Ephesus Church Road/Fordham Boulevard Small Area Planning and Traffic Analysis

COUNCIL MEETING

February 28, 2011

Development Concepts . Urban Collage . Kimley-Horn and Associates

Agenda

Project Overview

Existing Physical Conditions

Concept Alternatives

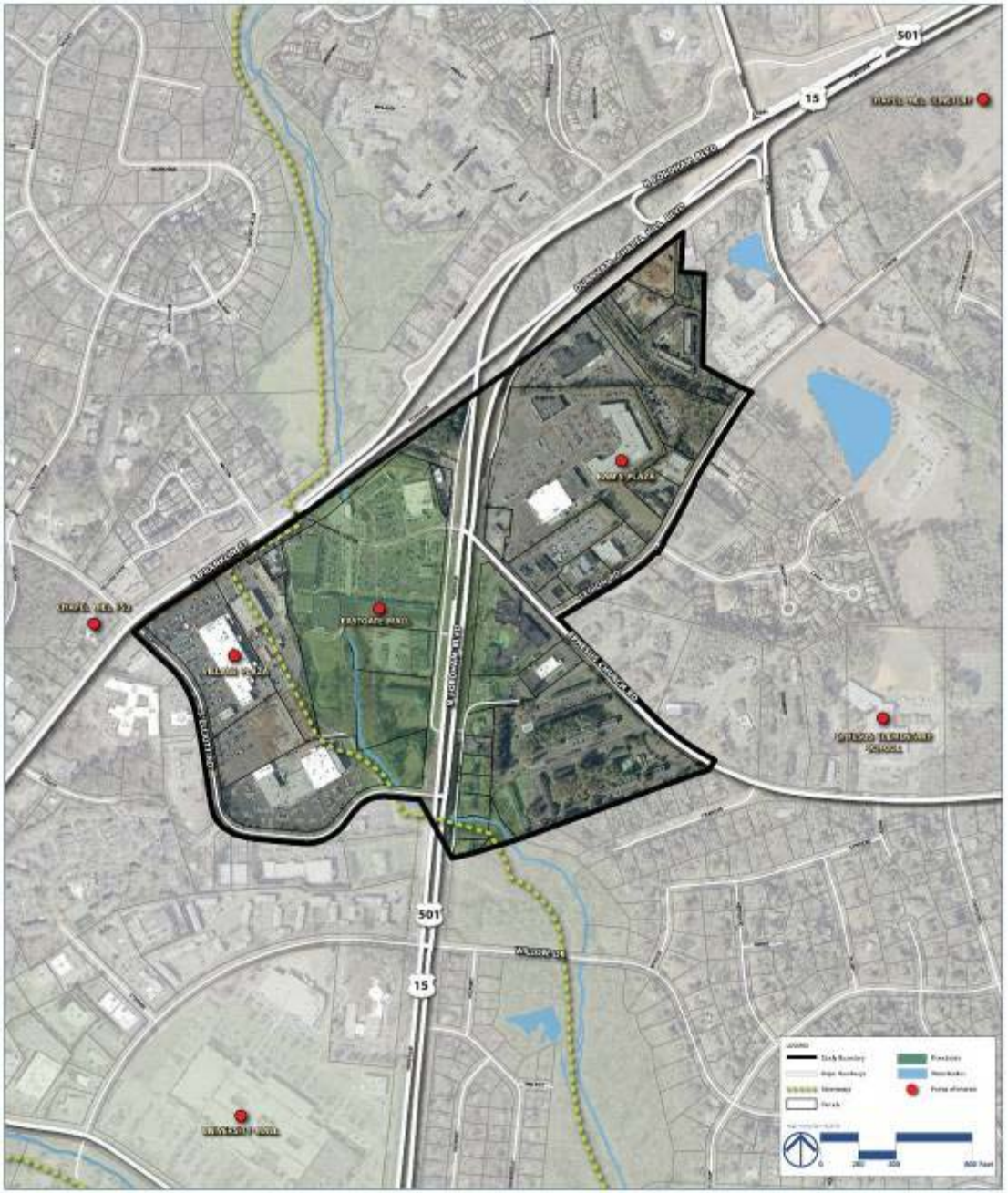
Proposed Framework Plan

Transportation Assessment

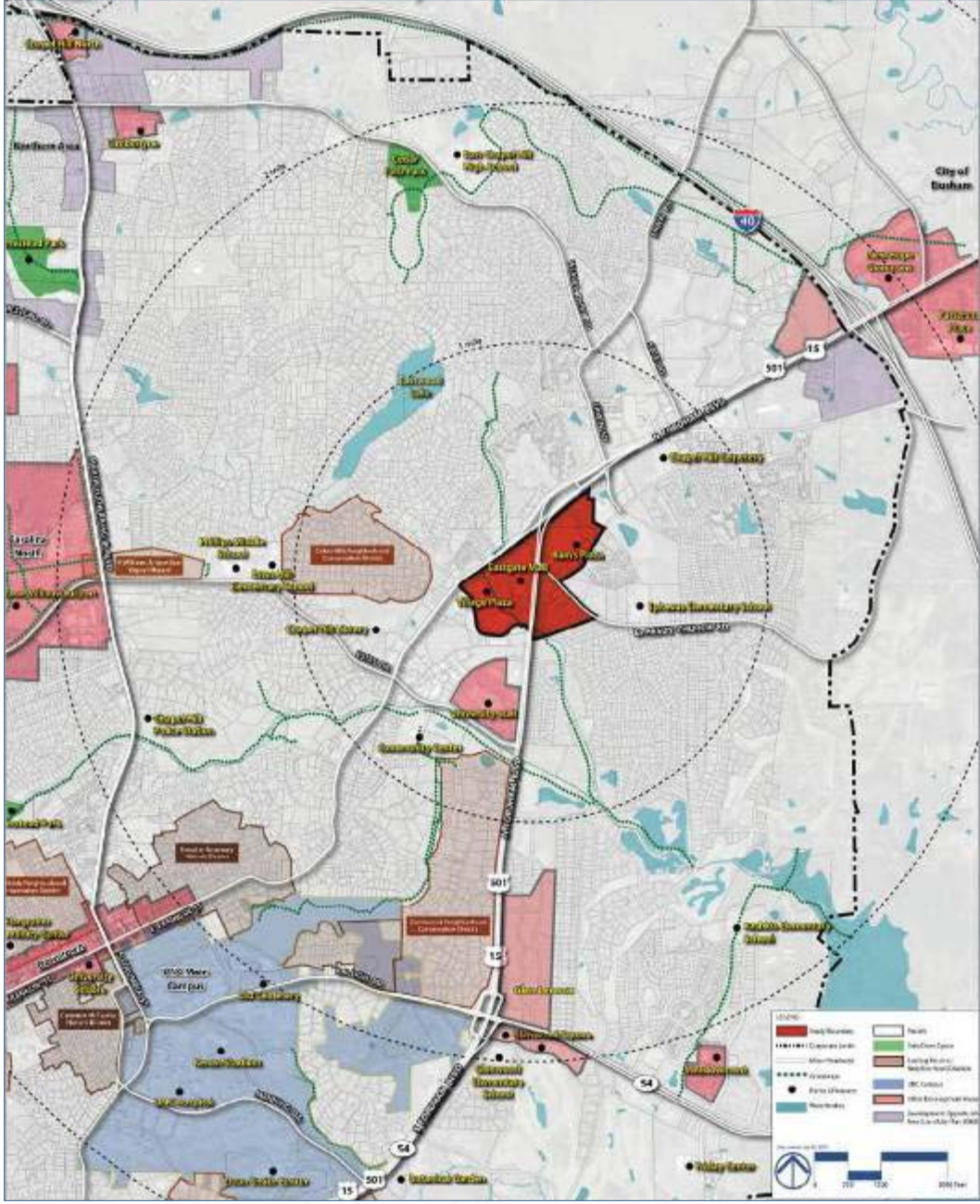
Implementation

Project Overview

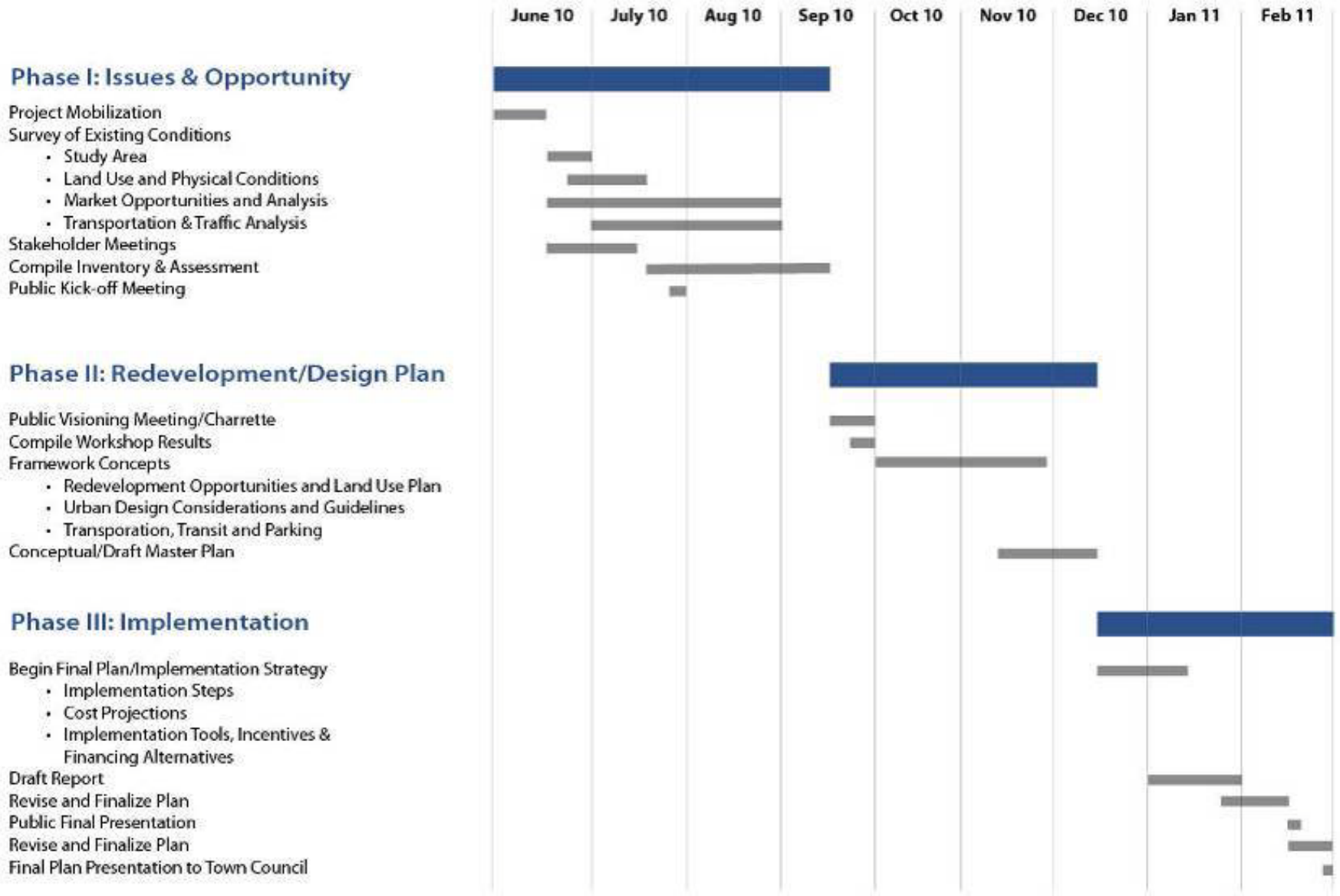
Study Area



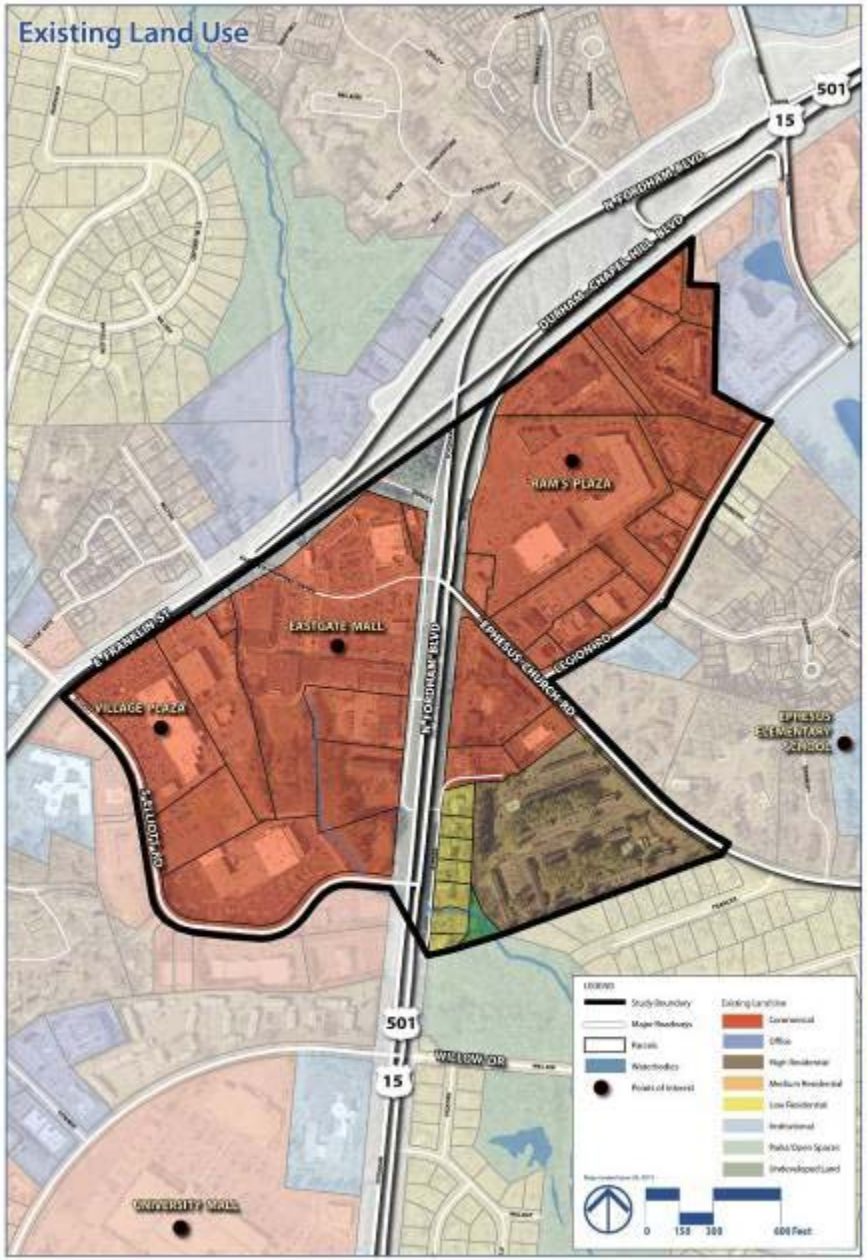
Context Map



Planning Process/Schedule



