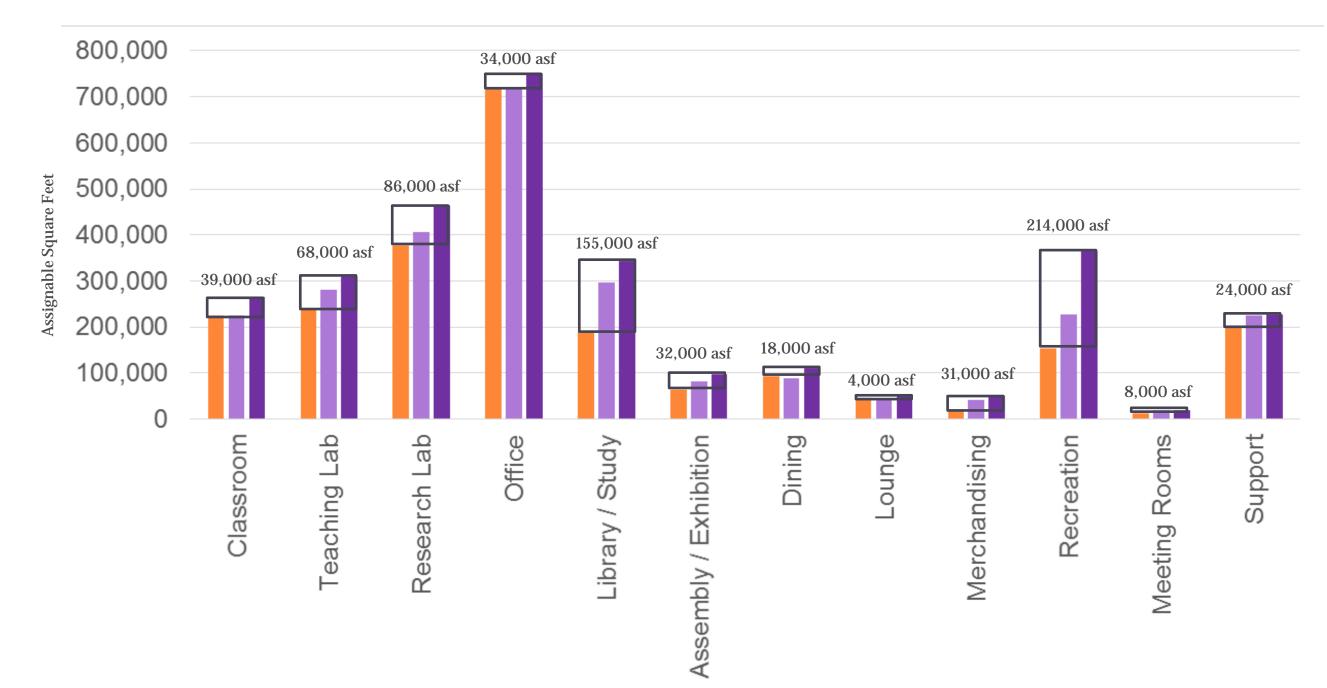
### On-Campus Population

SUMMARY

CURRENT POPULATION (2015/2016*)	FUTURE POPULATION (2026)
18,600	22,300 (21,658 FTE)
Undergraduate students	Undergraduate students
<b>2,546</b>	→ 4,000 (4,000 FTE)
Graduate students	Graduate students
1,546	→ <b>1,853</b> (1,780 FTE)
Faculty	Faculty
<b>4,110</b>	→ <b>4,929</b> (4,443 FTE)
Staff	Staff

#### Space Needs Summary

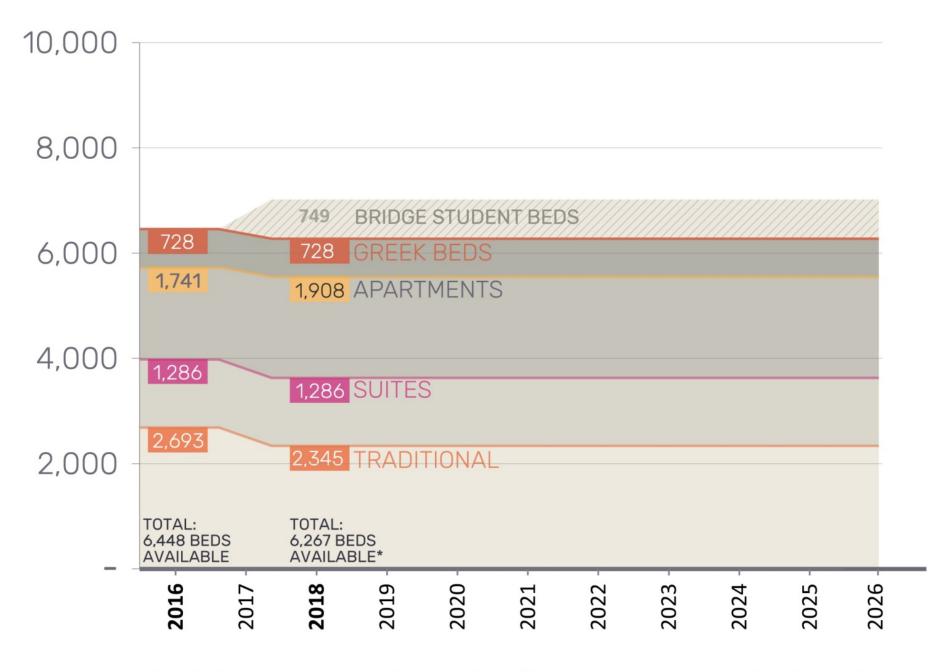
GENERATES FUTURE SPACE DEFICIT OF 713,500 ASF / 1,100,000 GSF\*





Existing Space Current Need Future Need

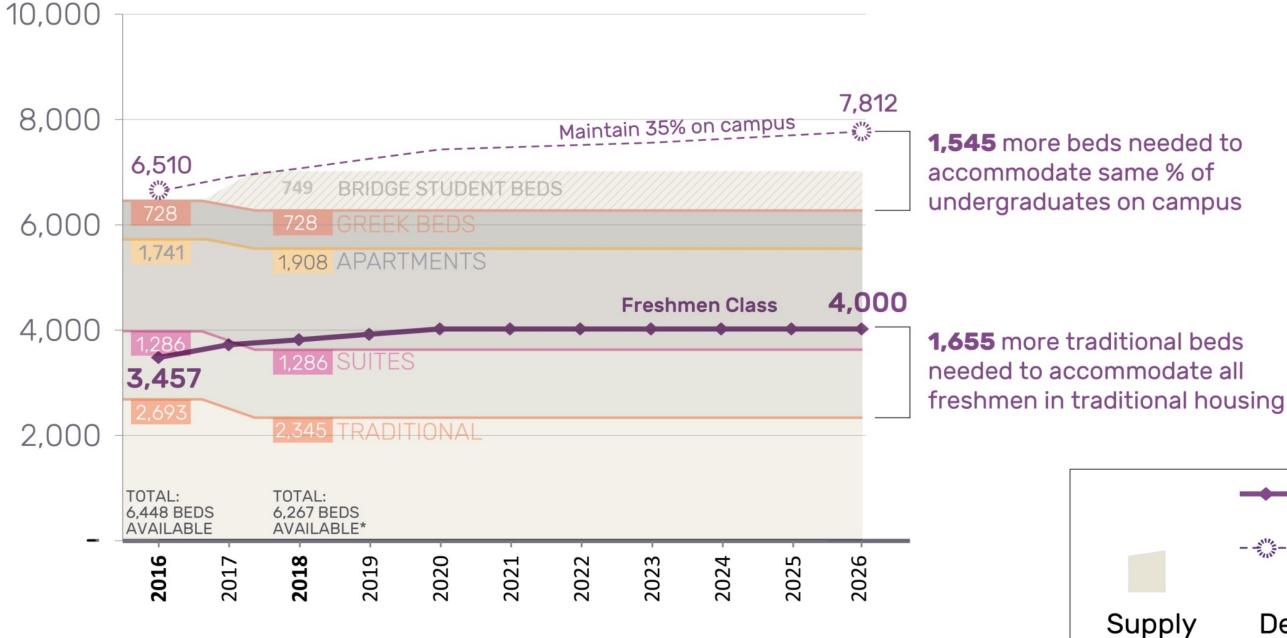
#### Housing Planned changes will shift distribution of housing options



\*Available beds for undergraduate students (does not include Bridge student housing)



#### Housing FRESHMEN CLASS AND GROWTH EXCEEDS AVAILABLE TRADITIONAL BEDS



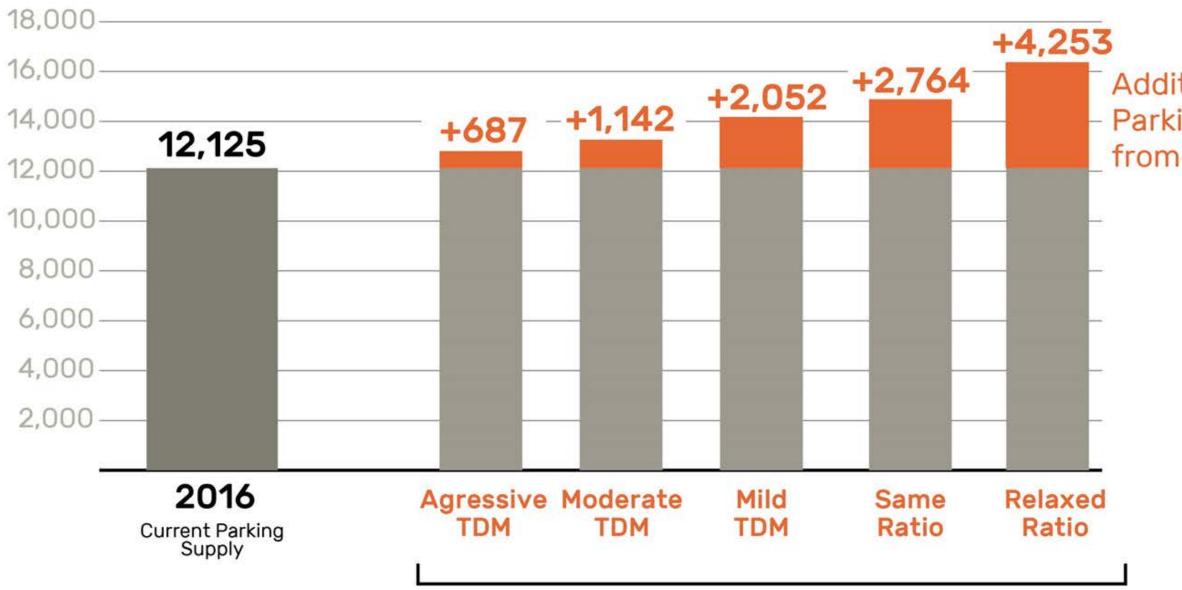
\*Available beds for undergraduate students (does not include Bridge student housing)

