



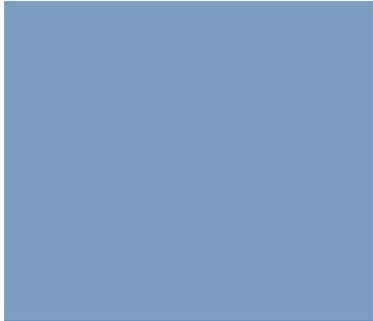
UNC Health Care Eastowne Property Transportation Impact Analysis

Project Scoping Presentation



Public Input Meeting
October 3rd, 2019

Presented By:
Kumar Neppalli
Town of Chapel Hill



Craig Scheffler, PE, PTOE
HNTB North Carolina, PC

UNC Health Care Eastowne Property

Transportation Impact Analysis

Today's Presentation

- Introduction by Town Staff
- Project Background
- Project Study Area
- Scope and Major Tasks
- Analysis Tools
- Next Steps



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UNC Health Care Eastowne Property

Transportation Impact Analysis

Project Background

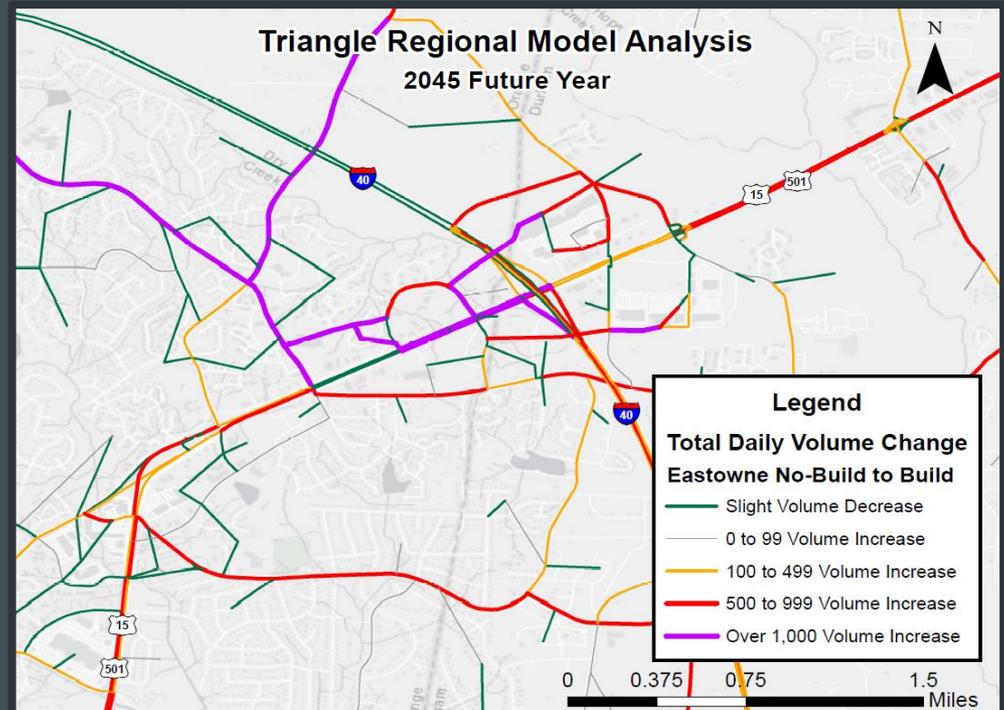
Current UNC Health Care
Eastowne Property
Development Scenarios

Initial High-Level
Estimates/Analysis



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Scenario	Option A (1.8 million SF)	Option B (2.3 million SF)
Daily	22,500	26,800
AM Peak Hour	2,250	2,550
Noon Peak Hour	1,750	2,000
PM Peak Hour	2,350	2,750