Existing Physical Conditions


Existing Land Use
501
15
N FORDHAM BLVD
DURHAM - CHAPEL HILL BLVD
HAM'S PLAZA
EASTGATE MALL
VILLAGE PLAZA
E FRANKLIN ST
S ELLIOTT RD
N FORDHAM BLVD
EPHESUS CHURCH RD
E GOLDRD
EPHESUS ELEMENTARY SCHOOL
501
15
WILLOW DR
UNIVERSITY MALL
LEGEND
Study Boundary
Major Roadways
Parcels
Waterbodies
Points of Interest
Existing Land Use
Commercial
Office
High Residential
Medium Residential
Low Residential
Institutional
Parks/Open Space
Undeveloped/Land
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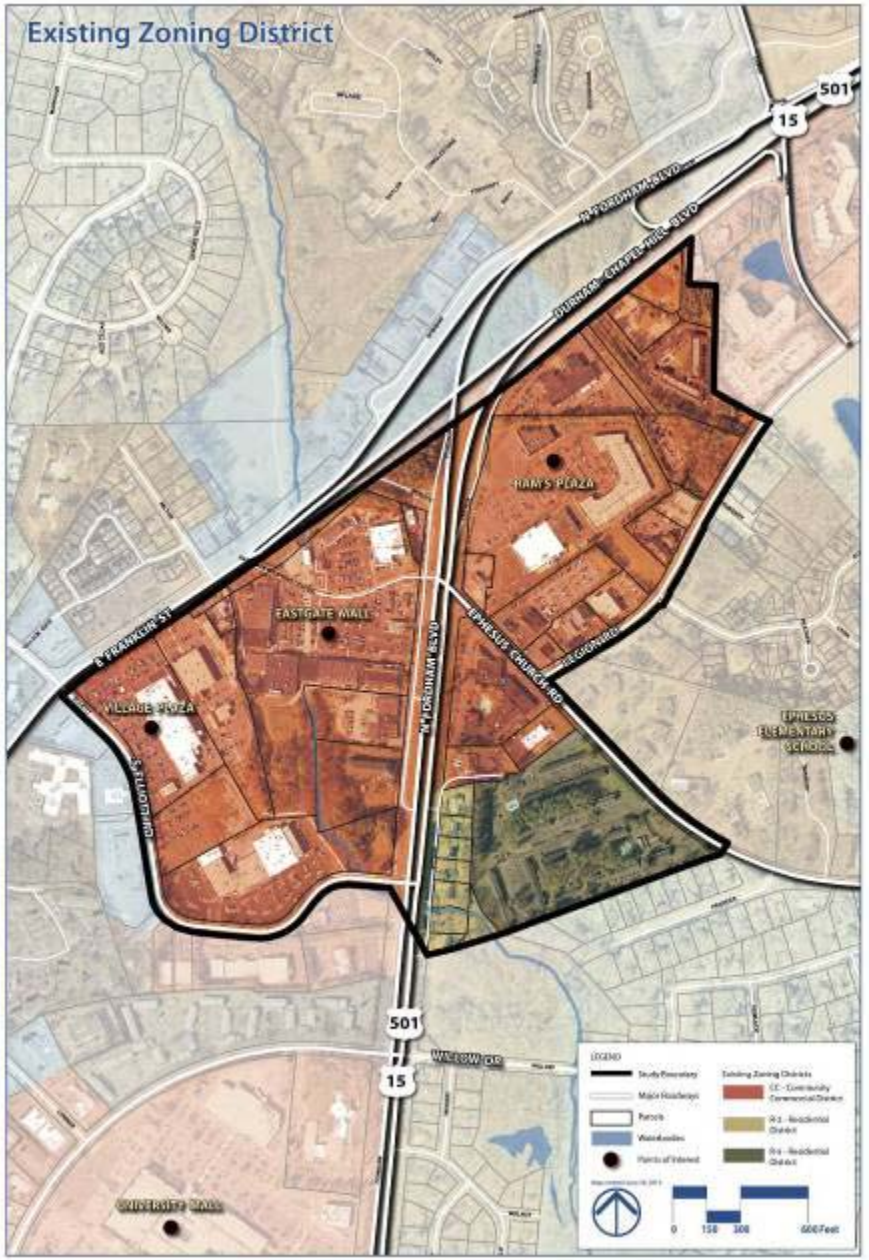