Freshmen - Fall

- 🐎 Maintain 35% on campus



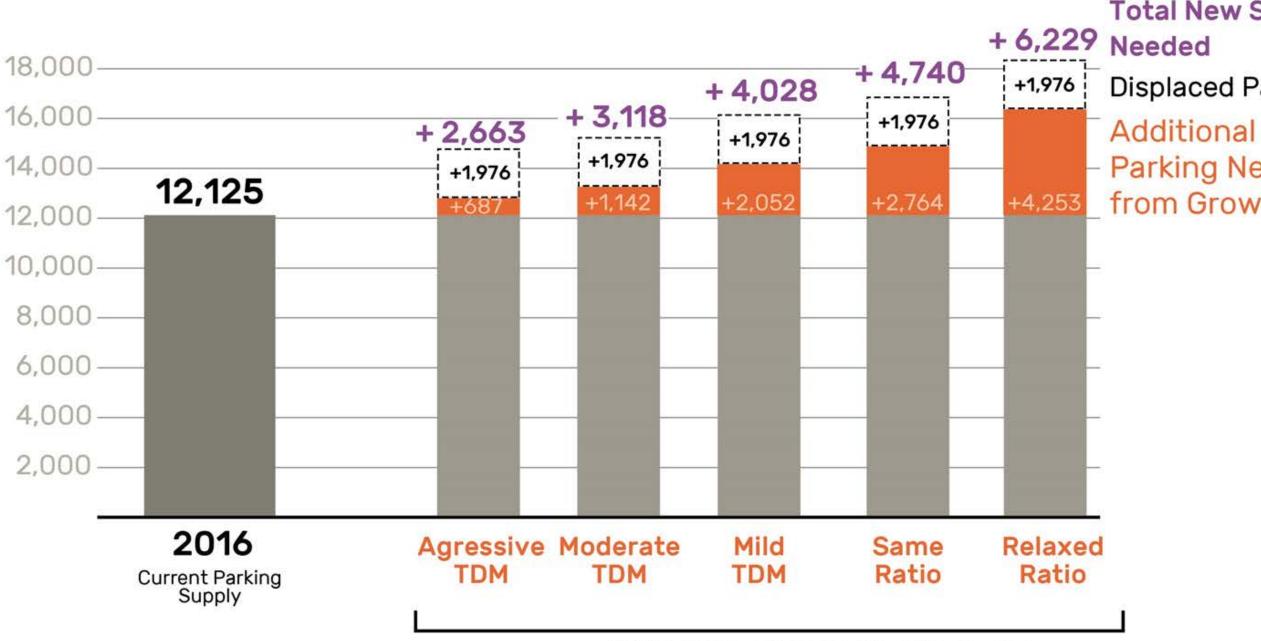




2026 Alternative Parking Scenarios

#### Additional Parking Need from Growth

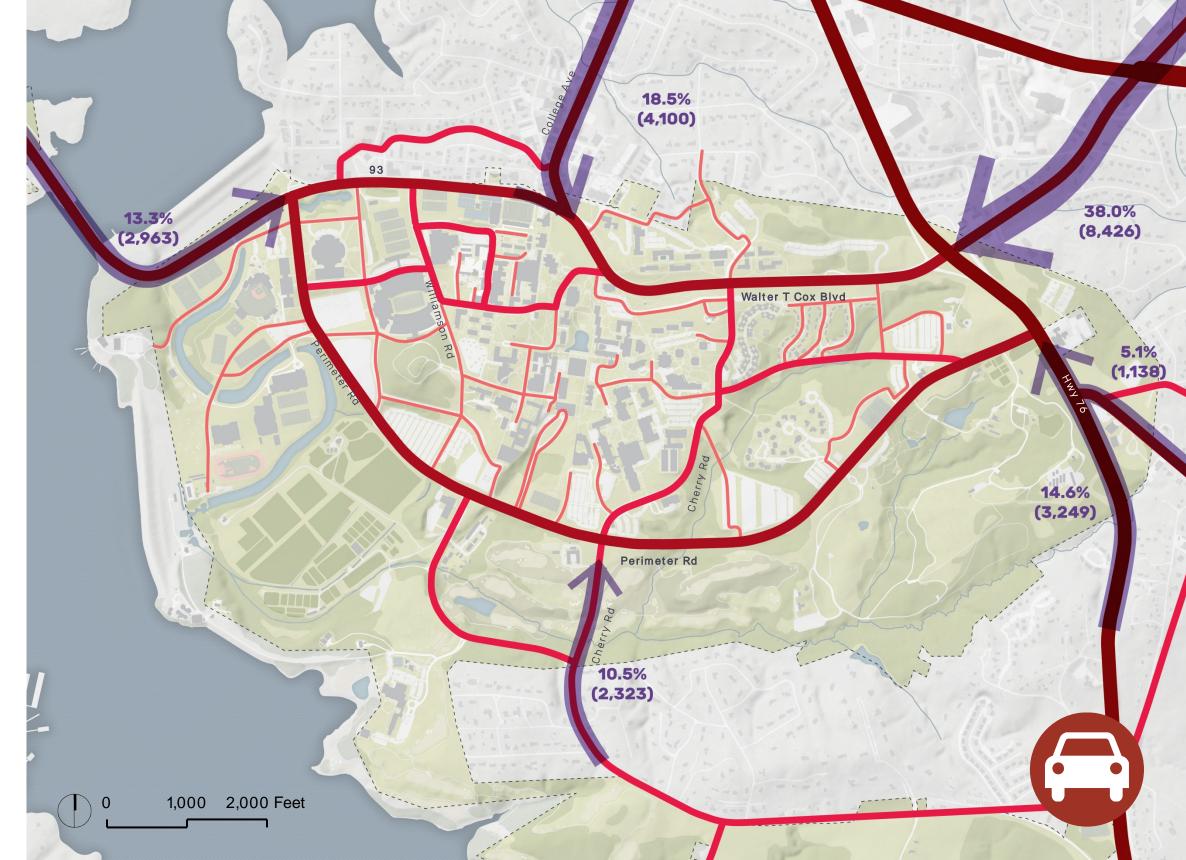




2026 Alternative Parking Scenarios

#### **Total New Spaces Displaced Parking** Parking Need from Growth

#### Mobility VEHICULAR CIRCULATION + POTENTIAL SURFACE PARKING



Vehicular Flow Path

#% Percentage of Vehicular Making Movement (#) Number of Vehicular Making

(#) Number of Vehicular Making Movement

## **GUIDING PRINCIPLES**

Postcard by Jonathan Balcombe (Class of 2015), Creative Services Internship

11



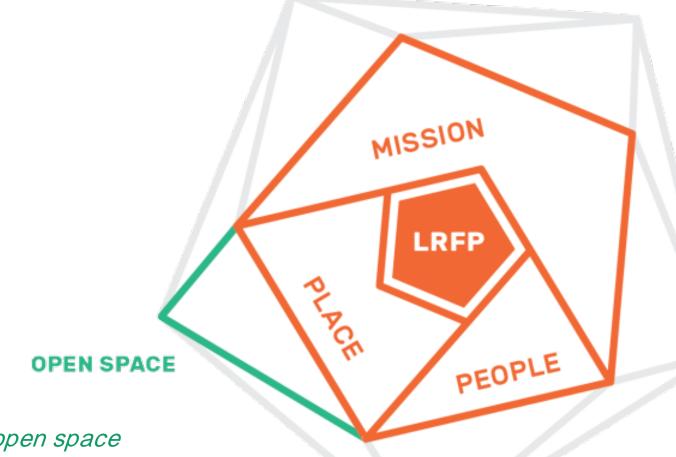
#### Vision REVISED

#### **Plan the Clemson Campus to ....**

- **Promote engaged learning and research—a "high seminary of learning"** [mission]
- *Cultivate a special sense of community and encourage interaction* [people]
- Inspire great memories, delight, healthy living, innovation and ideas [place]



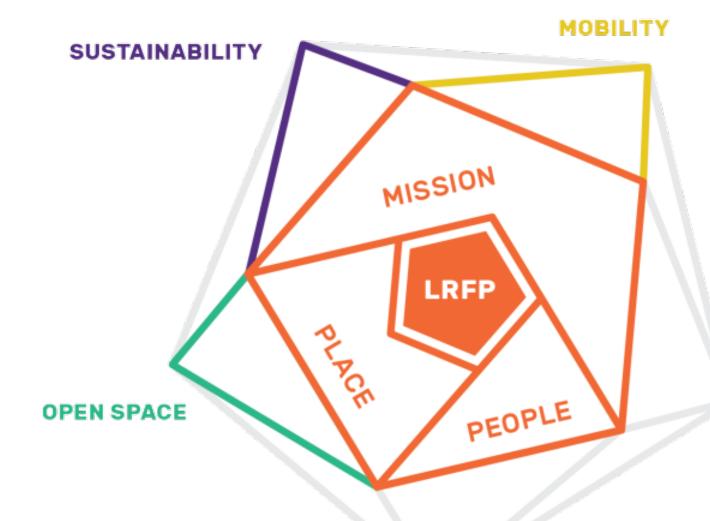




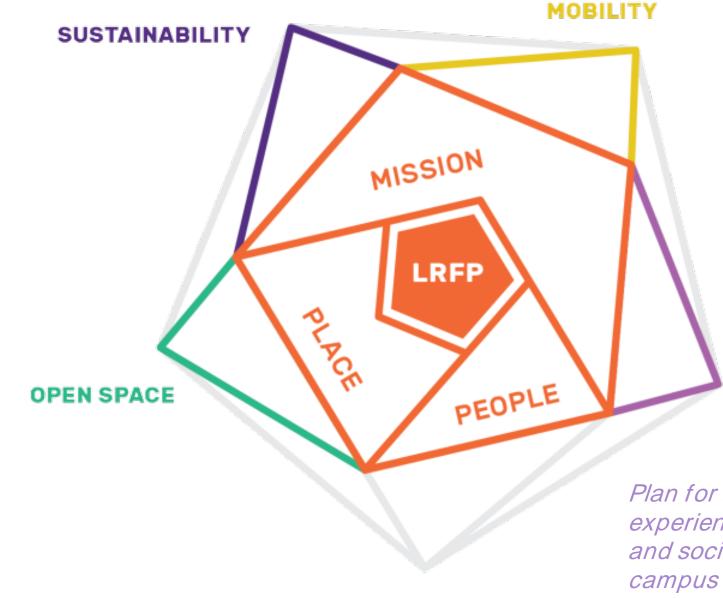
*Respect and extend the established open space framework of the campus; identify new opportunities for campus traditions and special spaces* 

SUSTAINABILITY Promote integrated planning in order to achieve Clemson's social, environmental and economic objectives for the campus MISSION LRFP Q PCE PEOPLE **OPEN SPACE** 

the campus and the community

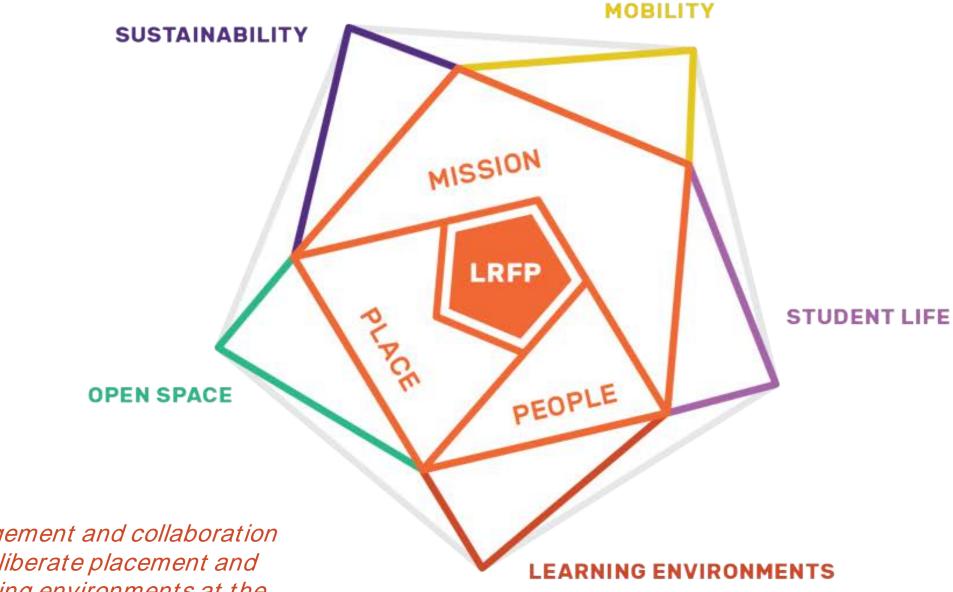


#### Plan for a greater variety of ways to get around



#### **STUDENT LIFE**

Plan for a rich Clemson experience by integrating study and social spaces across the



Promote engagement and collaboration through the deliberate placement and design of learning environments at the heart of the campus

# CONCEPTALTERNATIVES Postcard by Jonathan Balcombe (Class of 2015), Greative Services Internship

ETA IN

13



#### Introducing a Framework Plan

- Systems-based approach to planning
- Decision-making tool
- Defines an overarching structure for development
- Allows for flexibility in future development
- Envelope versus architectural detail
- Each development site responds to the various systems

#### Frameworks

LAYERED APPROACH TO EXAMINE THE CONCEPTS

- Development Framework
- Public Realm Framework
- Circulation and Parking Framework
- Building and Land Use Framework
- Sustainability Framework

# Existing Campus

Tiger Blvd

Walter T. Cox

AV

College

MAIN CAMPUS

Walter T.

RAVENEL





# Proposed Concept 1 INCREMENTAL IMPROVEMENTS

RAVENEL



MAIN CAMPUS 42

College

Walter

Tiger Blvd

Walter T. Cox



# Proposed Concept 2 INTENSIVE INVESTMENT

RAVENEL



MAIN CAMPUS 2.

2

College

Walter

Tiger Blvd

Walter T. Cox



#### Main Campus Concepts

#### Concept 1 – Incremental Improvements

#### **Potential Demolition and Renovation** ...

WOODLAND

CEMETERY

lege

BOWMAN

FIELD

5

SPIRIT POINT

> TIGER BAND

PLAZA

Perimeter Rd

6

**Development Framework** 

blic Realm Framework

....

Nalter T. Cox

Perimeter Rd.

**Circulation and Parking Framework** 

SUBER DAM

**Building and Land Use Framework** 

19

Walter T. Cox

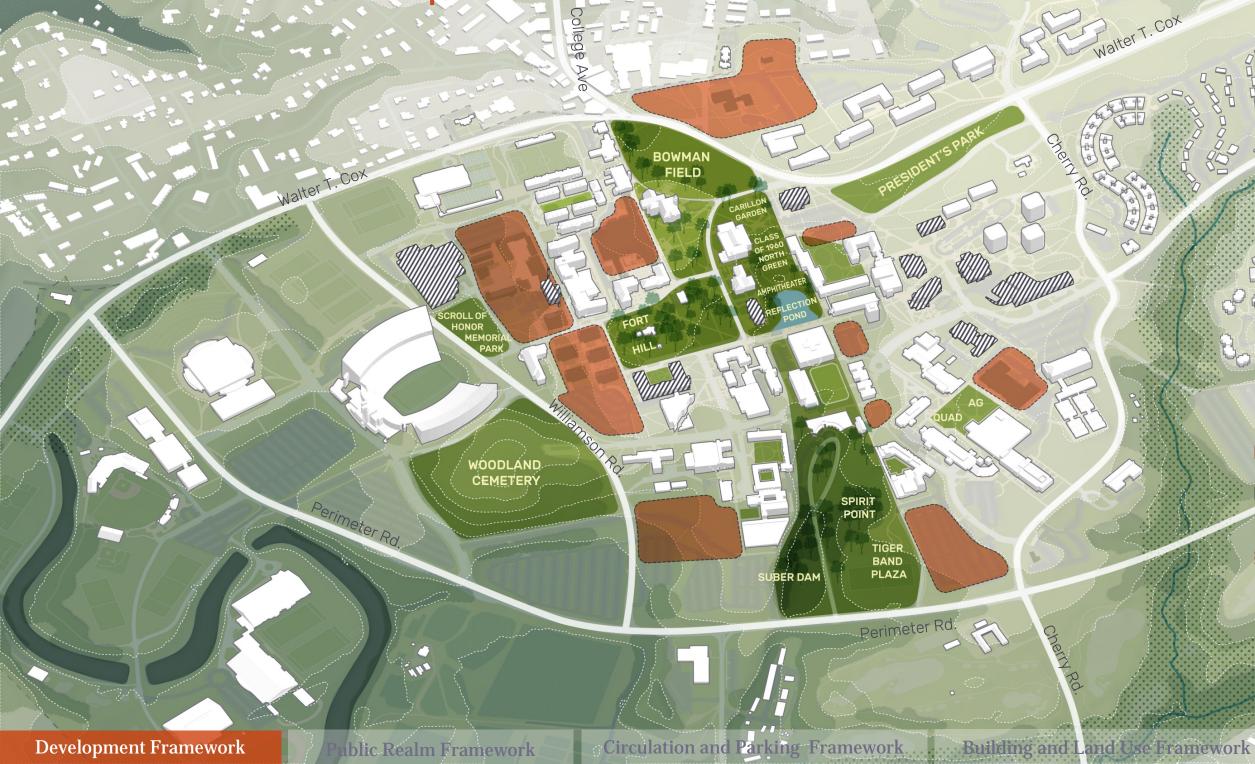
1 Fike Rec. Center 2 Central Energy Facility **3** Sirrine Hall 4 Olin Hall **5** Sikes Hall 6 Mauldin Hall **7** Vickery Hall 8 Edward Hall **9** Schilletter Dining Hall Hendrix Student Center 1 Redfern Health Center

12 LittleJohn House **3** Visitor Center 4 Harcombe Dining Hall 15 Central Energy Facility **16** Dillard Building 17 Shoeboxes 18 Newman Hall 19 Endocrine Physiology Laboratory



Potential Demolition Proposed Renovation & Addition

#### Potential Development Sites





Historic Building Potential Demolition **Planned Project Proposed Renovation &** Addition 12 Potential Development Site

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E

Perimeter Ro.