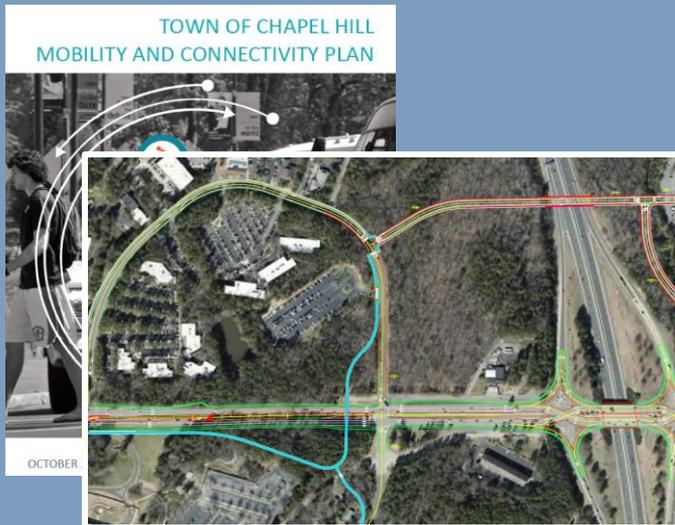


UNC Health Care Eastowne Property

Transportation Impact Analysis

Project Background

Conformance to Plans



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- NCDOT STIP Projects & US 15-501 Corridor Studies
- Current MPO MTP Long-Range Plans
- Other Recent Development Plans/Studies
- Current Town Mobility Plan
- CHT Transit Planning – Update Based on DOLRT

UNC Health Care Eastowne Property

Transportation Impact Analysis

Project Study Area

- 32+ Intersections
- Based on Town Thresholds for Inclusion in TIA & Council Request
- Include Durham Intersections to Assess Corridor Impacts
- Include Current / Future Development Projects
- Include Transit Routes/Stops, Sidewalk & Bicycle Facilities



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LEGEND

-  = Study Intersection
-  = UNC Health Care Eastowne MOB Phase 1
-  = UNC Health Care Master Plan Site

 NOT TO SCALE

CHAPEL HILL

DURHAM

UNC MAIN CAMPUS



DRAFT

UNC Health Care – Eastowne Property
Transportation Impact Analysis

DATE: October 2019

DRAFT - PROJECT STUDY AREA - INTERSECTIONS

FIGURE 1

UNC Health Care Eastowne Property

Transportation Impact Analysis

Scope and Major Tasks

TIA Preparation to Town
Guidelines



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- Data Collection
- 2019 Existing Conditions
- 2045 Future Year No-Build Scenario
- 2045 Scenario Screening Analysis – 3 Options
- 2045 Future Year Preferred Build Scenario
- 2045 Future Year Preferred Build Scenario + Improvements

- Impact Analysis – All Modes

LEGEND

- = UNC Health Care Eastowne MOB Phase 1
- = UNC Health Care Master Plan Site
- X = Peak Period Turning Movement Count Needed
- X = 13 Hour Turning Movement Count Needed
- X = No Count Needed – Recent Data Available
- = 48 Hour Volume/Speed/Classification Count Needed



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**UNC Health Care – Eastowne Property
Transportation Impact Analysis**