300
600 Feet


Existing Zoning District
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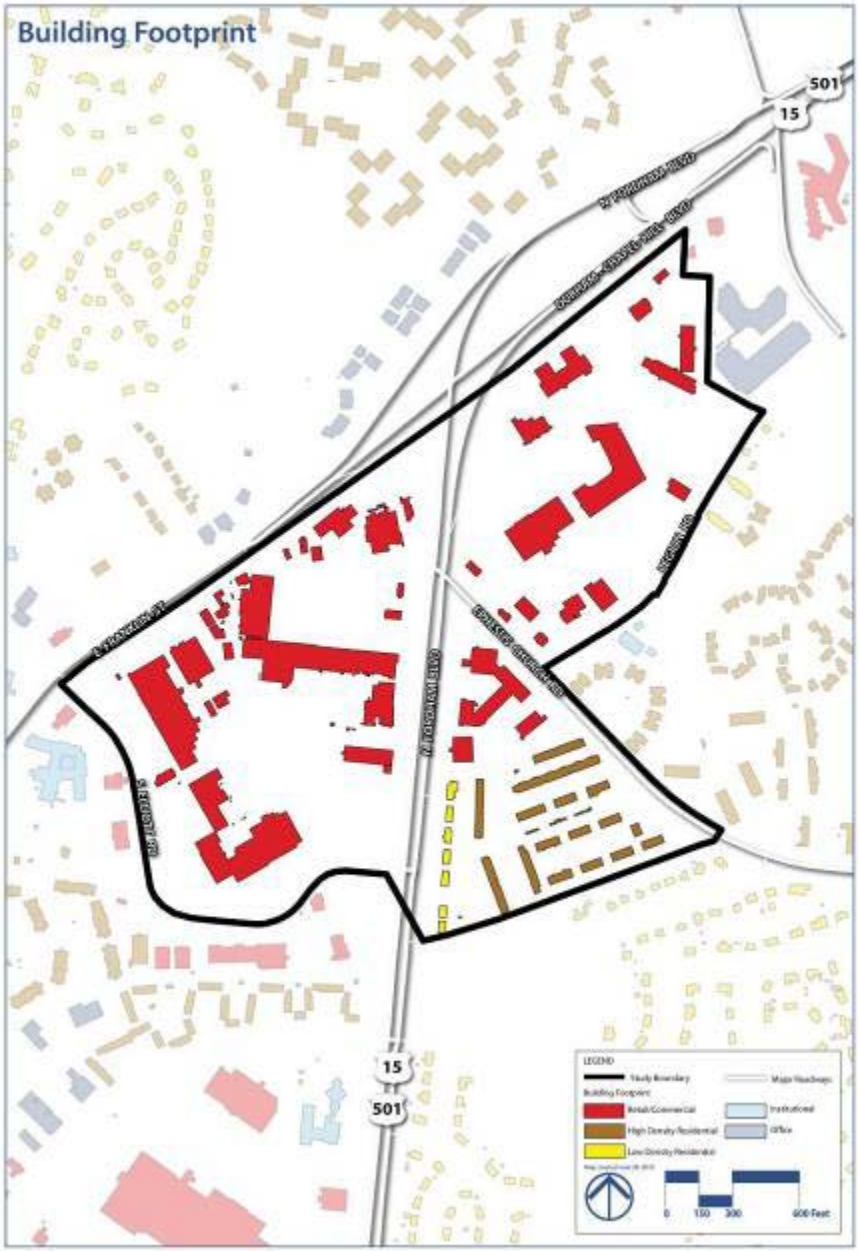
15
N FORDHAM BLVD
DURHAM - CHAPEL HILL BLVD
HAM'S PLAZA
EASTGATE MALL
VILLAGE PLAZA
E FRANKLIN ST
S ELLIOTT RD
N FORDHAM BLVD
EPHESUS CHURCH RD
E GOLDRD
EPHESUS ELEMENTARY SCHOOL
501
15
WILLOW DR
UNIVERSITY MALL
LEGEND
Study Boundary
Major Roadways
Parcels
Waterbodies
Points of Interest
Existing Zoning Districts
CC - Community Commercial District
R-1 - Residential District
R-4 - Residential District
0
150
300
600 Feet