# Proposed Development DEVELOPMENT SITES & CAPACITY

**GSF Provided: 1.5 million gsf** 

**Displaced GSF: 400,000 gsf** 

Net New GSF: 1.1 million gsf

**GSF Need: 1.1 million gsf** 

**Development Framework** 

Public Realm Framework

in

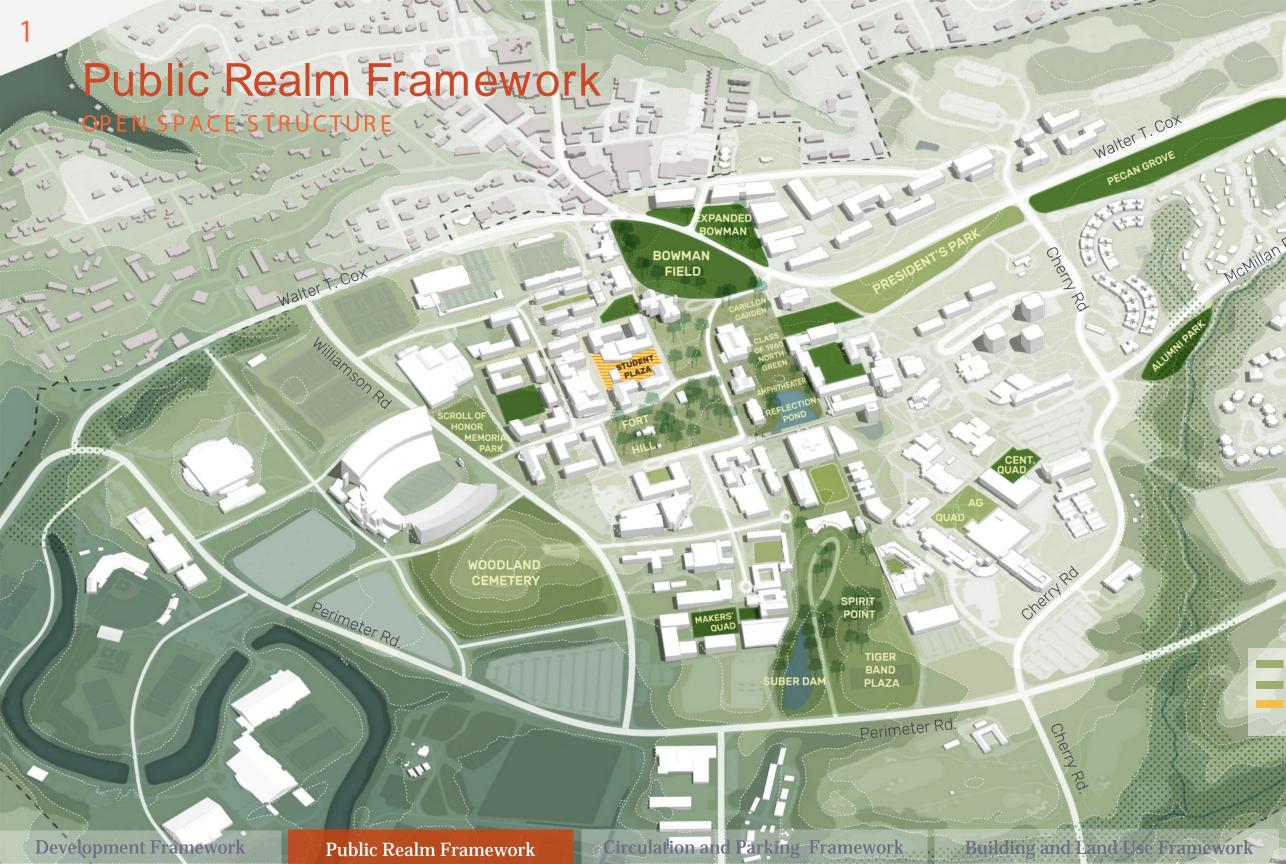
Circulation and Parking Framework

T

**Building and Land Use Framework** 

S





Existing Open Space Proposed Open Space Proposed Plaza

Newman Rd.

Perimeter Rd.

### Pedestrian Network

Walter t. Cox

Perimeter Rd.

**Development Framework** 

**Public Realm Framework** 

THE

Circulation and Parking Framework....

Perimeter Rd.

Existing Pedestrian Corridor Proposed Pedestrian Corridor Proposed Hunnicutt Creek Trail

Ro

Perimeter

Walter T. Cox

Cherry RO

Cherry Rd.

Building and Land Use Framework

McMillan Rd.

#### **Bike Circulation**

**Development Framework** 

blic Realm Framework

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Perimeter Rd.

**Circulation and Parking Framework** 

Perimeter R

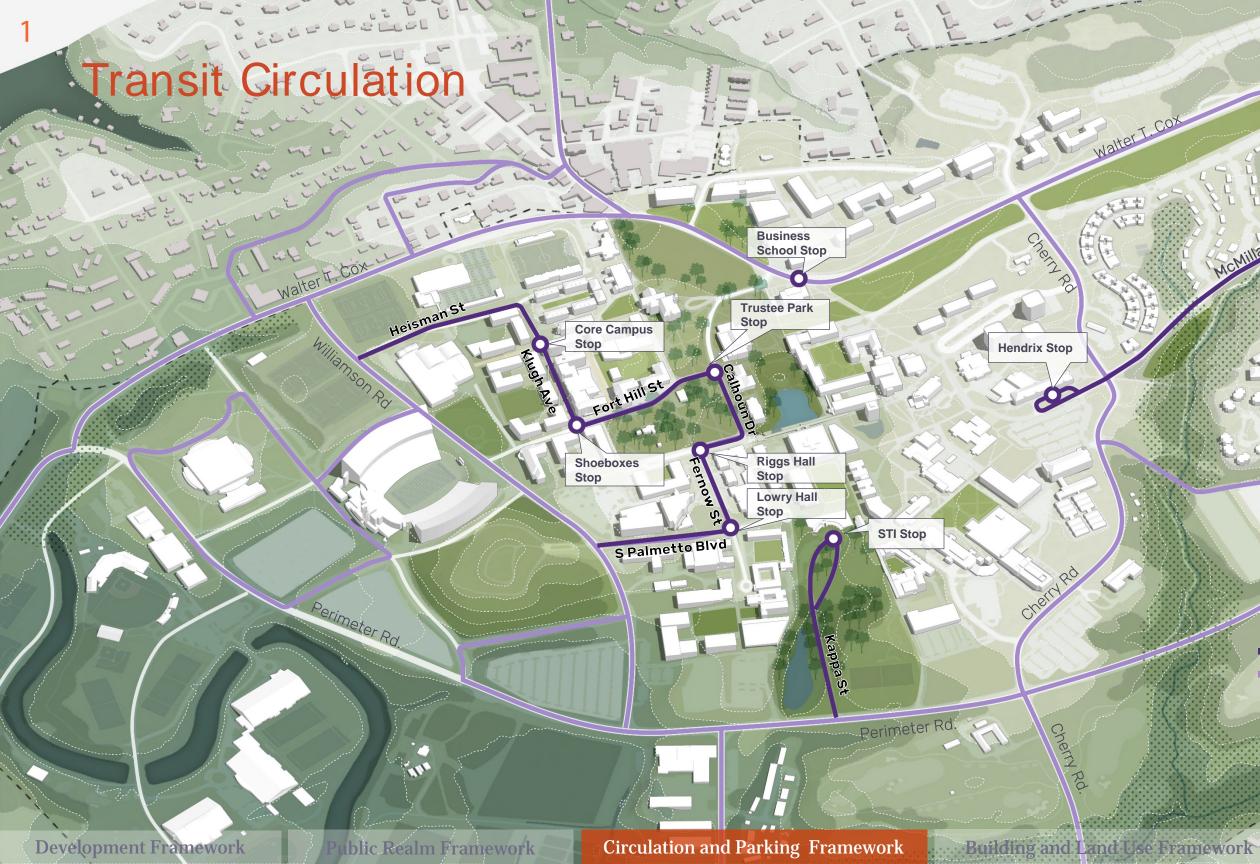
Building and Land Use Framework

Existing Bike Lane Proposed Bike Lane Existing Shared with Pedestrian Proposed Shared with Pedestrian Existing Shared with Road Proposed Shared with Road Major Bike Corrals Bike Share Location **Dismount Zone** Existing Off-road Trail Proposed Off-road Trail

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**11 1** 

O 0 Perimeter Rd.





Perimeter Rd.

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## Proposed Bus Stops Proposed Bus Routes Existing Bus Routes

## Vehicular Circulation

Walter T. Cox

Perimeter Rd.

Development Framework

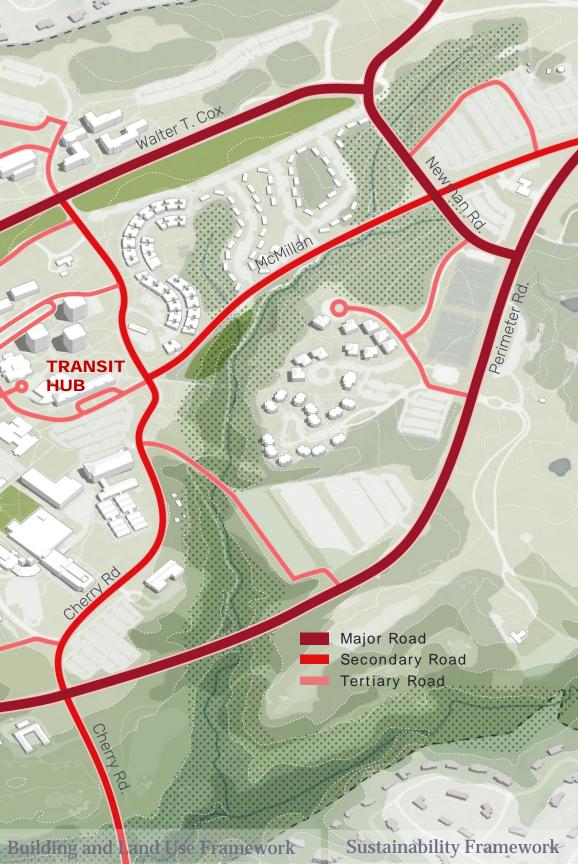
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blic Realm Framework

Circulation and Parking Framework

Perimeter Rd

1.2



Walter

TRANSIT HUB

# Potential Parking

Net New Parking Need: +687 to +4,253 spaces Spaces Displaced: 1,309 Total Need: 1,996 to 5,562

New Parking Provided Walter T. Cox

- 2,495 surface
- 1,661 structured
- 4,156 total
  - +221

**Development Framework** 

Public Realm Framework

111

Perimeter Rd.

Circulation and Parking Framework

mson Rd



+165

Building and Land Use Framework

P

Perimete

Sustainability Framework

+525

# Potential Parking

Net New Parking Need: +687 to +4,253 spaces **Spaces Displaced: 1,309** 

Total Need: 1,996 to 5,562

New Parking Provided Walter T. Cox

- 3,295 surface
- 1,661 structured
- 4,956 total
  - +221

**Development Framework** 

blic Realm Framework

111

Perimeter Rd

**Circulation and Parking Framework** 

Rd



+165

Building and Land Use Framework

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Perimete

+800

Major Road Secondary Road **Tertiary Road** Structured Parking Potential Surface Parking

+525



Walter T. Cox

Perimeter Rd.

**Development Framework** 

blic Realm Framework

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Circulation and Parking Framework.

Perimeter Rd.

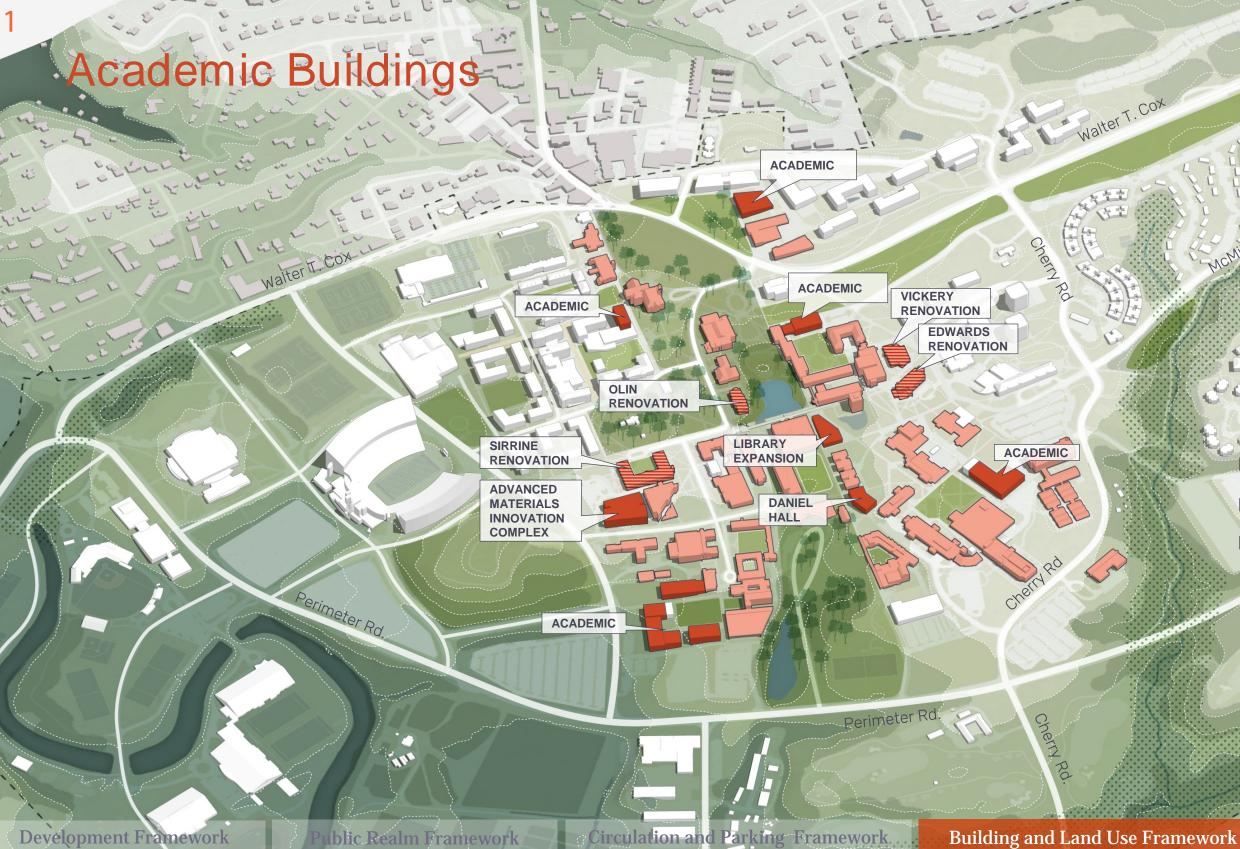
**Building and Land Use Framework** 

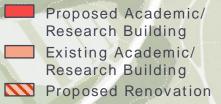
Cherry Rd.

