

This is the East Carolina University Comprehensive Facilities Master Plan Final Draft Plan Review. This workbook reviews the campus draft master plan first presented on campus on June 29 and June 30, 2011. It first summarizes the work that led up to the preliminary draft plans, and then presents the final draft plans.

Agenda



Master Plan Purpose and Goals



East Carolina University W Comprehensive Facilities Master Plan

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Master Plan Purpose and Goals

3 Key Themes:

- 1. Create a socially, economically, and environmentally sustainable campus plan that represents the hopes and aspirations of this region.
 - Integrate strategic, academic, and financial planning
- 2. Bring 4 diverse campus environments into *a coherent and connected campus* plan.
 - Main Campus
 - Health Sciences Campus
 - West Research Campus
 - North Recreational Fields Complex

3. Utilize the campus to support and enhance the University and the community.

University as engaged resource



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Three Key Themes were introduced very early on in the process as an overall guide in the planning process.



This schedule shows the overall process by the consultant team. Currently, the consultant team is in the Final Plans stage. The planning team is currently refining these plans based on comments from the ECU community.



Campus Master Plan Process

Today's Process

- Brief review of the draft final master plans
- Vehicular and pedestrian opportunities
- Overview of draft phasing, capital projects and costs
- Stormwater opportunities
- Discussion



East Carolina University W Comprehensive Facilities Master Plan

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Concurrently during the Capital Projects process, the master plan team performed a thorough site inventory and analysis of the Health Sciences Campus. These maps helped drive the alternative scenarios process in regards to community context, natural features, vehicular and pedestrian circulation, and campus structure. These maps can be reviewed in detail on the campus master plan site: www.ecu.edu/masterplan



Concurrently during the Capital Projects process, the master plan team performed a thorough site inventory and analysis of the Main Campus. These maps helped drive the alternative scenarios process in regards to community context, natural features, vehicular and pedestrian circulation, and campus structure. These maps can be reviewed in detail on the campus master plan site: www.ecu.edu/masterplan



The master plan team created four alternative scenarios for the Health Sciences Campus. These "bubble diagram" illustrations show a comparative overview of each. The primary movable pieces are the Ambulatory and Ancillary Service components and the Medical Education facility. Academic, Institution, and Research zones became less mobile in the process due to existing established districts within this campus.

- 1. "Live Within Your Means" illustrates a scenario where all of the future growth is handled within the existing property boundaries of the campus.
- 2. The "Moye Village" scenario shows an extension of the Moye Building complex to the east of Moye Boulevard.
- 3. In the "Partner With PCMH" scenario, the Ambulatory and Ancillary components move south of Heart Boulevard for an more direct adjacency to PCMH.
- 4. In the last scheme, "Institution Zone Density", the Ambulatory and Ancillary components move into a central location between the Family Medicine and Cardiovascular Institute.

Health Sciences Campus Draft Preliminary Master Plan



This slide illustrates a overview of the Health Sciences Campus Preliminary Master Plan. Feedback from the ECU community after the Alternatives Phase indicated that optimizing the land that the University currently owns was a good option to pursue. Feedback from the presentations in March indicated that some of the uses should change and that is reflected in the revised plans later in this workbook.

Health Sciences Campus Draft Preliminary Master Plan



This slide illustrates a perspective view of the Health Sciences Campus Preliminary Master Plan. Feedback from the ECU community after the Alternatives Phase indicated that optimizing the land that the University currently owns was a good option to pursue. Feedback from the presentations in March indicated that some of the uses should change and that is reflected in the revised plans later in this workbook.



The master plan team created three alternative scenarios for the Main Campus. These "bubble diagram" illustrations show a comparative overview of each. The primary movable pieces are the Academic (expansion), Residential (expansion), Millennial Campus and Facilities components. The pieces that become more stationary are the Athletic, established Residential, established Academic areas and the HHP campus. These areas are less mobile due to their existing districts on campus.

- 1. "Go North" illustrates a scenario where future Academic components are incorporated into the downtown fabric of campus. A new Residential component would be established just to the south of this area. A Millennial Campus would be developed in the Warehouse District.
- 2. The "Campus Density" scenario shows an increased concentration of Academics within the existing east Academic Zone. New Residential opportunities would be located in existing Residential areas within the campus boundary. The Millennial Campus would be developed within the Reade Street Corridor. Facilities and Support Services would located in the Warehouse District.
- 3. In the "Go West" scenario, the Academic expansion would occur in the Warehouse District. Residential expansion could be paired with mixed use in the downtown area. The Millennial Campus in this scheme is located to the Health Sciences Campus.