DATE: October 2019

DRAFT - PROJECT STUDY AREA – TRAFFIC COUNTS

FIGURE 2

UNC Health Care Eastowne Property

Transportation Impact Analysis

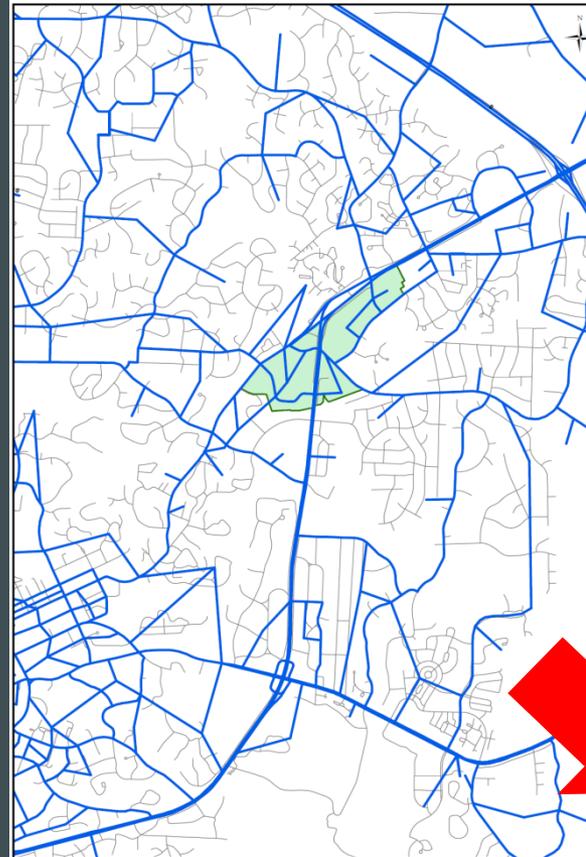
Analysis Tools

Traffic and Transit Models

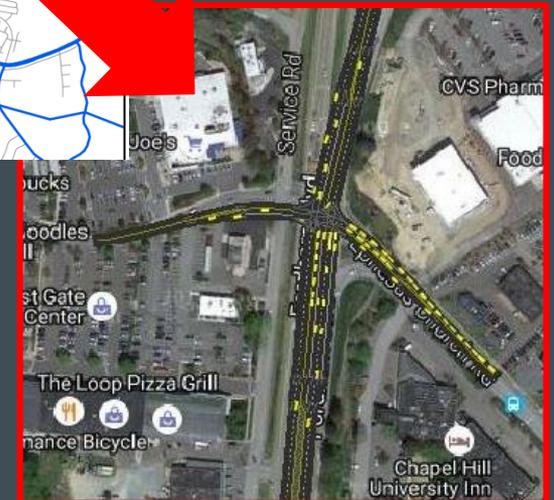


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“BIG PICTURE MODEL”



“DETAILED MODEL”

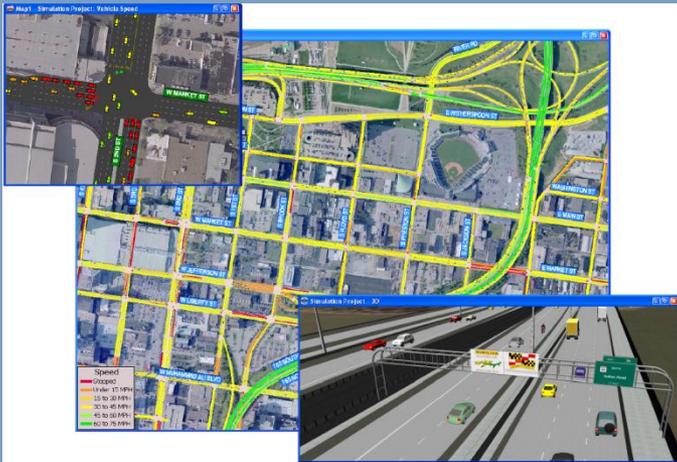


UNC Health Care Eastowne Property

Transportation Impact Analysis

Analysis Tools

Traffic and Transit Models



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- TransModeler Software Tool
- Integrates with Triangle Regional Model
- Can Model Traffic, Pedestrian, Bike and Transit Networks
- Will Integrate Previous Traffic Models/Studies – Blue Hill District
- Will Serve as Basis for Town-wide Traffic Model

LEGEND

-  = UNC Health Care Eastowne MOB Phase 1
-  = UNC Health Care Master Plan Site
-  = Blue Hill District TIA Model Network
-  = Additional Model Network to be Added



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INTERSECTION INFORMATION

NETWORK INFORMATION

CORRIDOR INFORMATION

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**UNC Health Care – Eastowne Property
Transportation Impact Analysis**

DATE: October 2019

DRAFT TRANSMODELER NETWORK DETAILS

FIGURE 4

UNC Health Care Eastowne Property

Transportation Impact Analysis

Analysis Tools



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- TransModeler Video Clip From Blue Hill District TIA