Building Footprint
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Block Layout
Chapel Hill Downtown Block Layout
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501
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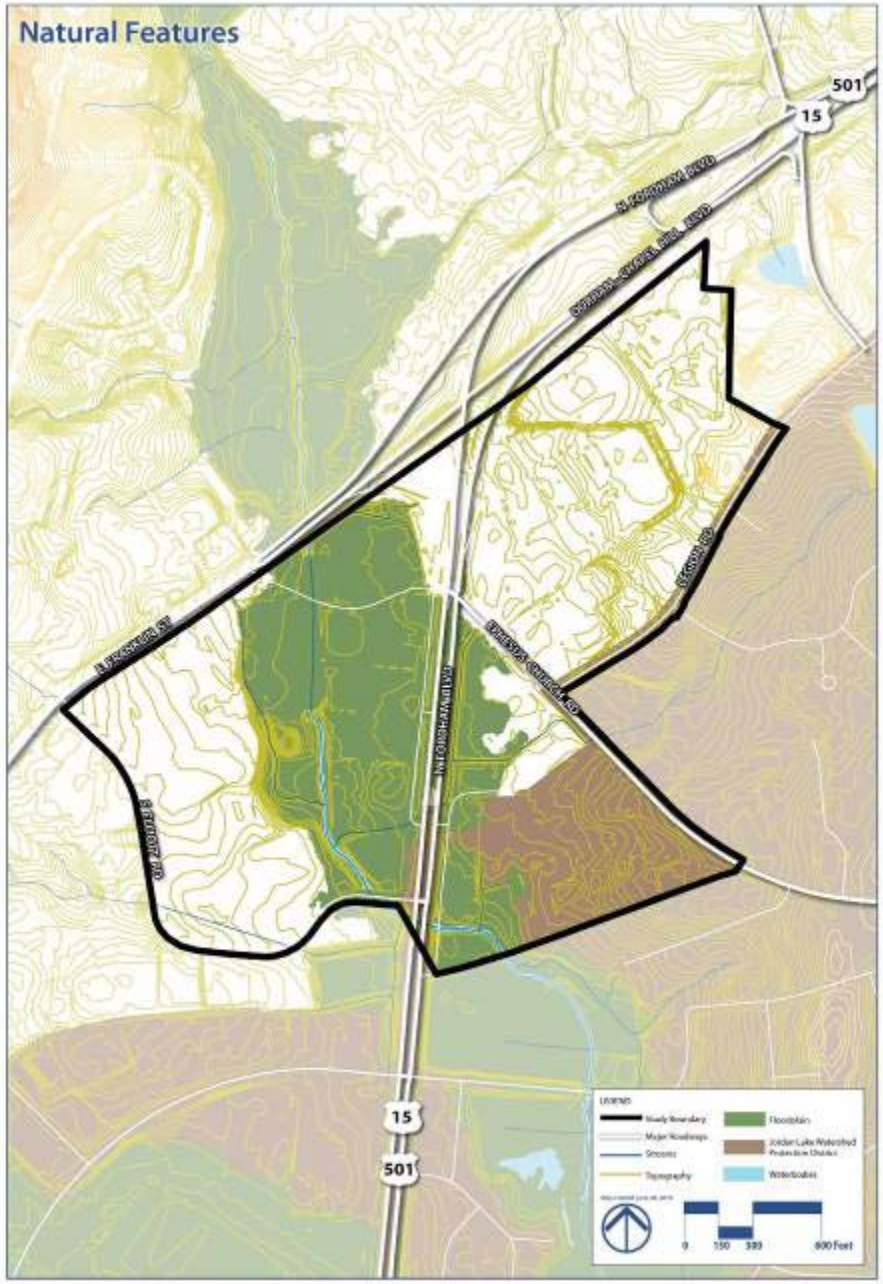
Natural Features
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Vegetation
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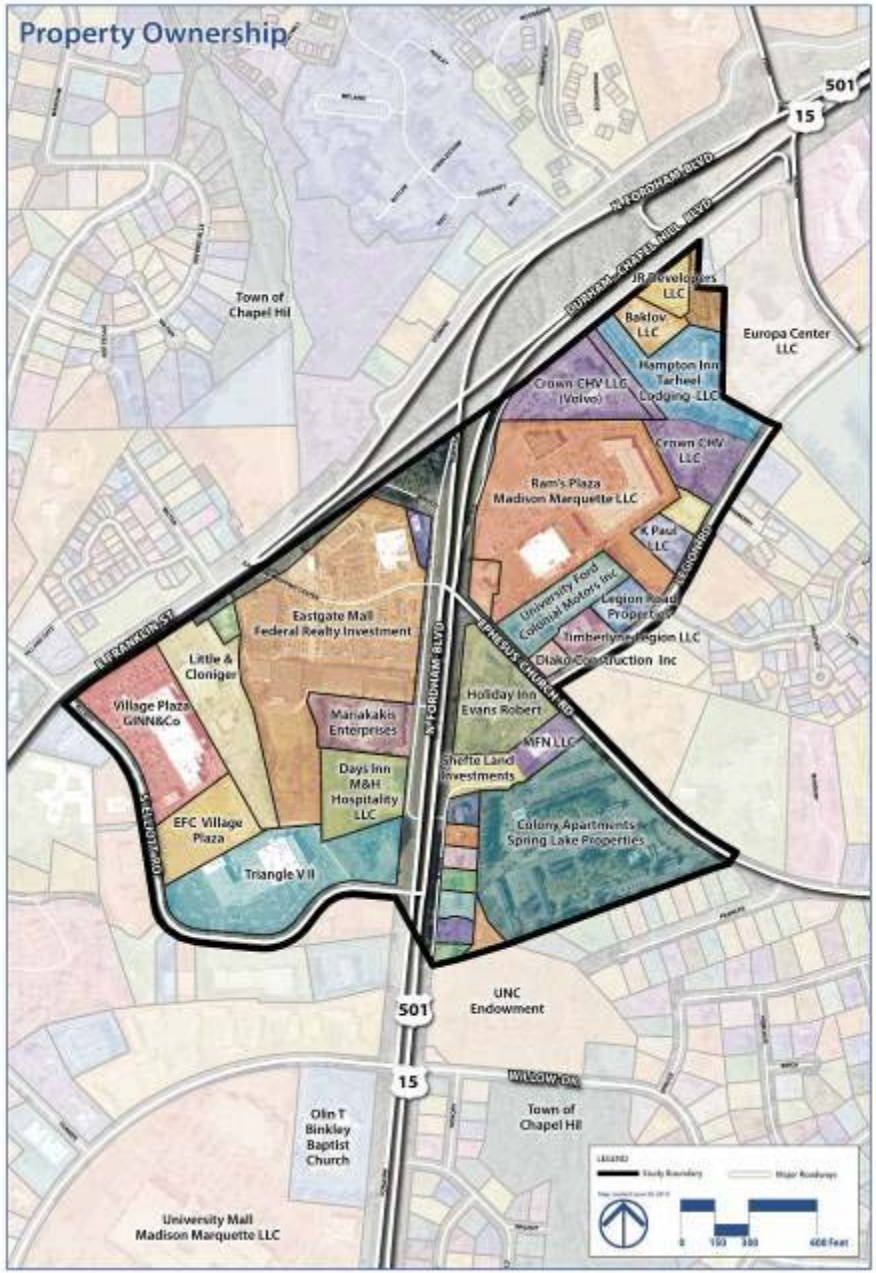
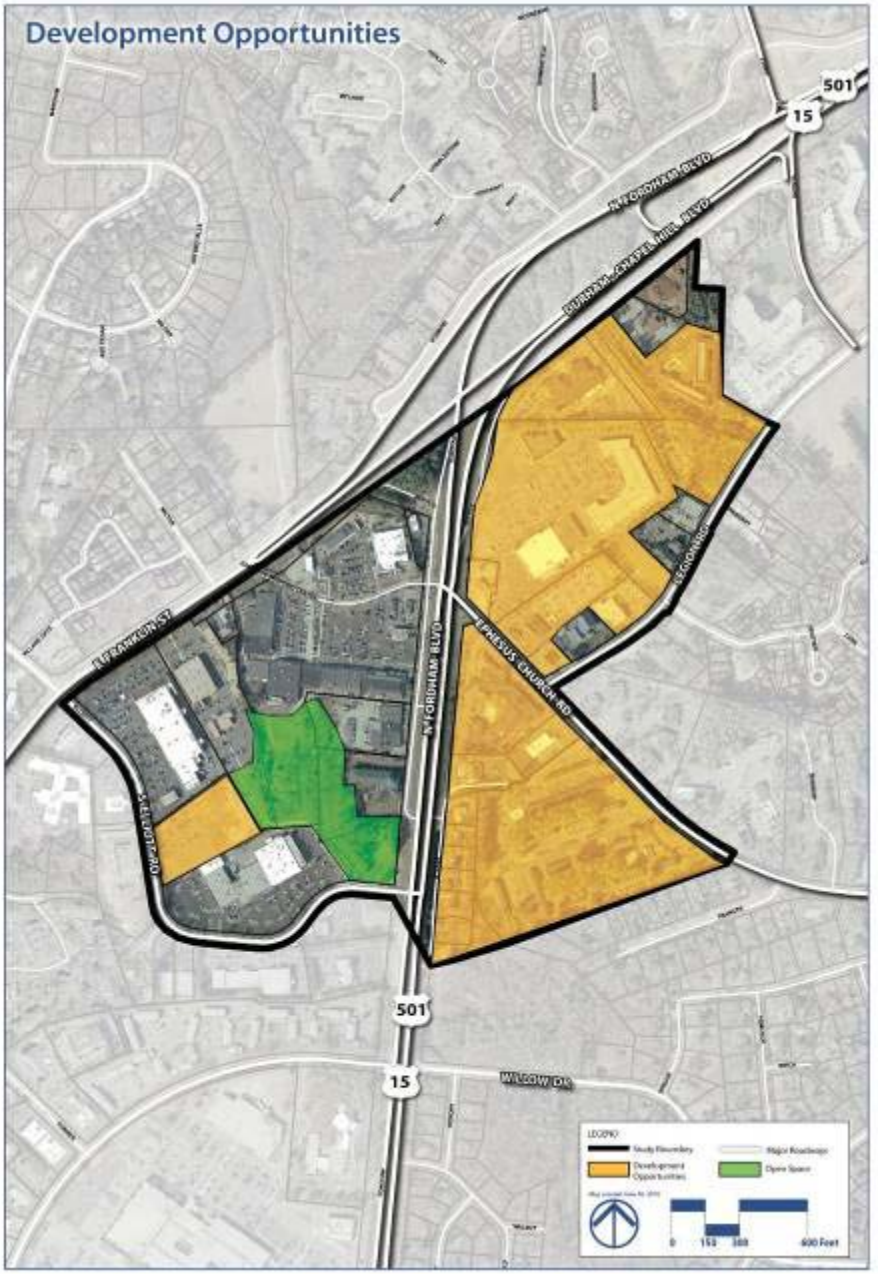