This slide illustrates a overview of the Main Campus Preliminary Plan. Feedback from the ECU community after the Alternatives Phase indicated that new growth for the campus should "Go North" and "Go West".





The planners are aware of the importance of connections to the Main and Health Sciences Campuses and envision strong links within the community.

Health Sciences Campus Draft Final Master Plan



A brief overview of the major components of the Health Sciences Draft Final Plan are: Buildings:

- 1. The Immediate Needs of the campus are identified by orange and the places where Future Opportunities can occur are identified in yellow.
- 2. The Medical Education building will be located at the west side of the Brody Complex. The placement of this building in this location will allow better adjacencies to research, the hospital and the institutional uses on campus.
- 3. A student services building will be located at the south end of the Allied Sciences building. The need for this type of facility was identified in an earlier phase of the project.
- 4. In regards to the clinical aspect of the program, a proposed integrated Ancillary Services and Clinics building is located between the Cardiovascular Institute and the Family Medicine building. A phased approach to this building can be utilized. An interior corridor system can be used to link the various institutional uses.
- 5. A central parking deck is located just north of Family Medicine.
- 6. A new Cancer Center will be located at the east side of W. Arlington. The cancer center is placed in a restorative setting, and does not necessarily need to be directly adjacent to other components. Adjacent surface parking is an important element for this facility.
- 7. Future opportunities for growth are identified in yellow. A program need has not been identified for these blocks.
- 8. The Brody building can be renovated to provide research space and additional offices.

Parking and Circulation:

- 1. The placement of new surface parking is difficult to achieve in this plan. Several parking decks are incorporated for staff/faculty parking to provide a relief to patient parking in the surface areas south of Family Medicine and Cardiovascular.
- As the campus develops, opportunities for an enhanced pedestrian network increase and is necessary. This plan shows a comprehensive system for pedestrians to get to parking, easily traverse between facilities and recreational opportunities. The service drive south of the utilities building and north of Cardiovascular will be transitioned into a Service/Pedestrian "Roadway", eliminating through traffic.
 Exterior Green and Open Space:
- 1. The placement of buildings and other built elements will also provide an opportunity for new exterior spaces for respite such as courtyards, plazas and gardens. This enhancement will provide this portion of the campus with an increased amount of exterior activity spaces. A central green space is located north of the new Ancillary and Clinics Building.



Health Sciences Campus Draft Final Master Plan















To understand the Draft Master Plan and how it affects current campus vehicular and pedestrian systems, a breakdown of each of the individual systems is illustrated in the next several diagrams.



With an increase in building footprints and population in the future, it is necessary to understand where vehicular access is impacted.



Some surface lots will need to be removed to make space for new buildings.



With the addition of buildings in existing surface lots and an increase in population on this campus, it is necessary to add parking decks as there is limited land for the addition of new surface parking.



A central drop off for transit will be located at the new Student Services building. A shuttle service from this location should be utilized for service to individual destinations.



A pedestrian network is lacking in the existing campus fabric. The plans now incorporate a new network of walks that connect all destinations to surrounding uses, parking, and buildings.



Bike facilities are important in reducing vehicular traffic in campus environments. The plan addresses major bike routes on campus and connecting these routes with planned or existing city routes. A bike system should also incorporate a bike station for minor repairs and enough bike parking to accommodate users.



The placement of buildings and other built elements will also provide an opportunity for new exterior spaces for respite such as courtyards, plazas and gardens. This enhancement will provide this portion of the campus with an increased amount of exterior activity spaces. A central green space is located north of the new Ancillary and Clinics Building.



This slide illustrates several concept images of how the "Central Green" on campus could be developed.







This slide illustrates a overview of the Main Campus Draft Final Plan. Feedback from the ECU community after the Alternatives Phase indicated that new growth for the campus should "Go North" and "Go West".


Three major districts on the northern portion of the Main Campus will be discussed in more detail in the next few slides.



Within the Central Core of the Main Campus:

The Immediate Needs of the campus are identified by orange and the places where Future Opportunities can occur are identified in yellow. During the Strategic Review and Needs Assessment portion of the process, several priority buildings were identified.