Walter T. Cox

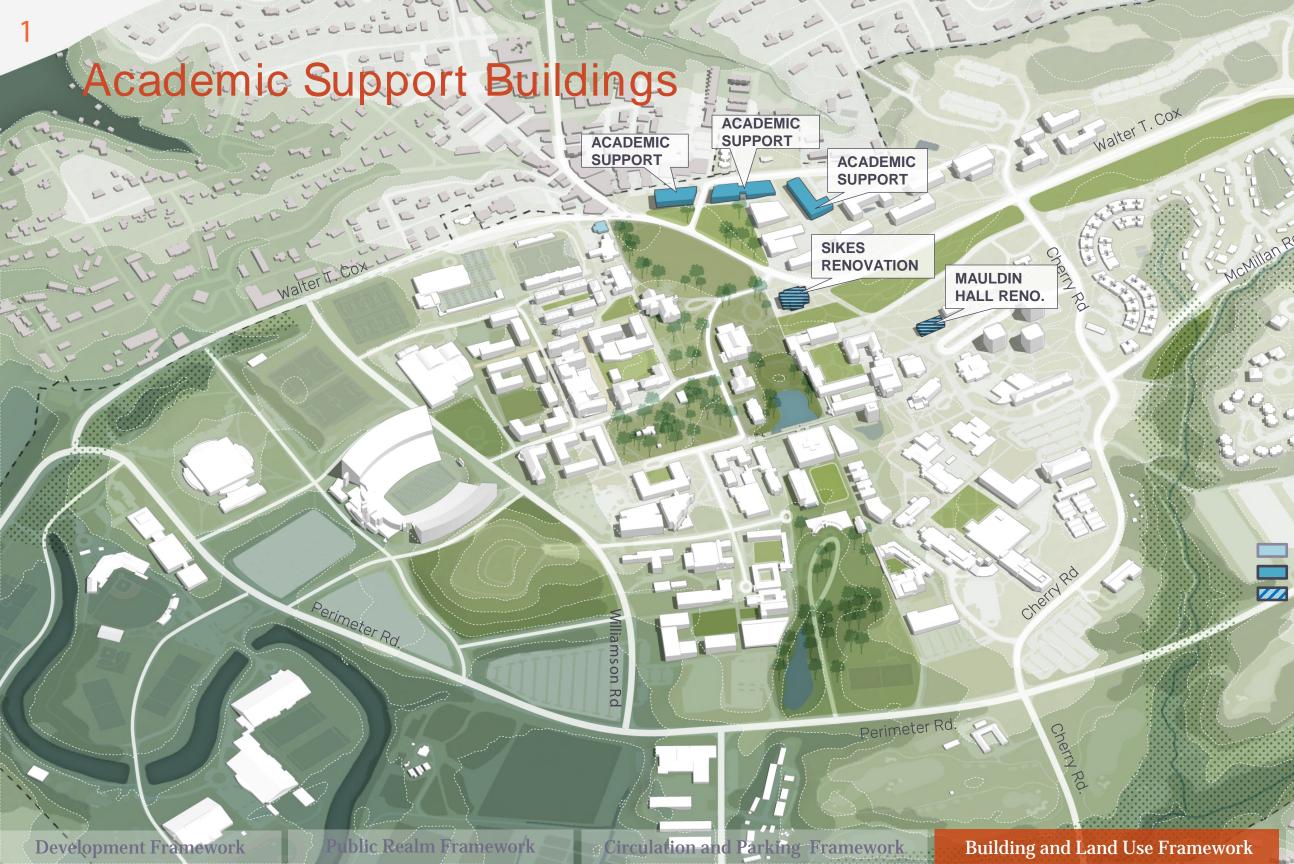
Proposed Academic/ Research Building Existing Academic/ **Research Building** N Academic/ Research **Building Renovation** Proposed Student Life **Existing Student Life Student Life Renovation** Proposed Housing **Existing Housing** Proposed Admin Existing Admin Admin Renovation **Proposed Recreation** Existing Recreation **Existing Athletics** 

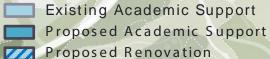
Perimeter |



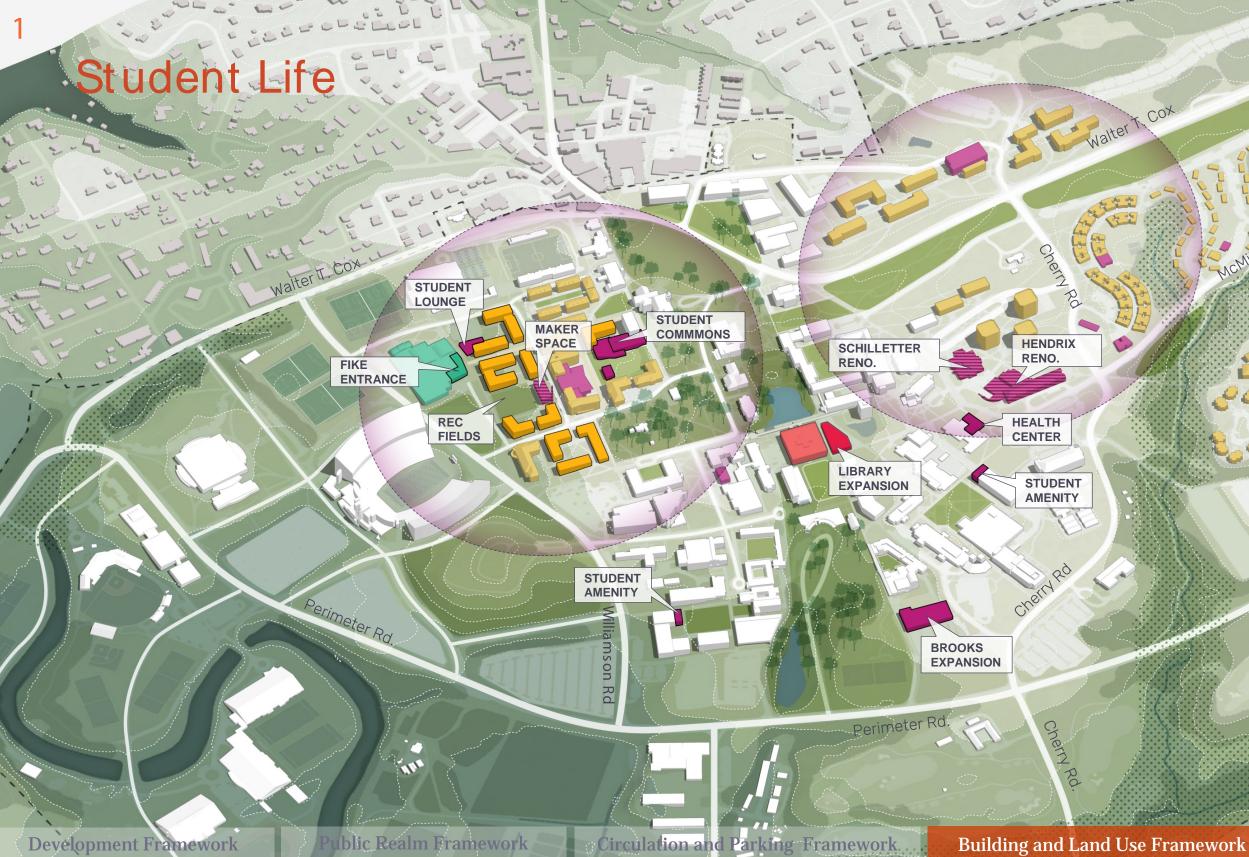


Perimeter Rd.





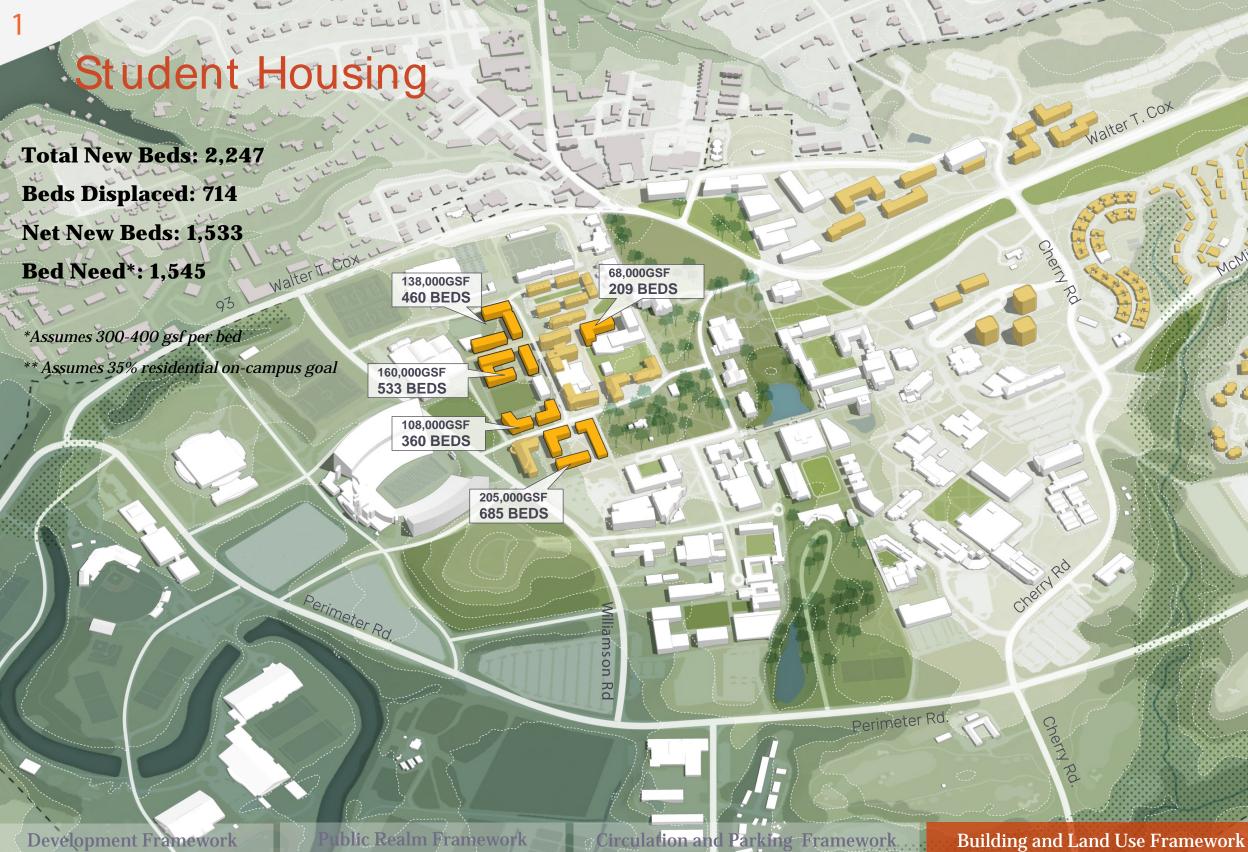
Perimeter Rd.



**Existing Student Life** Proposed Student Life **ZZZ** Student Life Renovation Existing Recreation Proposed Recreation 10 Min Walking Circle

REC FIELDS

Perimeter Rd.





Existing Housing Proposed Housing **Proposed Renovation** 

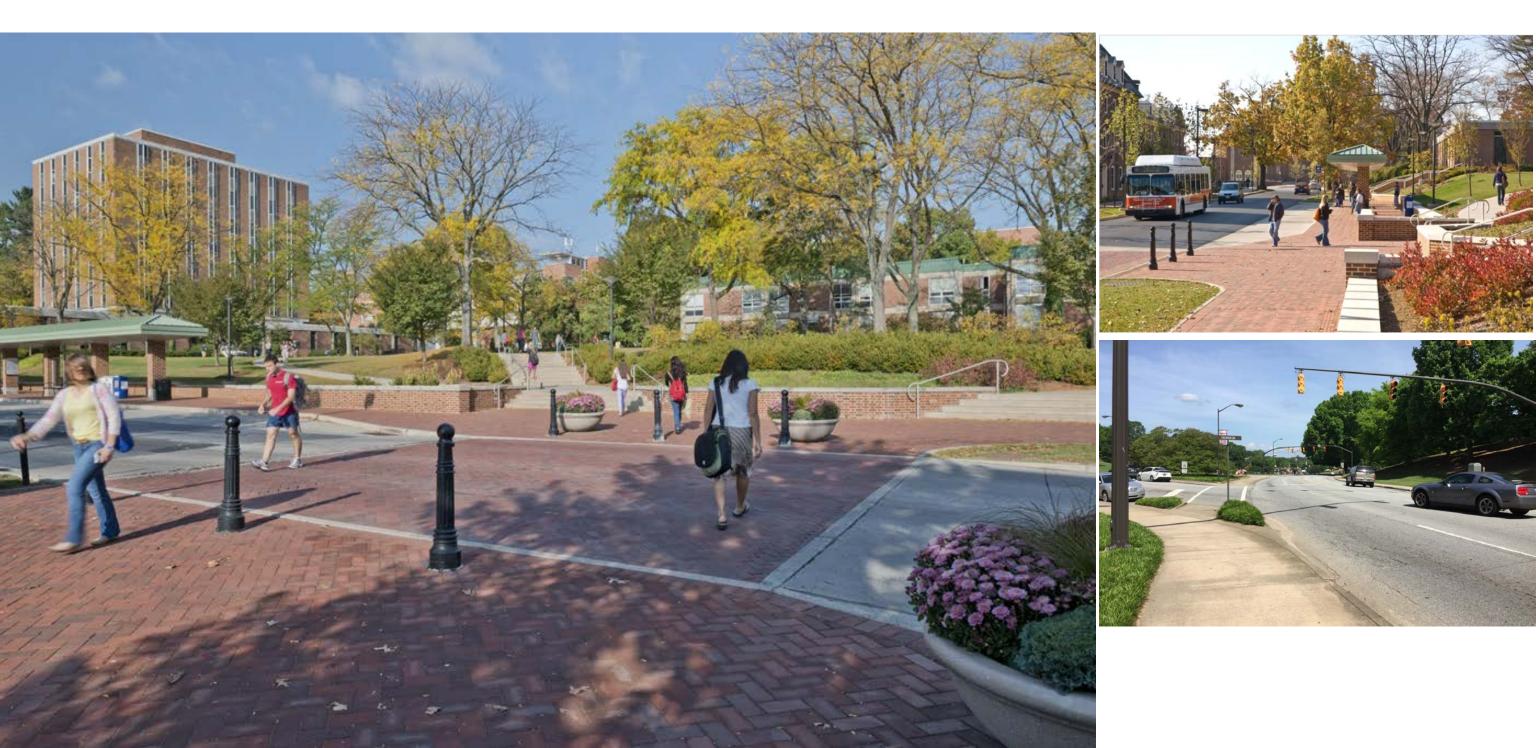
Perimeter Rd.