Property Ownership
501
15
N FORDHAM BLVD
DURHAM-CHAPEL HILL BLVD
Town of Chapel Hil
JR Developers LLC
Baklov LLC
Europa Center LLC
Hampton Inn Tarheel Lodging LLC
Crown CHV LLC (Volvo)
Crown CHV LLC
Ram's Plaza Madison Marquette LLC
K Paul LLC
University Ford Colonial Motors Inc
Legion Road Properties
Timberlyne Legion LLC
Diako Construction Inc
Eastgate Mall Federal Realty Investment
Little & Cloniger
Village Plaza GINN&Co
Manakakis Enterprises
Days Inn M&H Hospitality LLC
EFC Village Plaza
Triangle VII
EPHESUS CHURCH RD
Holiday Inn Evans Robert
MFN LLC
Sheffe Land Investments
Colony Apartments Spring Lake Properties
S ELEVATH RD
UNC Endowment
WILLOW DR
Olin T Binkley Baptist Church
Town of Chapel Hil
University Mall Madison Marquette LLC
0 150 300 600 Feet


Development Opportunities
501
15
N FORDHAM BLVD
DURHAM-CHAPEL HILL BLVD
E FRANKLIN ST
EPHESUS CHURCH RD
S ELEVATH RD
WILLOW DR
0 150 300 600 Feet