UNC Health Care Eastowne Property

Transportation Impact Analysis

Analysis Tools

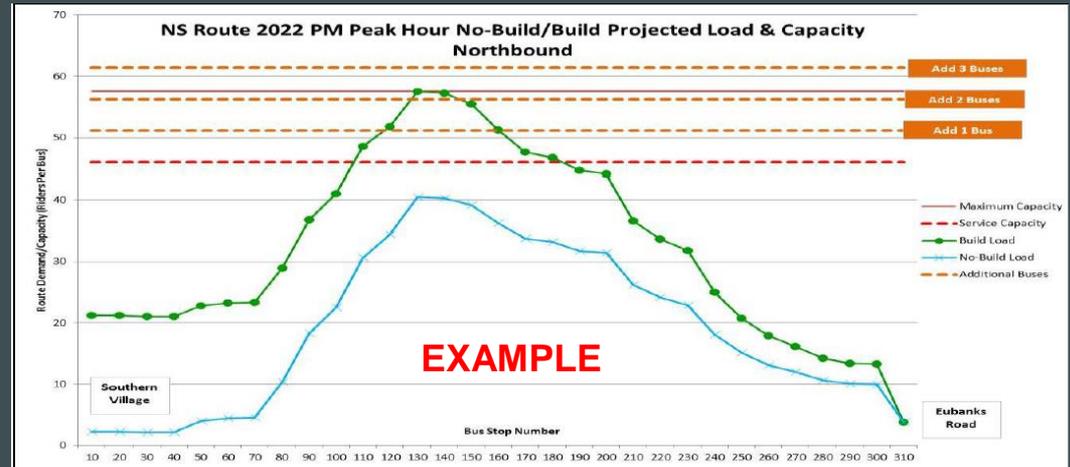
Transit Impacts



Chapel Hill
transit



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- CHT & GoTriangle Ridership Data (D Route, 400/405 Route)
- Existing Service Demand/Capacity by Route
- Future Transit Demand
- Existing Stops – Future Stops – Design & Access Issues
- Effect of No DOLRT / Future BRT

UNC Health Care Eastowne Property

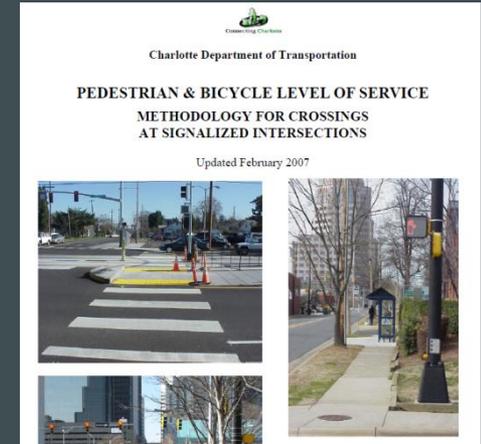
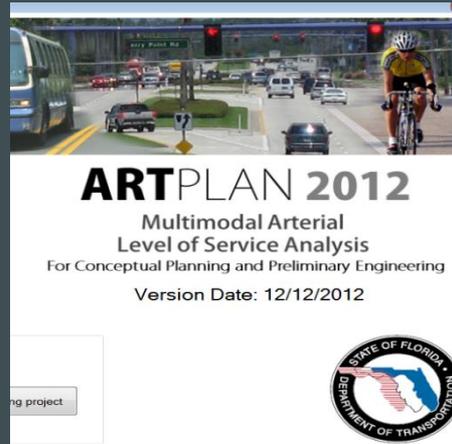
Transportation Impact Analysis