### Concept 1 – Incremental Improvements

## Design Concepts – Bowman Field & Walter T. Cox



## Example: Pedestrian Crossing at Walter T. Cox





**Development Framework** 

Public Realm Framework

Circulation and Parking Framework

Building and Land Use Framework



**Development Framework** 

Public Realm Framework

Circulation and Parking Framework

Building and Land Use Framework



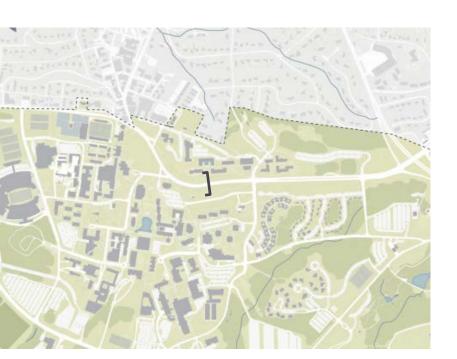
## Walter T. Cox Existing Street Section

NEAR PRESIDENT'S PARK





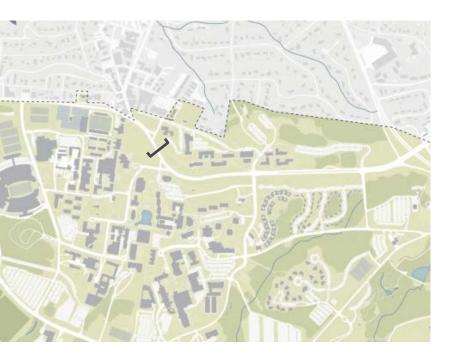
#### Walter T. Cox Proposed Street Section NEAR PRESIDENT'S PARK





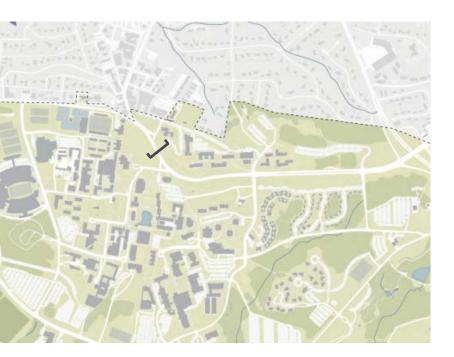
#### Walter T. Cox Existing Street Section NEAR BOWMAN FIELD

- Major conflict between pedestrian crossing and car traffic
- No bike lane





# Walter T. Cox Proposed Street Section









VARIES

VARIES

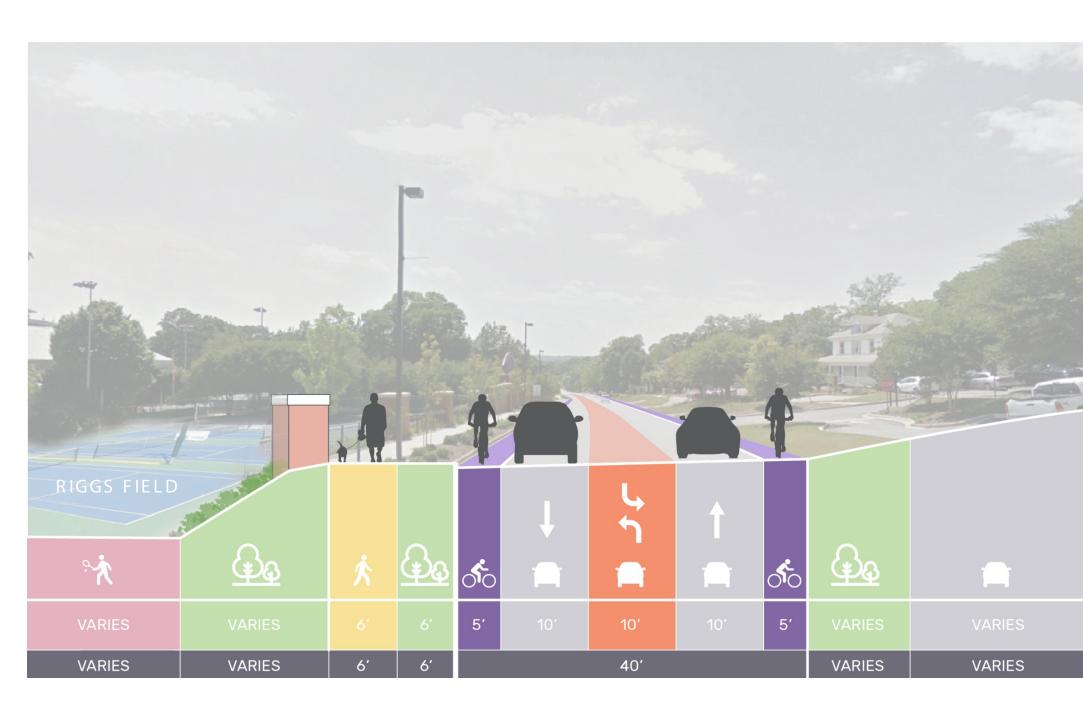
#### Walter T. Cox Existing Street Section NEAR RIGGS FIELD





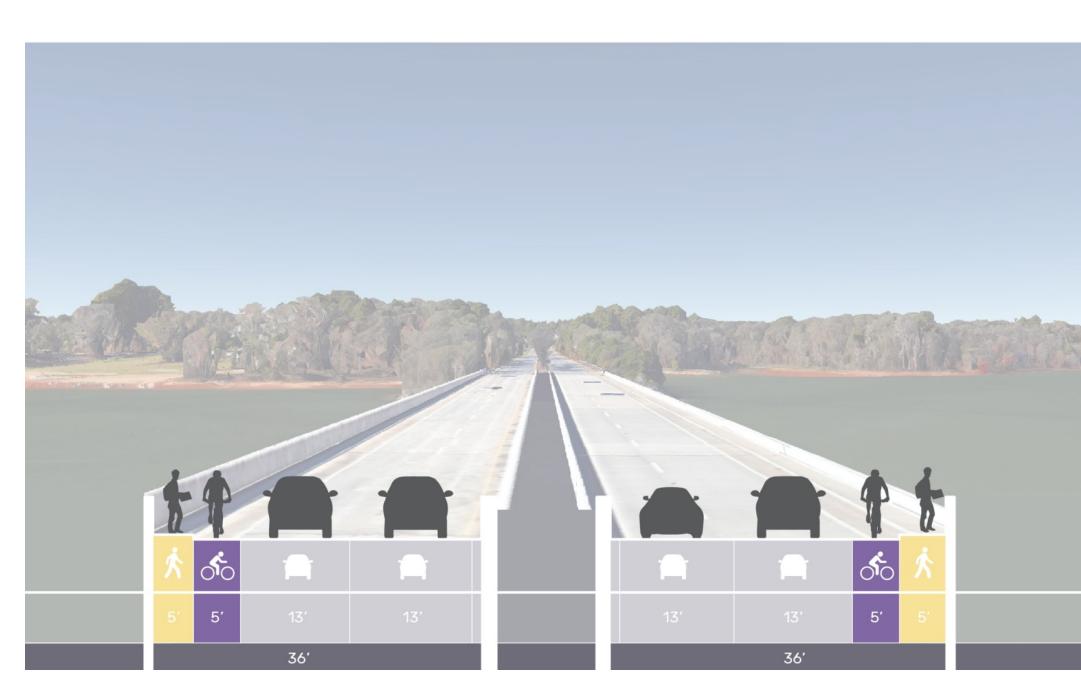
#### Walter T. Cox Proposed Street Section NEAR RIGGS FIELD





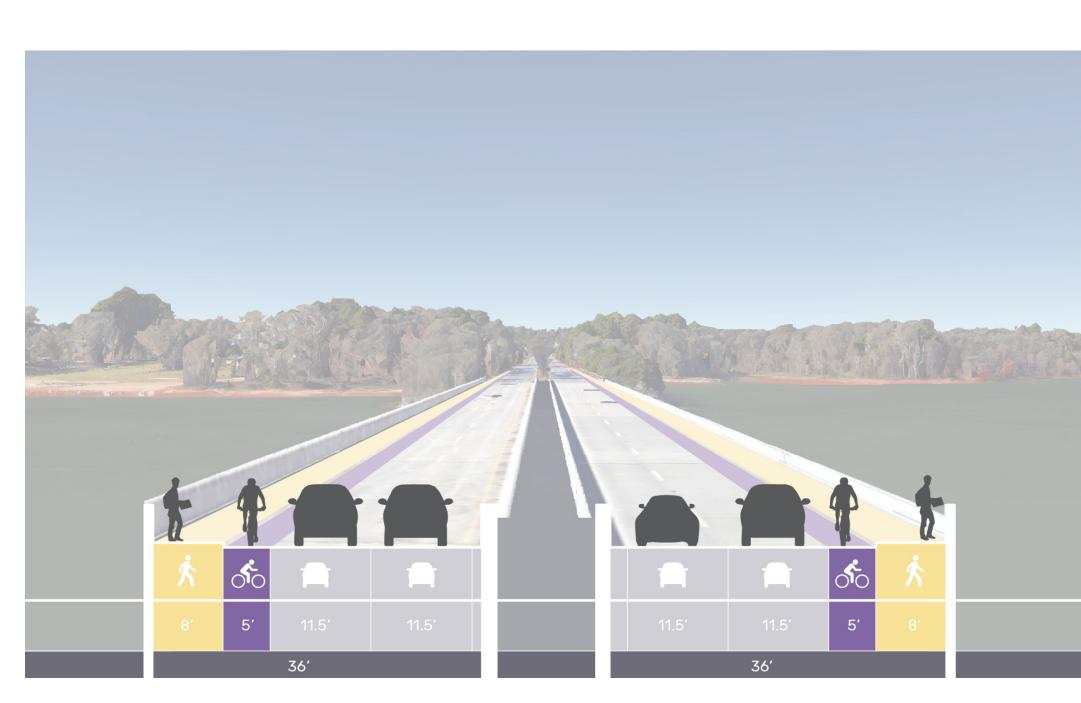
#### 93 Existing Street Section ON BRIDGE TO RAVENEL





#### **93** Proposed Street Section ON BRIDGE TO RAVENEL





## Concept 1 – Incremental Improvements

## Design Concepts – North/ South Academic Corridor



#### Proposed Development DEVELOPMENT SITES & CAPACITY

**Development Framework** 

Public Realm Framework

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Circulation and Parking Framework

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**Building and Land Use Framework** 

ACADEMIC SUPPORT

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BUSINESS

MARTIN

LIBRARY EXP

ACADEMIC

BROOKS EXP

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**Development Framework** 

Public Realm Framework

Circulation and Parking Framework

Building and Land Use Framework

## Transparency at Martin





#### North – South Spine

# Student Life COMMONS FIKE $\odot$ -

Proposed Academic/ Research Building Existing Academic/ Research Building Academic/ Research Building Renovation Proposed Student Life Existing Student Life Student Life Renovation Proposed Housing Existing Housing Proposed Admin Existing Admin Admin Renovation Proposed Recreation **Existing Recreation Existing Athletics** 

Cos



**Development Framework** 

**Public Realm Framework** 

Circulation and Parking Framework

Building and Land Use Framework



Questions / Comments on Option 1?

## Concept 2 – Intensive Investments

# **Potential Demolition**

Walter T. Cox

2

TD 3D lianson Pa WOODLAND. CEMETERY Perimeter Rd. SPIRIT POINT 19 TIGER BAND PLAZA SUBER DAM Perimeter Rd. 100 **Development Framework** blic Realm Framework **Circulation and Parking Framework Building and Land Use Framework** 

College

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BOWMAN

FIELD

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All and the

16

Perimeter Rd. 1 Fike Rec. Center 2 Facility Building 3 Shoeboxes Sirrine Hall 4 6 Olin Hall 6 Sikes Hall 7 Mauldin Hall 8 Vickery Hall 9 Edward Hall 10 Hendrix Student Center

Walter T. Cox

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## Potential Development Sites OPTION 2





Historic Building Potential Demolition **Planned Project Proposed Renovation &** Addition 3 Potential Development Site

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E

Perimeter Ro.

# Proposed Development DEVELOPMENT SITES & CAPACITY

**GSF Provided: 1.9 million gsf** 

**Displaced GSF: 450,000 gsf** 

Net New GSF: 1.45 million gsf

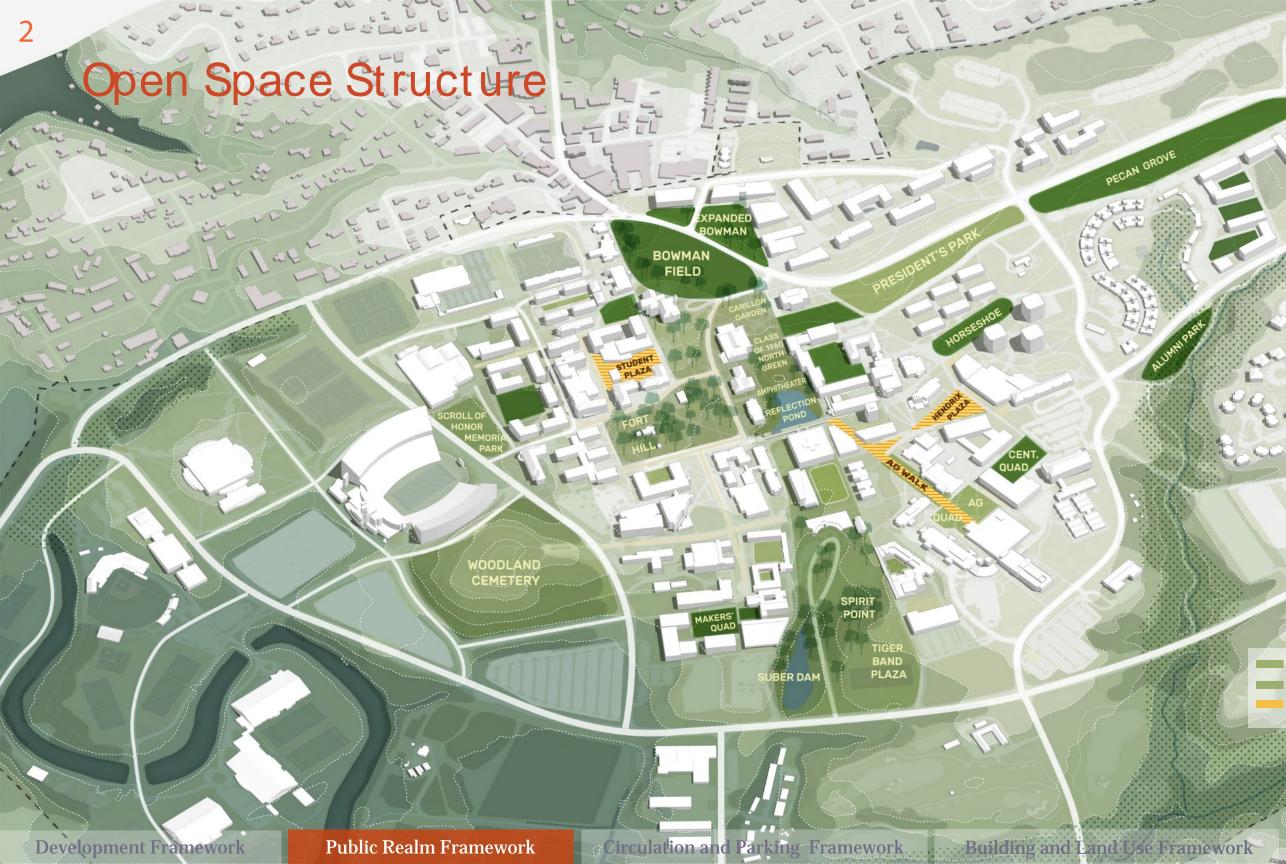
**GSF Need: 1.1 million gsf** 

**Development Framework** 

in.