THE EPHESUS –FORDHAM COMPASS

RESULTS

Part 1: Commercial and Office Development

Higher Ranked Images

Lower Ranked Images

Part 2: Residential

Higher Ranked Images

Lower Ranked Images

Part 3: Transportation and Circulation

Higher Ranked Images

Lower Ranked Images

Part 4: Parks and Open Spaces

Higher Ranked Images

Lower Ranked Images

Part 5: Identity

Higher Ranked Images

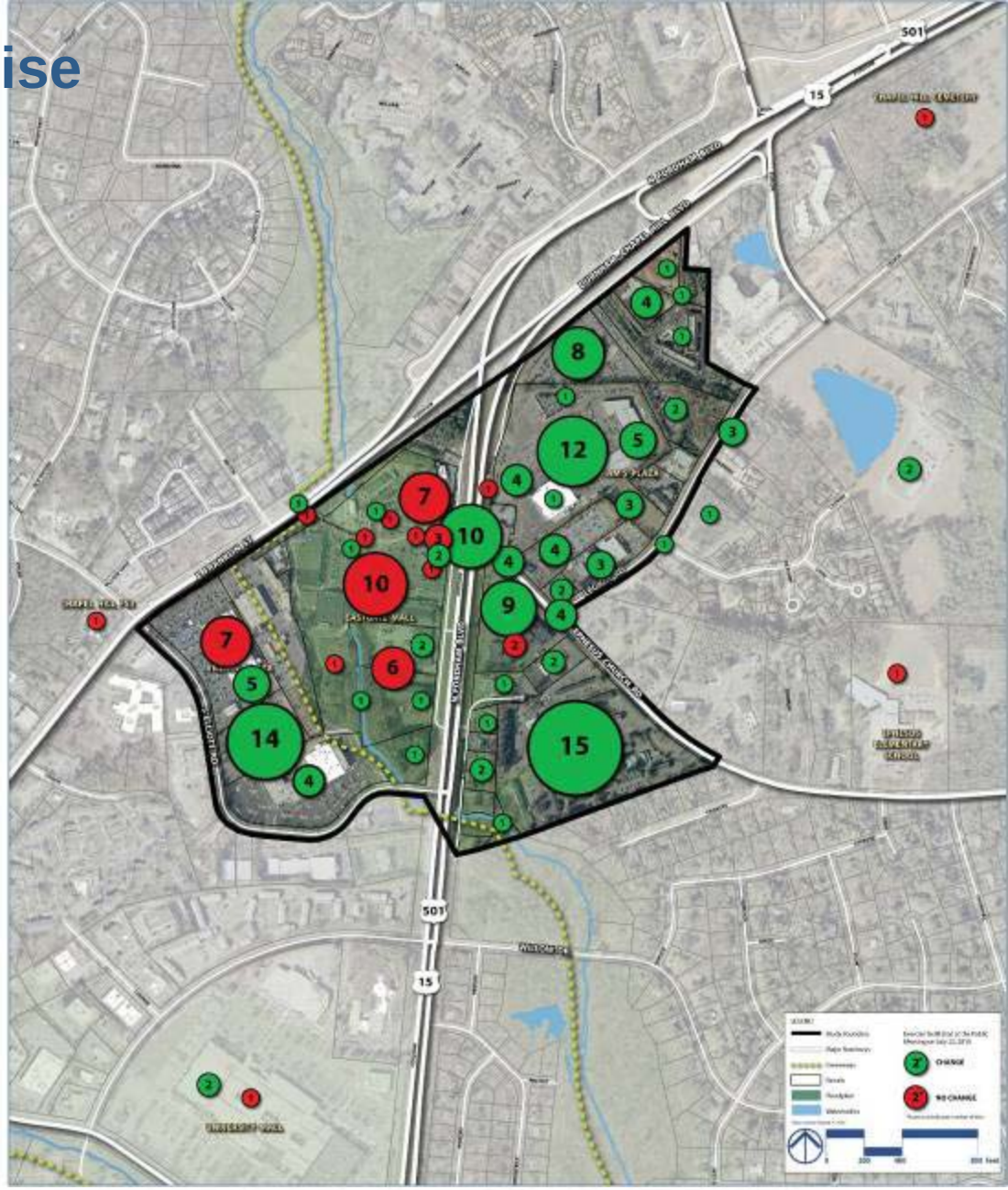
Lower Ranked Images

Short-Answer Questions Summary

- Rams Plaza and Volvo dealership should be focus of redevelopment
- 2-3 story density is most appropriate
- Should be a focus on providing trails and green spaces
- Traffic congestion and lack of pedestrian facilities are a major issue
- Traffic signal timing needs coordination
- Overall more connectivity and complete pedestrian facilities are needed
- Parking decks are desired to ease surface parking burden
- Consistent architectural and landscape features are desired

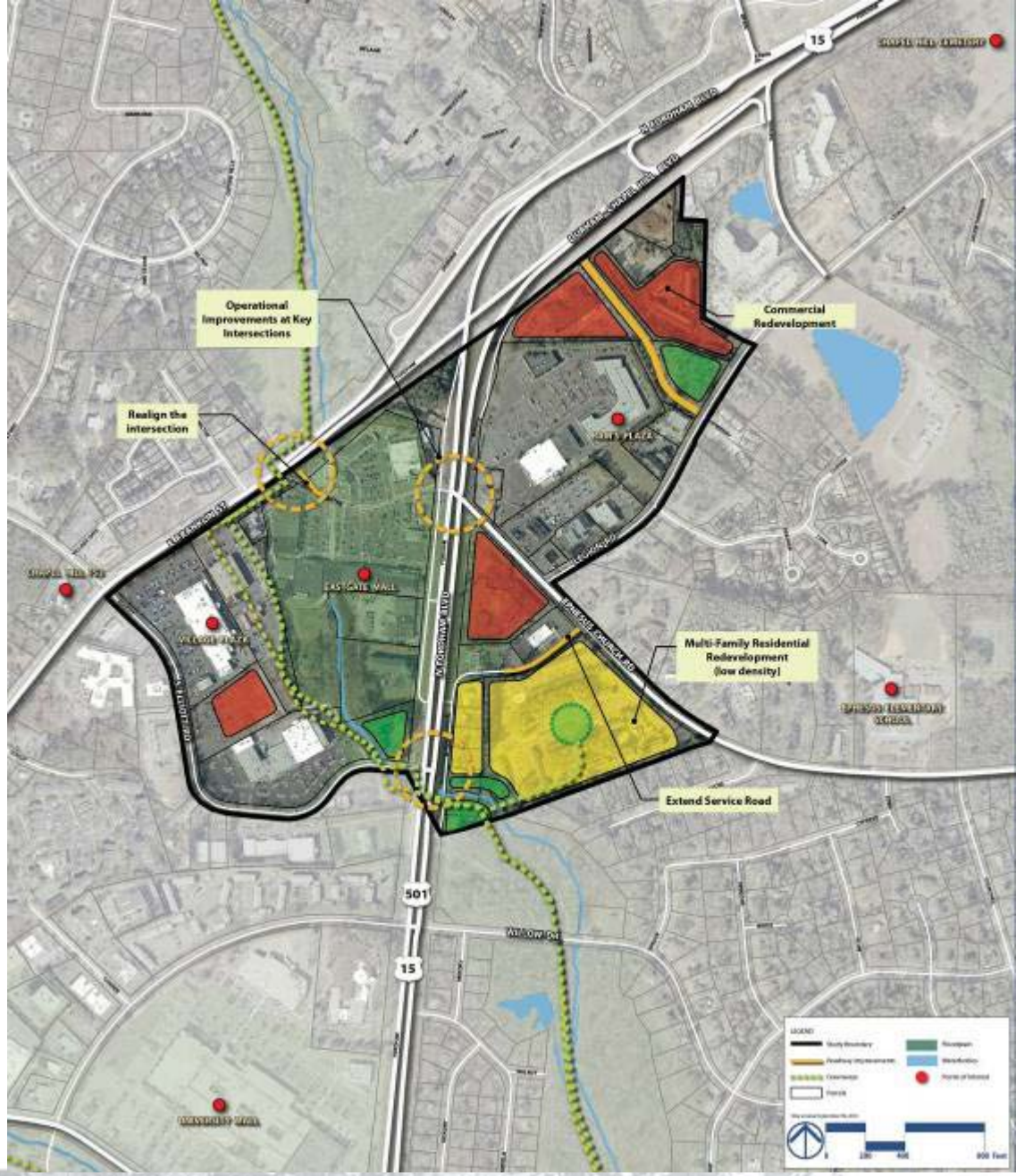
- Highest priority in terms of improving the quality of life within the study area
  - Improve traffic operations/signals/enforcement operations at Fordham-Ephesus Church Rd (4.0)
  - Enhance the area's identity (3.9)
  - Encourage mixed-use development (3.6)
- Biggest obstacle or barrier to implementing improvements in Chapel Hill
  - Excessive development reviews
  - Length and cost of application process