- Buildings:
- 1. Within the academic portion of the campus (east of Founders Drive), is currently at a building density limit, so further development here is limited. However, a new Biosciences building is located adjacent to the Howell Science building.
- 2. A new Student Center is located in the heart of the east side of the Main Campus, by the Recreation. Center and Joyner Library. A needed expansion to the Recreation Center is also illustrated.
- 3. A new Academic "A" Building will be located at the corner of 10th Street and Cotanche. This building will help with connectivity to the Warehouse District portion of campus and create a gateway element spanning Cotanche.

4. A future opportunity for growth exists at the east side of Wendell Smiley Way, however, a program has not been identified for this building.

- Parking and Circulation:
- 1. Opportunities for new surface parking on campus is limited, parking decks are proposed next to the new Student Center location and adjacent to Academic Building "A".
- 2. Several surface parking lots are eliminated in the core of the campus. The purpose of this is to allow safer pedestrian movements through campus. The lots on the campus perimeter will remain in tact.
- 3. The existing bus hub is currently located at Christenbury (off of 10th Street) where existing traffic and pedestrian interaction is not safe. An on street drop-off will be located off of Tenth Street at this location, while a new hub will be located at the new Student Center.
- 4. Several roads are proposed to be converted to Service/Pedestrian "Roadways": Founders Drive is will remain in place off of 5th and loop around the fountain, the south portion will have access to parking behind Flanagan. However, the center portion of the drive will only have access for service vehicles. This is important, as students have difficulty crossing this road between Bate and Flanagan. Faculty Way and Dixon Drive are also proposed as service and pedestrians only. This will encourage other modes of transportation other than personal vehicles.. Exterior Green and Open Space:

The placement of buildings and other built elements will also provide an opportunity for new exterior spaces for respite such as courtyards, plazas and gardens. This enhancement will provide this portion of the campus with an increased amount of exterior activity spaces.



Future growth is illustrated on 10th and Cotanche.



This slide illustrates a building massing study for the Immediate Needs at the corner of 10th and Cotanche.



This slide illustrates a building massing study for the Immediate Needs and Future Opportunities at the corner of 10th and Cotanche.



The 10th Street Corridor is an important image edge for the Main Campus. Currently, this edge of campus lacks a strong identity. It is proposed that a landscaped median be implemented down most of the length of 10th Street from the east to west portions of campus. Not only to slow vehicular traffic, but to assist with the safe and direct pedestrian crossings across this busy road. Especially at 10th and Cotanche, and at 10th and College Hill.

Additional landscape elements should also be incorporated on this edge of campus, reflecting the strong campus landscape that exists on the 5th Street corridor.

A major Bus Hub is will be moved from the Christenbury site (off of 10th Street) to a new location off to a location just south of the new Student Center. The location would hold approximately 4-5 busses at a time and be a major drop off and pick up point for the ECU transit system. A bus stop will still be located at the on 10th Street, just south of Brewster.



This detail illustration of the intersection and 10th Street and College Hill shows a safe place for pedestrians to land on the median while crossing the street. Parking has been removed just south of Brewster and Fletcher, creating an active open space and landscaped edge. Service access to Howell is still maintained as well as access to parking at the lots on the east side of campus.



These images illustrate some examples of improvements that can be made to the 10th Street Corridor.



The Downtown District of the Main Campus:

- 1. This district will work with the urban fabric of Downtown Greenville on existing ECU property.
- 2. Reade Street incorporates some immediate need buildings such as an Alumni Center and a Visual and Performing Arts Complex.
- 3. Future Opportunities exist to expand this portion of campus are illustrated with yellow blocks.
- 4. A pedestrian bridge is one idea to enable pedestrians to cross safely across 5th Street. The existing grade on the south side of 5th Street would allow easy access from the Campus Core to Downtown.
- 5. It is suggested that Reade Street employ Complete Street concepts. Two way travel is suggested, with the addition of bike lanes, streetscape elements (benches, landscape, etc.) and human scale architecture.



The Downtown District of the Main Campus:

- 1. The Visual and Performing Arts Complex at this corner will pair well with the Town Common plan, creating activity and energy in this corridor. Although not programmed yet, this program could include a black box theater, an auditorium, academic classrooms and offices.
- 2. The future addition of a Hotel / Conference Center would provide a transition to the Downtown Greenville area. A proposed deck would provide the necessary parking as development occurs here.



These images illustrate some conceptual images of the Downtown District.



The Warehouse District of Campus is located west of Evans Street and south of 10th Street.

This district would be a central command for the back of house activities of ECU, such as Police, Parking, and Mail Services. The last historical tobacco warehouse on this portion of campus will be renovated to accommodate relocated uses. Future buildings can be incorporated as needed and this would be a good location for the Millennial Campus. Strong pedestrian connections will be incorporated on the streets in this district and from the Main Campus. The future 10th Street Connector project will incorporate multi-modal transportation facilities to Health Sciences Campus.