**Circulation and Parking Framework** 

**Building and Land Use Framework** 



Existing Open Space Proposed Open Space Proposed Plaza

# Pedestrian Network

Walter T. Cox-LL

Perimeter Rd.

**Development Framework** 

2

**Public Realm Framework** 

THE

Circulation and Parking Framework....

Perimeter Rd

amson Rd

Existing Pedestrian Corridor Proposed Pedestrian Corridor Proposed Pedestrian Żone Proposed Hunnicutt Creek Trail

Perimeter Rd.

Walter T. Cox

Cherry RO

Cherry

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Building and Land Use Framework

# **Bike Circulation**

**Development Framework** 

**Iblic Realm Framework** 

-

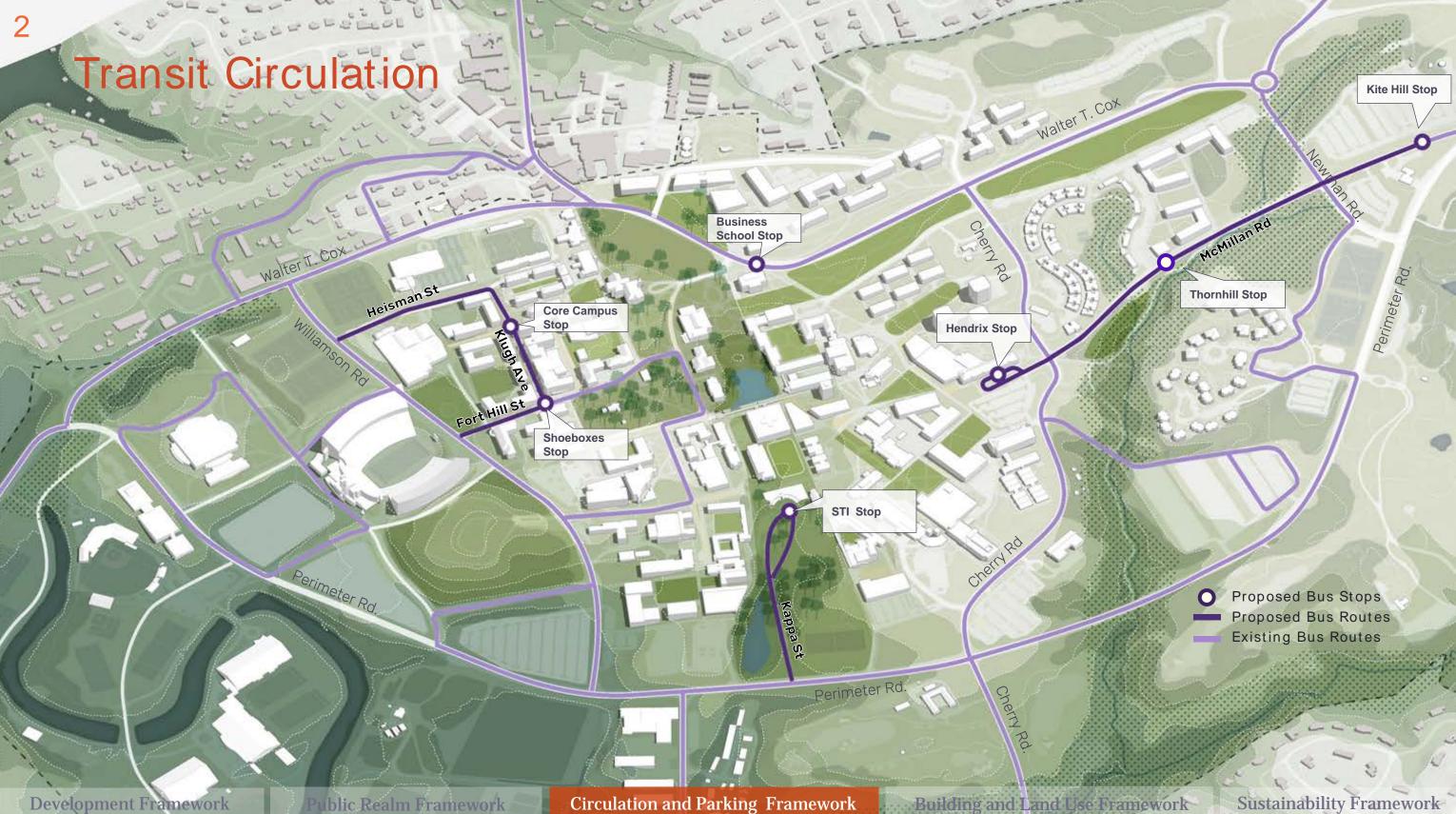
Circulation and Parking Framework

O

Building and Land Use Framework

Existing Bike Lane Proposed Bike Lane Existing Shared with Pedestrian Proposed Shared with Pedestrian Existing Shared with Road Proposed Shared with Road Major Bike Corrals Bike Share Location Dismount Zone Existing Off-road Trail Proposed Off-road Trail

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# Vehicular Circulation

Walter T. Cox

Perimeter Rd.

Development Framework

Public Realm Framework

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Circulation and Parking Framework

Perimeter Ro

amson Rd

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Walteri

Building and Land Use Framework



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# Potential Parking

Net New Parking Need: +687 to +4,253 spaces Spaces Displaced: 1,976

Total Need: 2,663 to 6,229

New Parking Provided Walter T. Cox

- 2,495 surface
- 2,215 structured
- 4,710 total
  - +221

Development Framework

Public Realm Framework

111

Perimeter Rd.

P

mson Rd

**Circulation and Parking Framework** 



+165

Building and Land Use Framework

P

Perimete

Sustainability Framework

+525

# Potential Parking

Net New Parking Need: +687 to +4,253 spaces **Spaces Displaced: 1,976** 

Total Need: 2,663 to 6,229

New Parking Provided Walter T. Cox

- 3,295 surface
- 2,215 structured ....
- 5,510 total
  - +221

**Development Framework** 

blic Realm Framework

111

Perimeter Rd

P

Rd

**Circulation and Parking Framework** 



+165

Building and Land Use Framework

P

Perimete

+800

Major Road Secondary Road **Tertiary Road** Structured Parking Potential Surface Parking

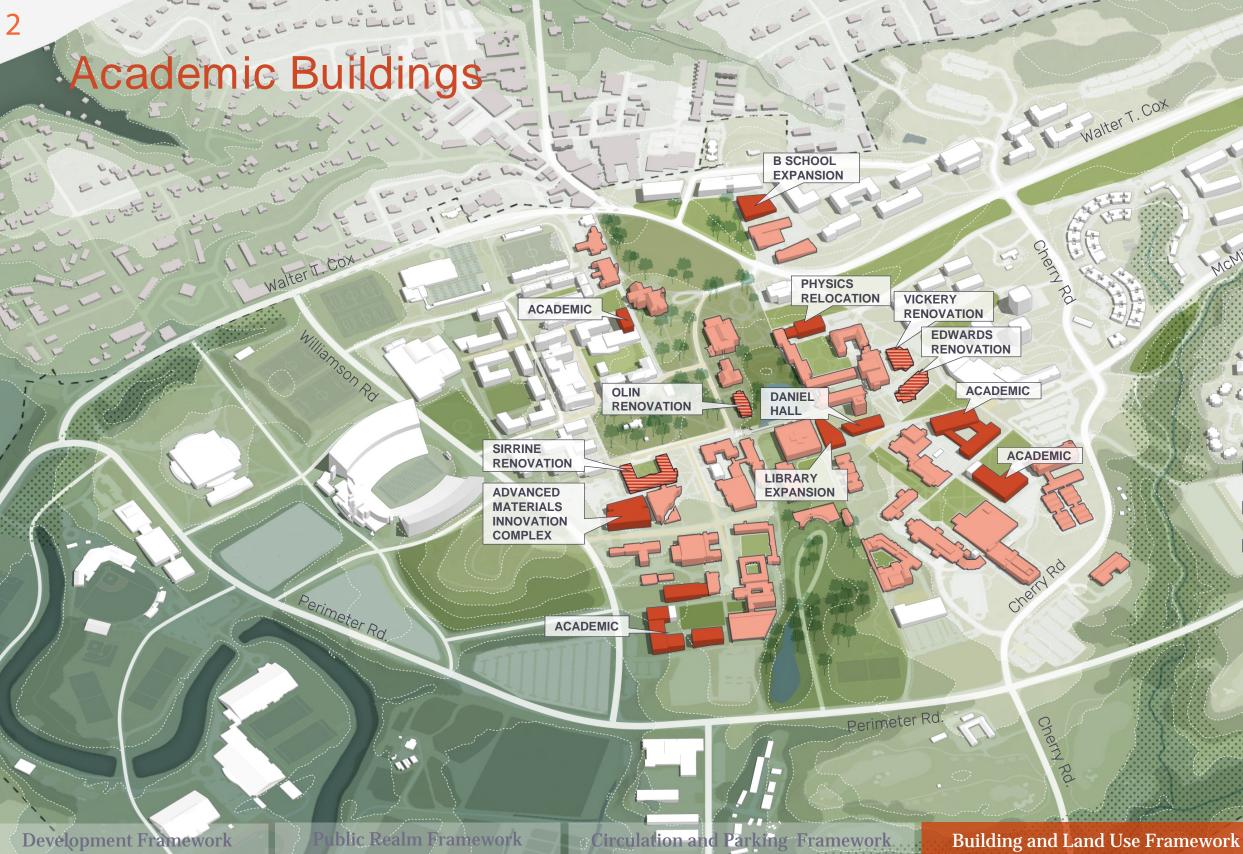
+525

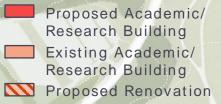


Proposed Academic/ Research Building Existing Academic/ **Research Building** N Academic/ Research **Building Renovation** Proposed Student Life Existing Student Life **Student Life Renovation Proposed Housing** Existing Housing Housing Renovation **Proposed Admin** Existing Admin Admin Renovation **Proposed Recreation Existing Recreation** Proposed Athletics **Existing Athletics** 

man Rd.

Perimeter #

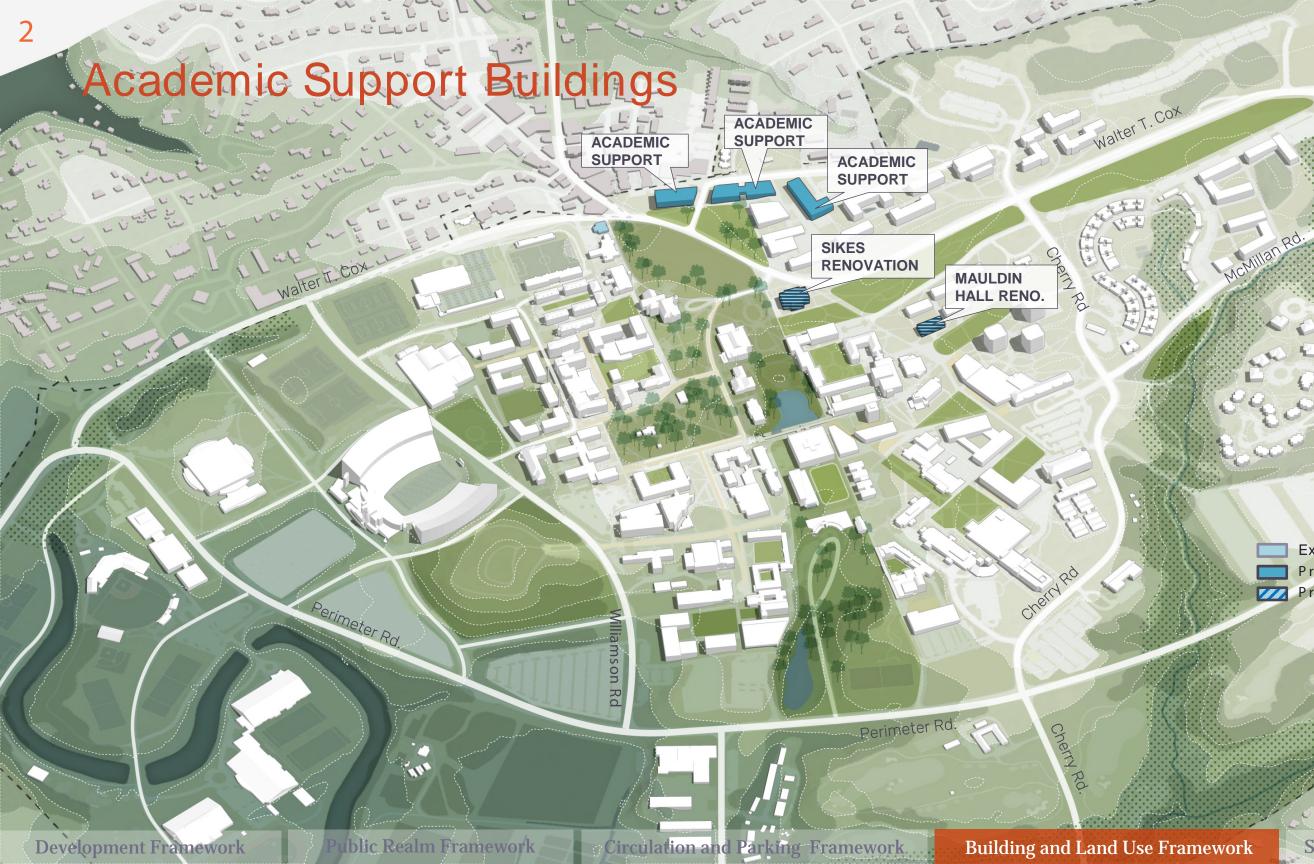




Newman Rd.