Change-No Change Exercise



Concept Alternatives

Option A – Operational Improvements



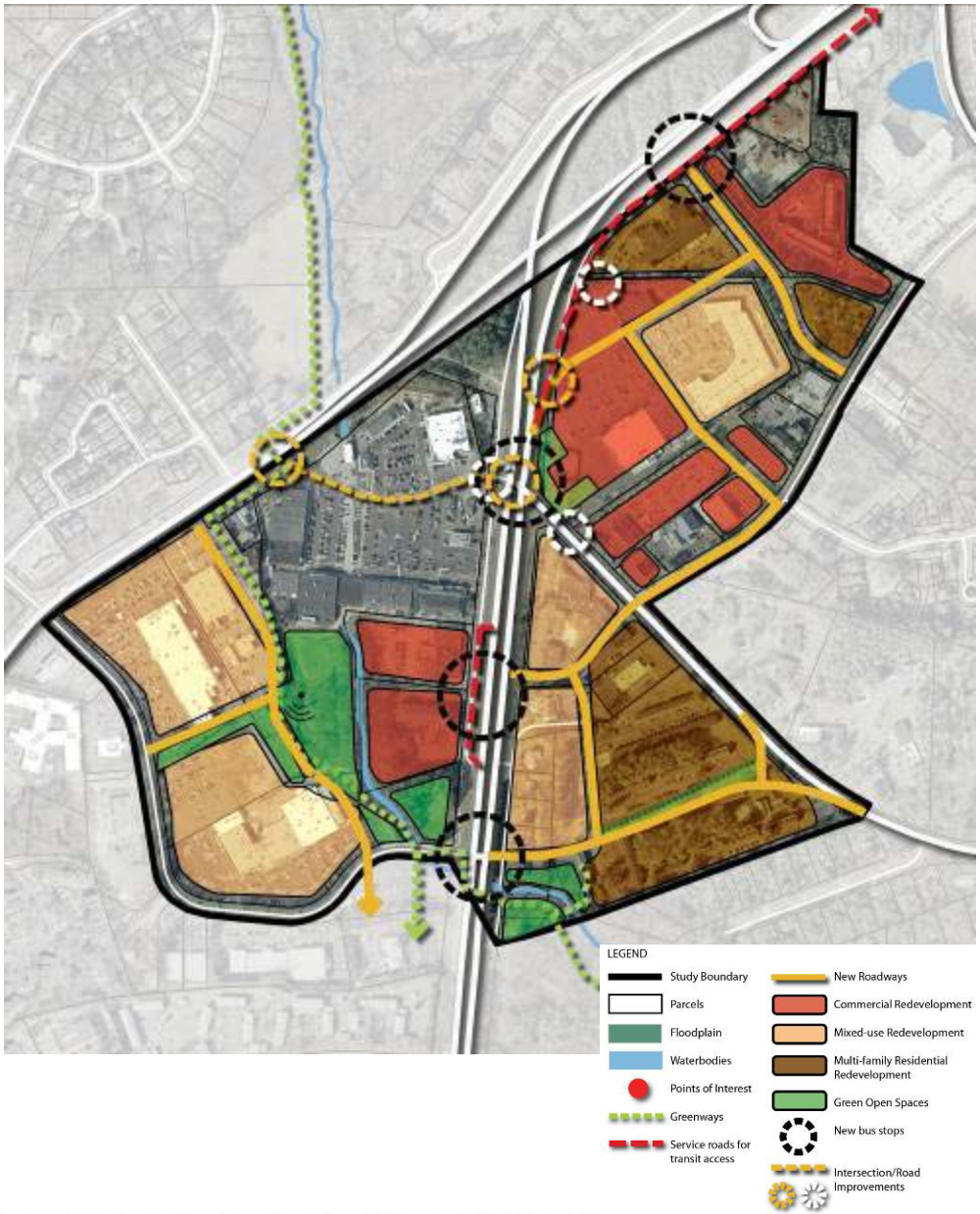
Option B – Street Network Improvements

Option C – Mixed Use Center

Proposed Framework Plan

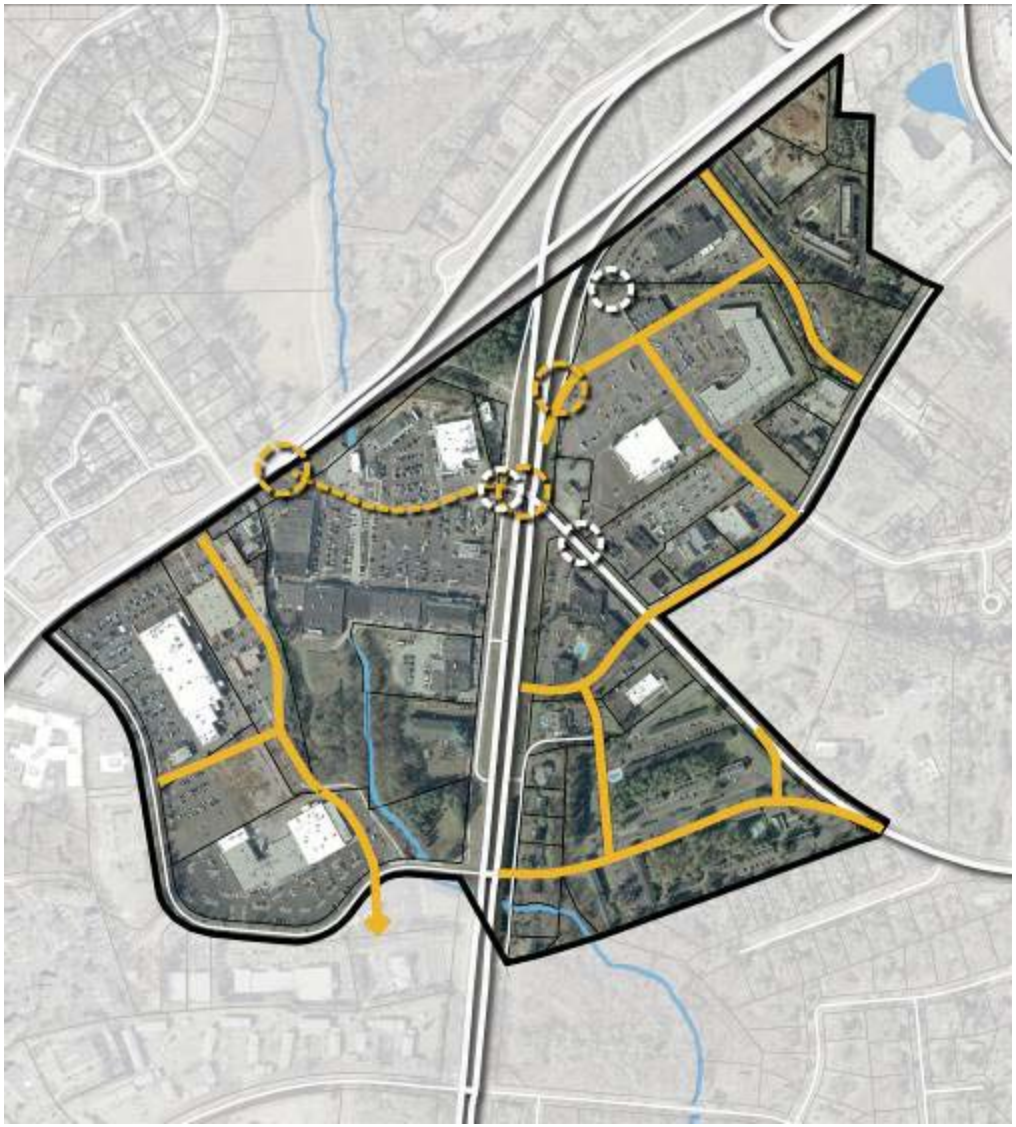
Proposed Framework Plan

- **Increased Connectivity Throughout**
- **Create Greenspace System**
- **Create Mixed-Use Nodes**
- **Multi-Family Residential Development**
- **Increased Transit Presence and Facilities**
- **Roadway Operational Improvements**
- **Flexibility by Quadrant**