These images illustrate some conceptual images of the Warehouse District.



The College Hill District will replace the existing Belk Residence Hall with a new space. An additional Living / Learning Complex will be located this area as well. The terminus of College Hill will create a loop turn around at the south end (however, still have access to 14th Street). With the old Belk Hall, pedestrians were blocked physically from getting through this area. A new pedestrian link would cross from this point south into the Athletics Campus. A parking deck could be incorporated in this area as well if demanded.



Within the South Academic District:

- 1. A new HHP gym will be located within the South Academic District with some additional classroom and office spaces. Future opportunities for other buildings would occur along Oglesby and to the west. The existing recreation fields would remain in place until that time.
- 2. The Athletics Campus is undergoing major changes at this time and are illustrated in this drawing. A new press box to the stadium is planned as well as a basketball practice facility on the north side of Minges Coliseum.
- 3. A pedestrian network would extend from College Hill Drive south to 14th Street into the Athletics District and into the South Academic District. A trail type path would be incorporated through the wooded areas to loop around to the south and west side of the campus (along the Green Mill Run).





To understand the Draft Master Plan and how it affects current campus vehicular and pedestrian systems, a breakdown of each of the individual systems is illustrated in the next several diagrams.



With an increase in building footprints and population in the future, it is necessary to understand where vehicular access is impacted.



Some surface lots will need to be removed to make space for new buildings.



Several options in regards to parking are being reviewed by the parking sub-consultant. With the addition of buildings in existing surface lots and an increase in population on this campus, it is necessary to add parking decks as there is limited land for the addition of new surface parking.



A central drop off for transit will be located at the new Student Center building.



Some gaps exist in the current pedestrian network on the Main Campus. Pedestrian networks will be filled in at these gaps, strengthening a west to east route on the central core from Academics to Student Service areas. A pedestrian connection will be incorporated through the Downtown District (and into the downtown of Greenville), along 10th Street, through College Hill, Athletics and the South Academic District. A recreational trail will be added along the Green Mill Run to make a loop through campus.



Bike facilities are important in reducing vehicular traffic in campus environments. The plan addresses major bike routes on campus and connecting these routes with planned or existing city routes. A bike system should also incorporate a bike station for minor repairs and enough bike parking to accommodate users.



The placement of buildings and other built elements will also provide an opportunity for new exterior spaces for respite such as courtyards, plazas and gardens. This enhancement will provide this portion of the campus with an increased amount of exterior activity spaces. Enhanced green, open spaces will be added to connect the campus landscape fabric and help reinforce connectivity. These new areas include the area around Old Cafeteria, Austin, along 10th Street, and between Athletics and College Hill.







A preliminary review of plan implementation is reviewed in the next few pages for Health Sciences and Main Campus. A 0-5, 5-10, 10-15 and 15+ year phasing blocks are currently being developed. Each block will have several projects listed and the projected costs. Each project will have a timeline for planning and implementation.









Main Campus Phasing Opportunities																									
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Stormwater strategies and mitigation are important to understand when implementing a master plan.



East Carolina University W Comprehensive Facilities Master Plan

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Rain Garden





Detention Pond





Strategies

Building Measures:

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- Rain gardens at new buildings
- Infiltration planters
- New pond or underground detention
 - **Green roofs**
- Rooftoprainwater harvesting
- Underground storage for reuse of non-potable water (toilets, irrigation)

Parking Decks:

Treatrunoffusing oil separators and collect water in cistern
for reuse

Site Measures:

- Bioswales of vegetated strips at parking/site boundaries, and along streets
 - Sandfilters or infiltration trenches at parking areas
- Biorentention in parking islands
- Large underground storage (campusirrigation)
- Underground storage at a slow release
- Perviouspavement
- Detention ponds

Pervious Pavement

Infiltration Planter

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This graphic represents the Health Sciences Campus and it's state of pre-settlement conditions. Most of the water during at 1-year, 24-hour storm would be retained on site.



With existing impervious materials in place due to development, run off is increased into the surrounding watershed.



The proposed new development on campus will increase stormwater runoff on campus.



But, with proper strategies in place, more run-off can be infiltrated on site.



This graphic represents the Main Campus and it's state of pre-settlement conditions. Most of the water during at 1-year, 24-hour storm would be retained on site.



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