Perimeter Rd

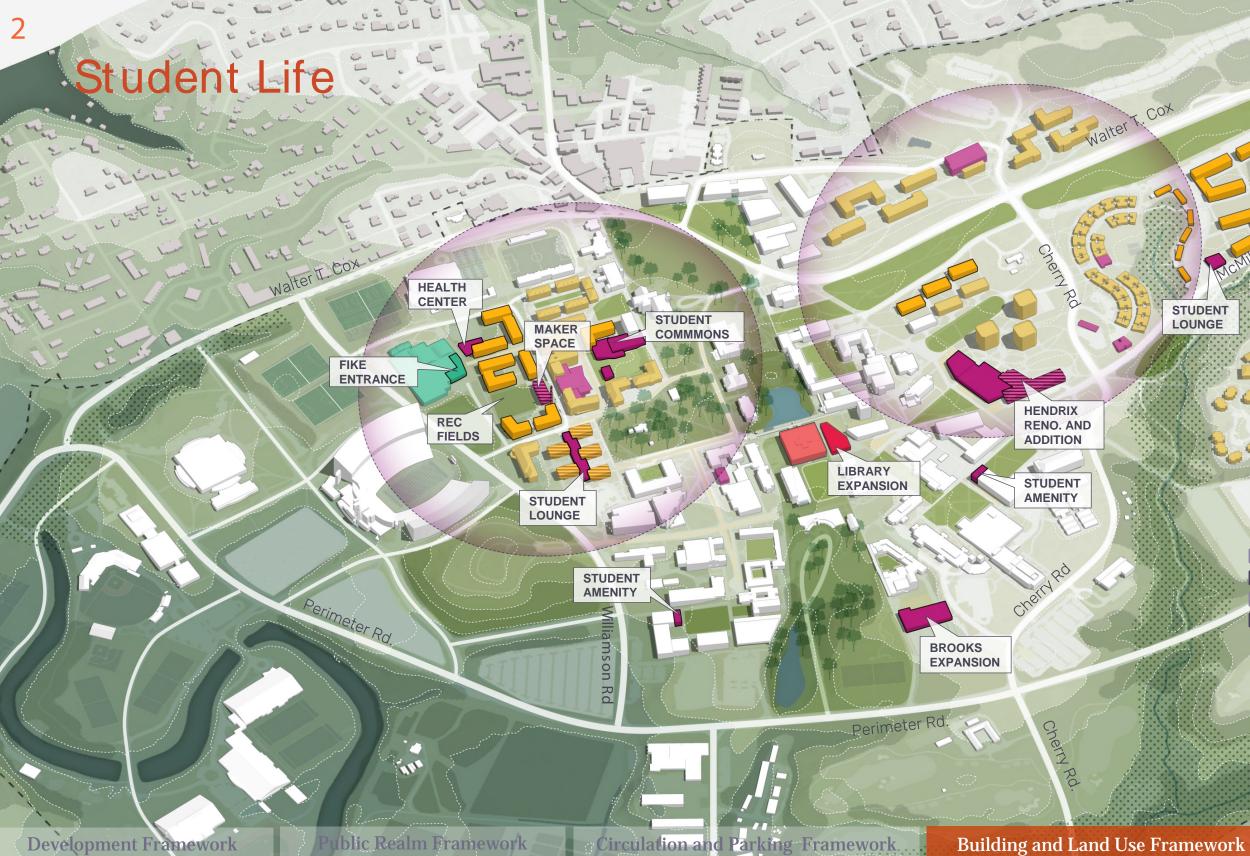
AcMillan Rd.



Existing Academic Support
Proposed Academic Support
Proposed Renovation

wman Rd.

Perimeter Rd

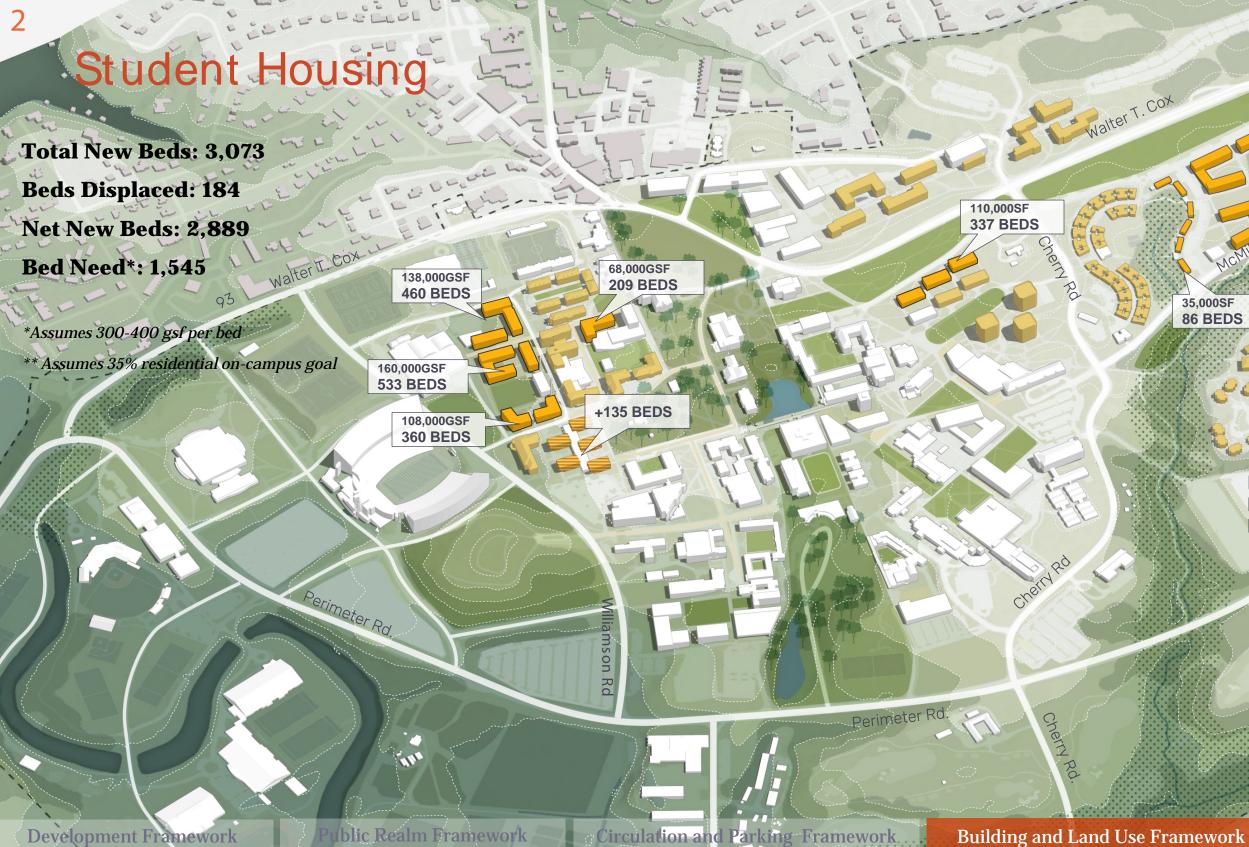


**Existing Student Life** Proposed Student Life **Existing Recreation** Proposed Recreation 10 Min Walking Circle

man Pd.

Perimeter Rd.

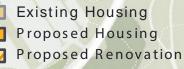
REC FIELDS





nan Rd.

Perimeter Rd.



#### Concept 2 – Intensive Investments

#### Design Concepts

### Pedestrian Network

Walter T. Cox ----

Perimeter Rd.

**Development Framework** 

2

**Public Realm Framework** 

THE

Circulation and Parking Framework....

Perimeter Rd

amson Rd

Existing Pedestrian Corridor Proposed Pedestrian Corridor Proposed Pedestrian Zone Hunnicutt Creek Trail

Perimeter Rd.

Walter T. Cox

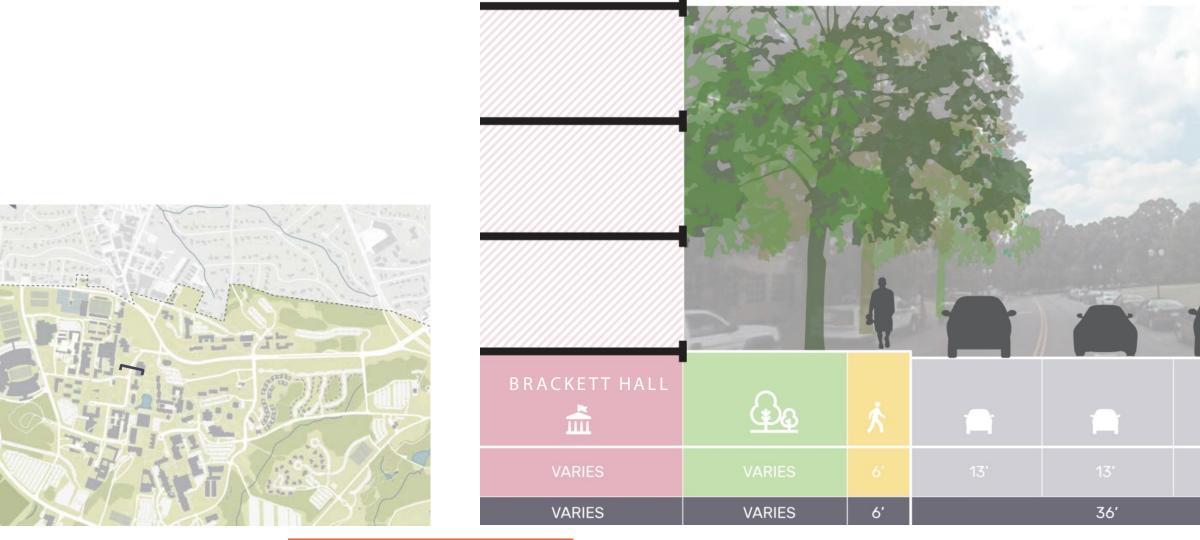
Cherry RO

Cherry Rd.