Analysis Tools

Pedestrian and Bicycle Impacts



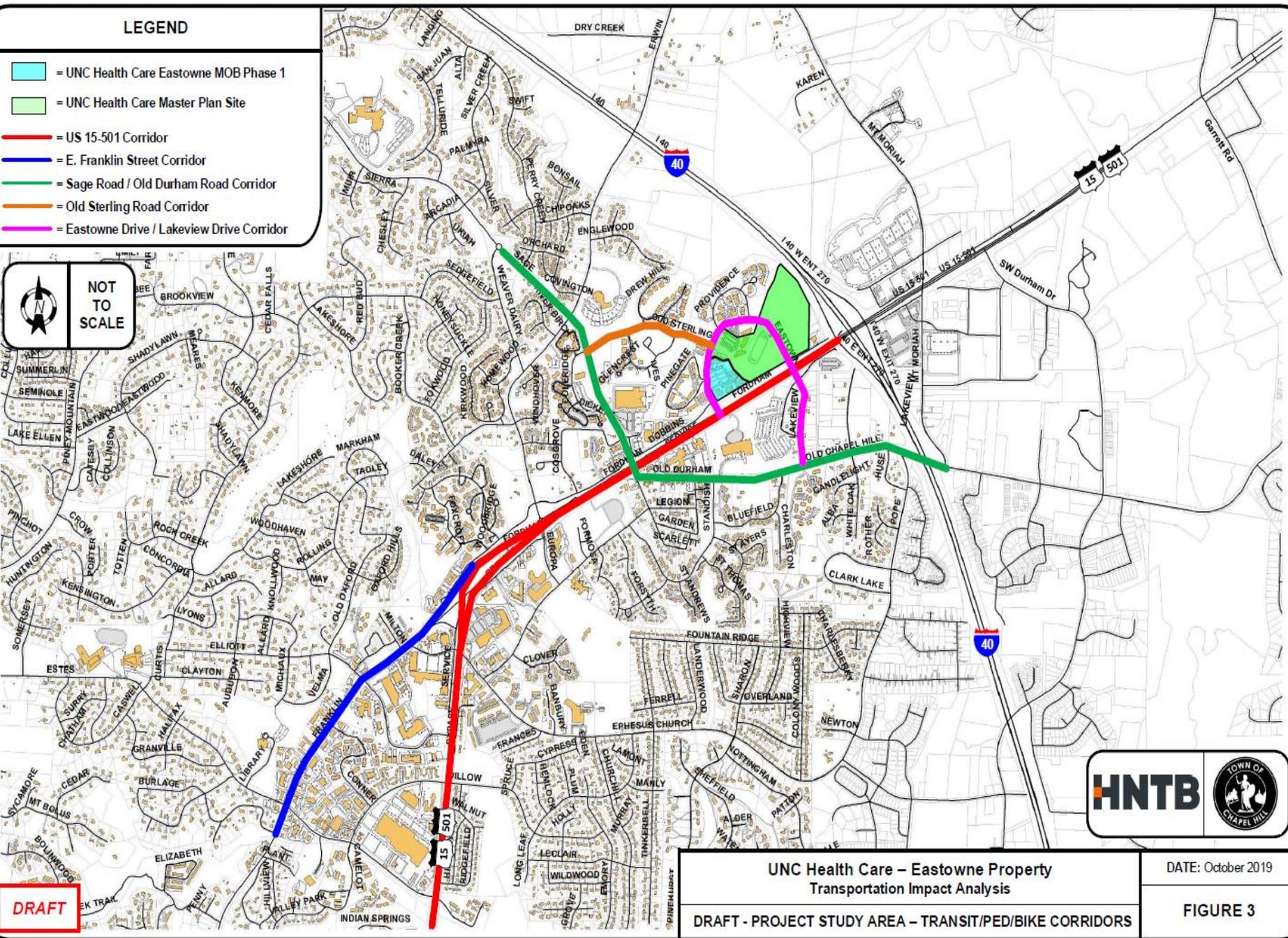
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- Not “Capacity” Issues – Safety and Accessibility Issues
- Existing Facilities – Design/Condition
- Crossing and Conflict Assessments
- Incorporate Town Mobility Plan
- Produce Corridor Level-of-Service Comparisons

LEGEND

- = UNC Health Care Eastowne MOB Phase 1
- = UNC Health Care Master Plan Site
- = US 15-501 Corridor
- = E. Franklin Street Corridor
- = Sage Road / Old Durham Road Corridor
- = Old Sterling Road Corridor
- = Eastowne Drive / Lakeview Drive Corridor



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UNC Health Care – Eastowne Property Transportation Impact Analysis	DATE: October 2019
DRAFT - PROJECT STUDY AREA – TRANSIT/PED/BIKE CORRIDORS	FIGURE 3

UNC Health Care Eastowne Property

Transportation Impact Analysis

Next Steps / Schedule

- Receive Comments from October 3rd Public Input Meeting
- Finalize Scope & Contract
- Collect Data – Mid-October 2019
- Existing Conditions Report & Public Meeting – December 2019
- Work with Stakeholders to Establish Overall Project Schedule



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UNC Health Care Eastowne Property Transportation Impact Analysis

Project Scoping Presentation

QUESTIONS AND DISCUSSION