Building and Land Use Framework

#### Pedestrian Network

EXISTING CALHOUN STREET SECTION AT BRACKETT HALL



**Development Framework** 

**Public Realm Framework** 

Circulation and Parking Framework

Building and Land Use Framework

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#### Pedestrian Network

#### PROPOSED CALHOUN PEDESTRIAN STREET SECTION AT BRACKETT HALL



**Development Framework** 

**Public Realm Framework** 

Circulation and Parking Framework

Building and Land Use Framework

#### Pedestrianized Streets



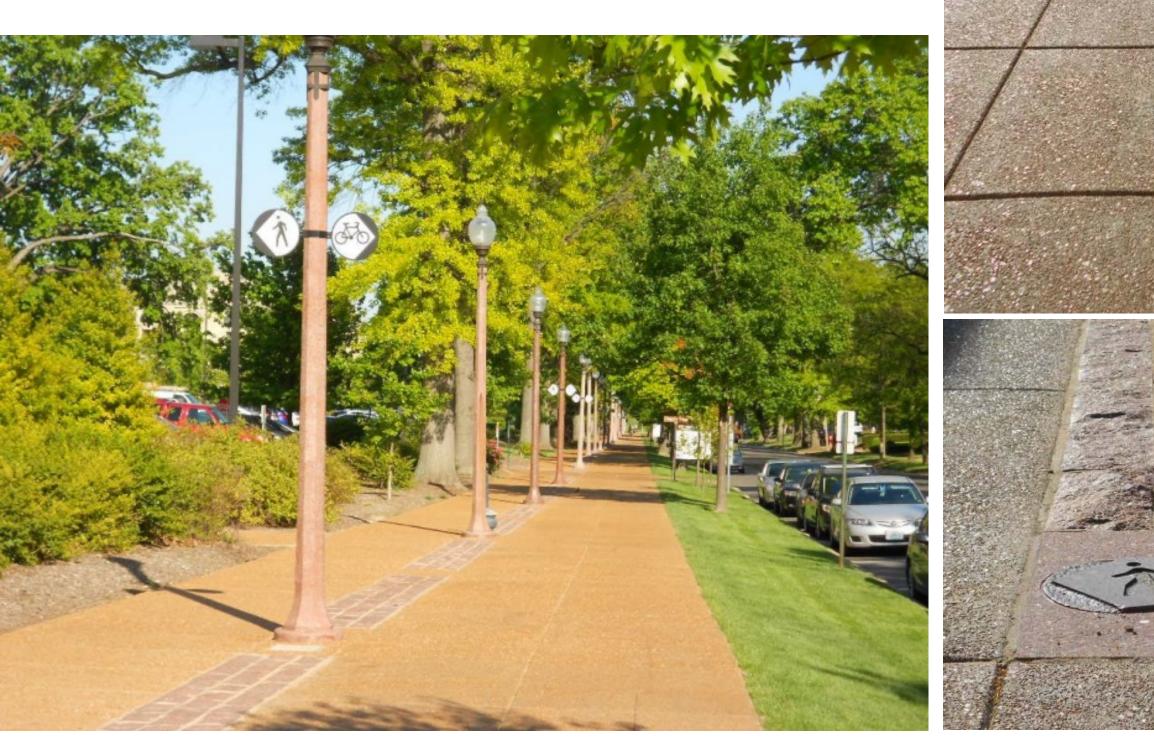


#### Pedestrianized Streets





#### Pedestrian / Bike Paths





#### **Bike Corrals**



### Academic Buildings

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STRODE TOWER

NEW ACADEN BUILDING

LIBRARY ADDITION IDEA

**Development Framework** 

Public Realm Framework Circulation and Parking Framework

DANIEL HALL

COOPERLIBRARY

EXPANSION

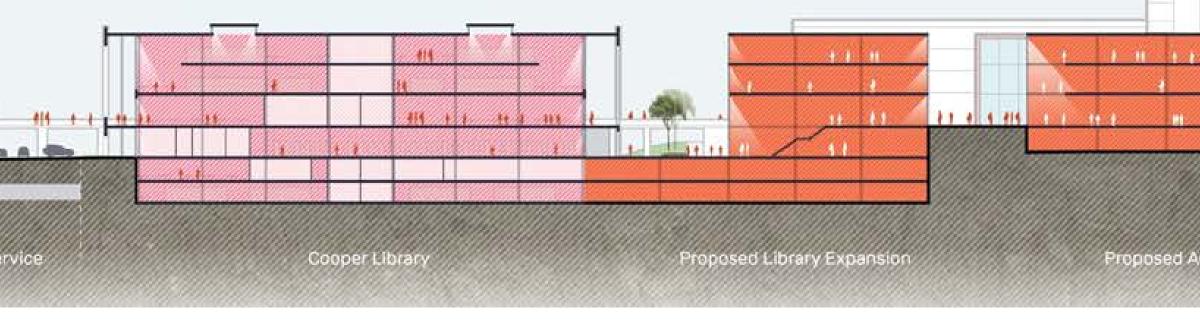
Building and Land Use Framework

#### Library – Academic Corridor



### Academic Buildings

LIBRARY ADDITION IDEA

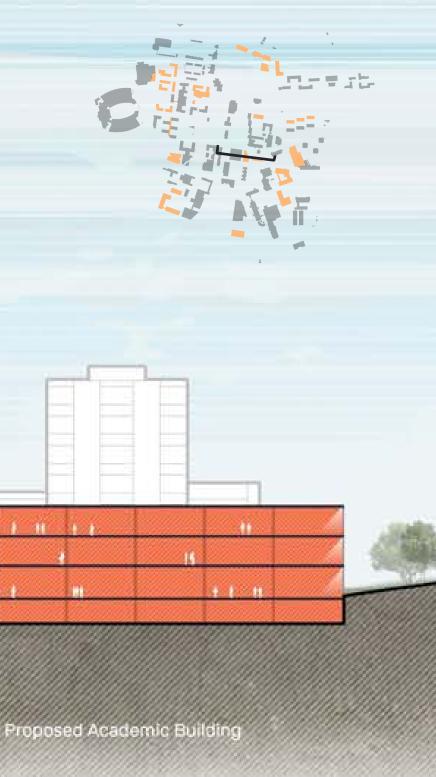


**Development Framework** 

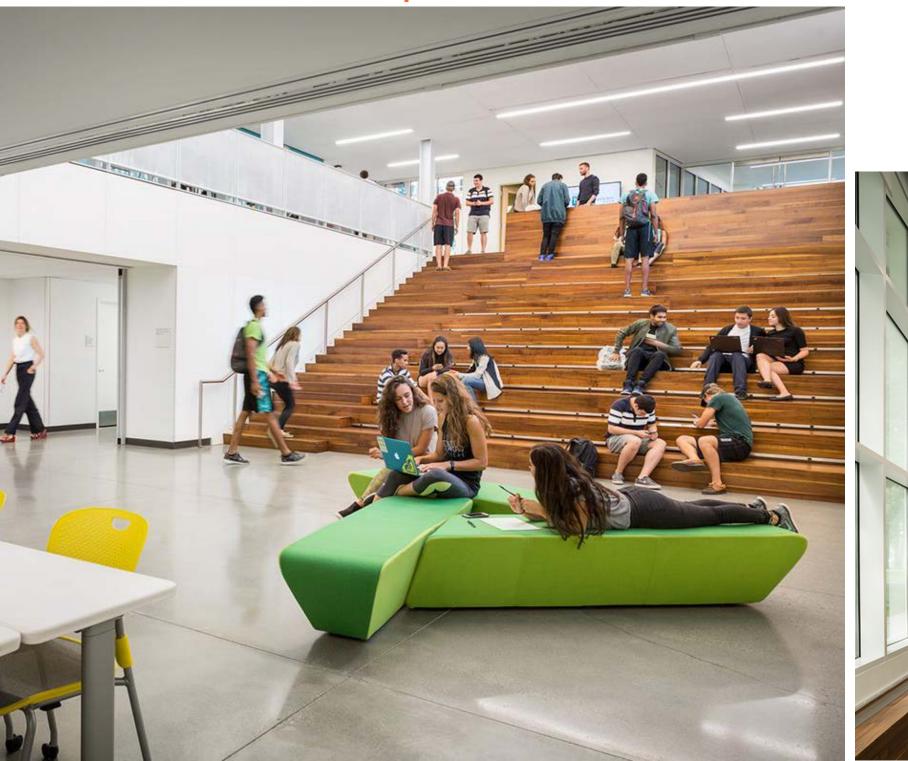
Public Realm Framework

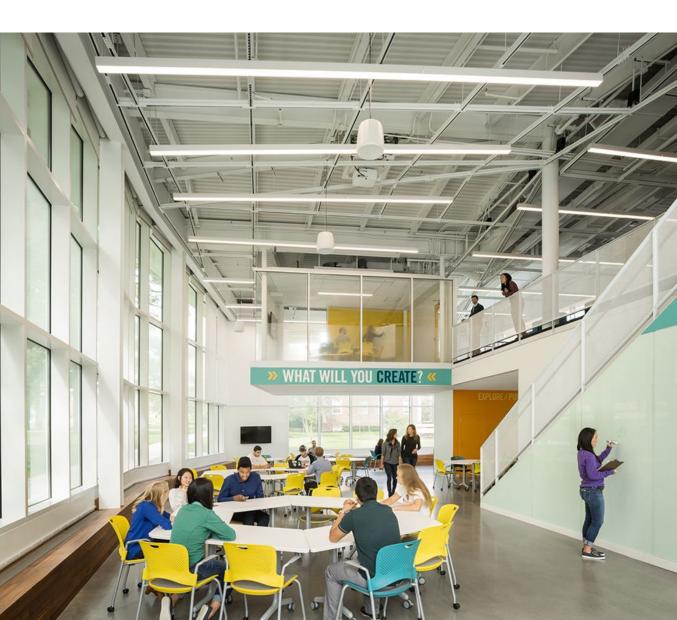
Circulation and Parking Framework

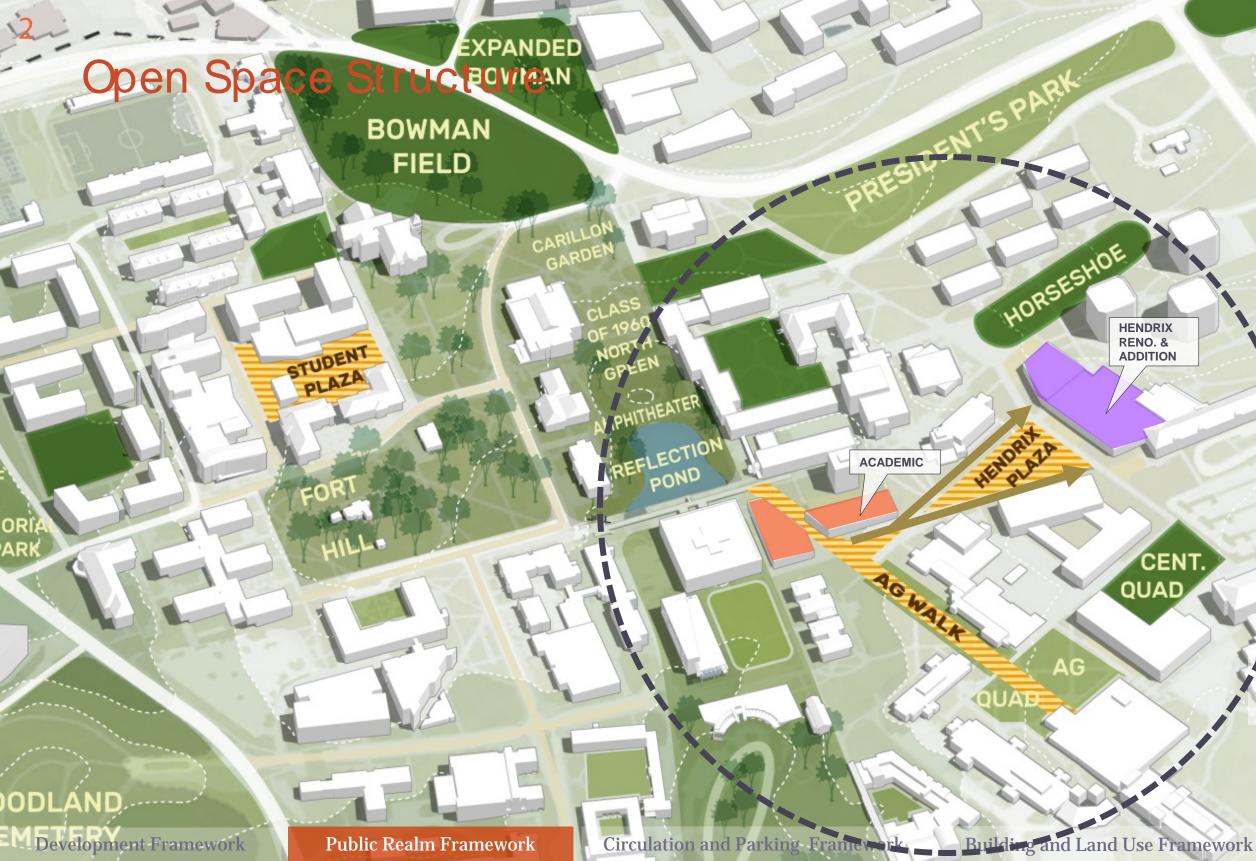
Building and Land Use Framework



#### Collaboration Space







Existing Open Space Proposed Open Space Proposed Plaza

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#### Student Life HENDRIX / SCHILLETTER IDEA



STUDENT CENTER

VICKERY HALL

> EDWARDS HALL

**Development Framework** 

**Public Realm Framework** 

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**Circulation and Parking Framework** 

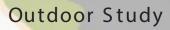
DOUBLE HEIGHT CORRIDO

HENDRIX

Building and Land Use Framework

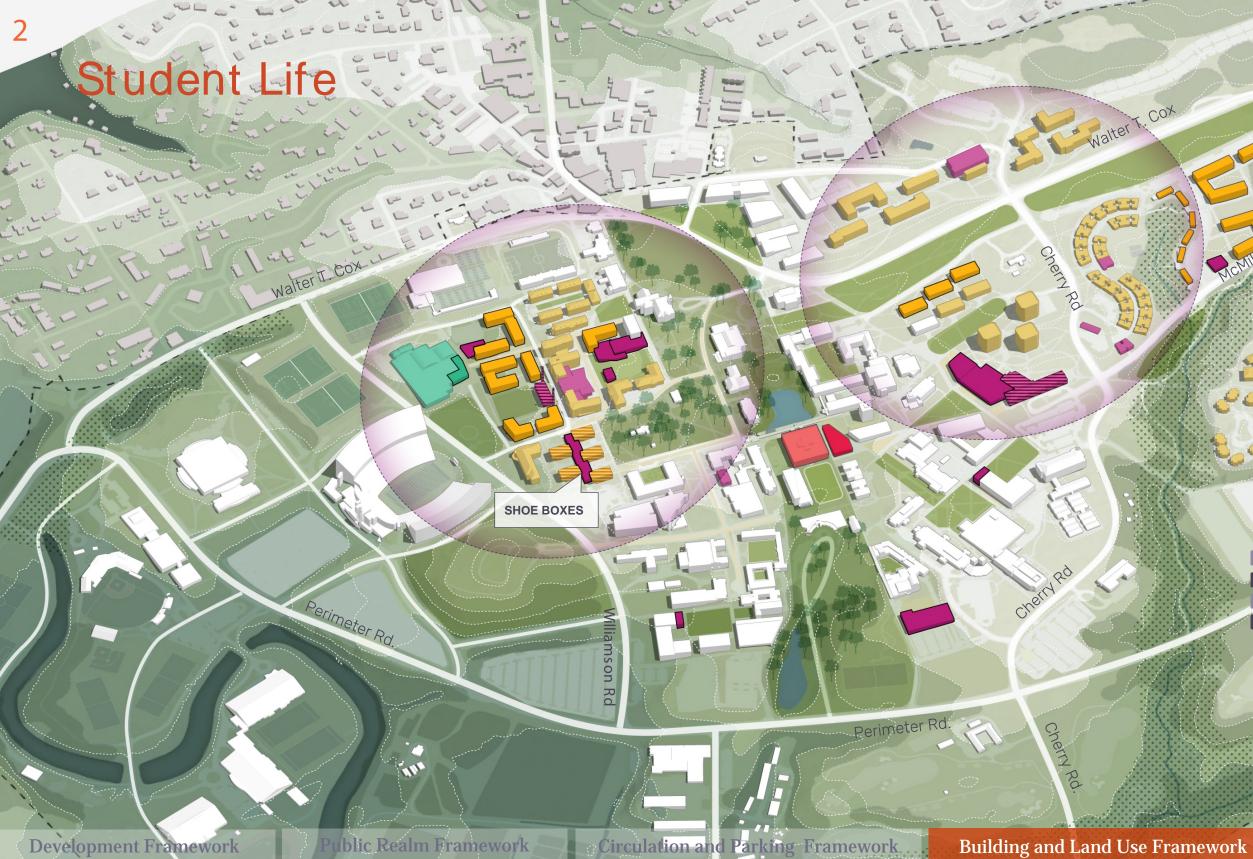


R



Garden

#### Courtyard



**Existing Student Life** Proposed Student Life **Existing Recreation Proposed Recreation** 10 Min Walking Circle

Newman Rd.

Perimeter Rd.

Questions / Comments on Option 2?

### Ravenel Campus Concepts

#### **Ravenel** Criteria for Siting

- Associated with industrial uses, engineering, or land intensive requirements
- Supporting services and uses
- Warehouse and demonstration
- Potentially hazardous research activities
- Future institutes or partnerships

#### Existing Condition



#### Proposed Program





### Future Development



#### Ravenel - Capacity



#### Questions / Comments on Ravenel?

# Proposed Concept 1 INCREMENTAL IMPROVEMENTS

RAVENEL

Tiger Blvd

College

MAIN CAMPUS

Walter T. Cox

WalterT



# Proposed Concept 2 INTENSIVE INVESTMENT

RAVENEL



Tiger Blvd

Z

College

MAIN CAMPUS

Walter T. Cox

WalterT



#### **Rotating Breakout Tables**

- Learning Environments
- Student Life (Recreation, Student Commons, Dining, and Student Housing)
- Open Space
- Mobility