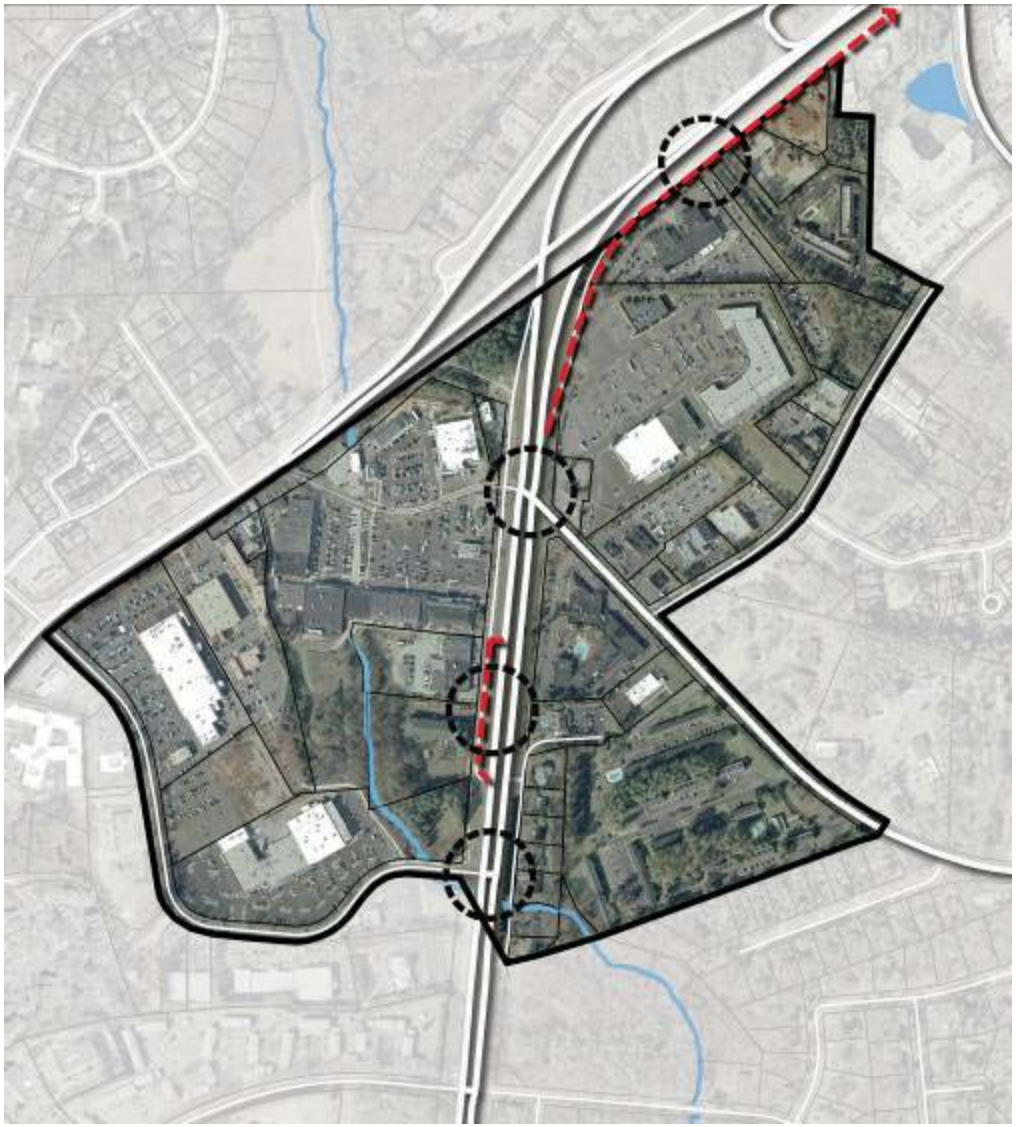
Framework Components: Streets and Intersections

- **Extend Legion Road**
- **Extend South Elliot Road**
- **Long-Term Road Connections in Village Plaza and Ram's Plaza**
- **Intersection Improvements**
- **Operational Improvements**



Framework Components: Transit

- **New Bus Stops**
  - Along Fordham
  - North side of Ram's Plaza
  - West side on service road
- **Plan for longer-term BRT along Fordham**

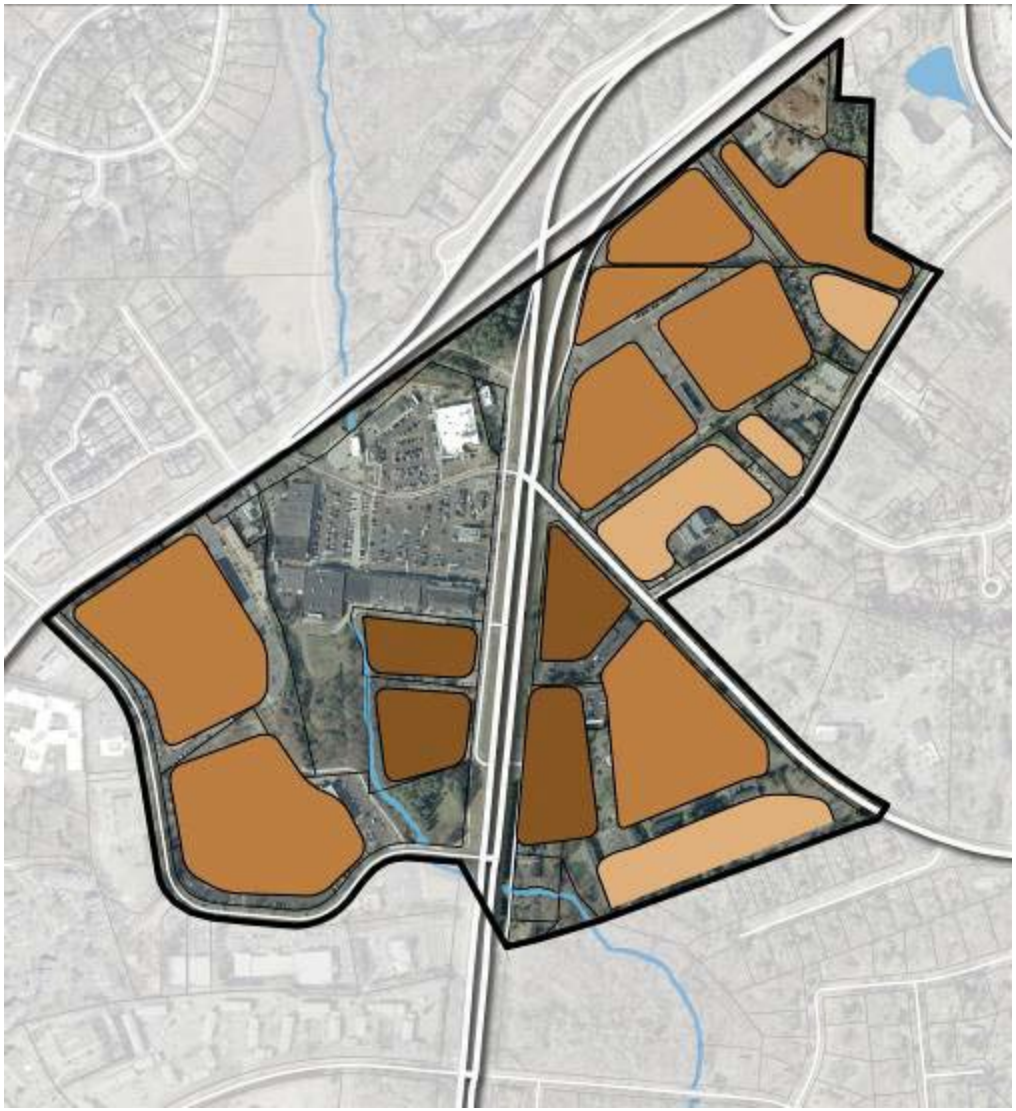


Framework Components: Greenspace

- Potential New Greenway Connections
- More Comprehensive Greenspace System
- Consistent Landscape Treatments
- Public Amphitheater in formalized open space

Framework Components: Density

- **Transitions to neighborhoods**
- **Highest Density along Fordham Blvd.**

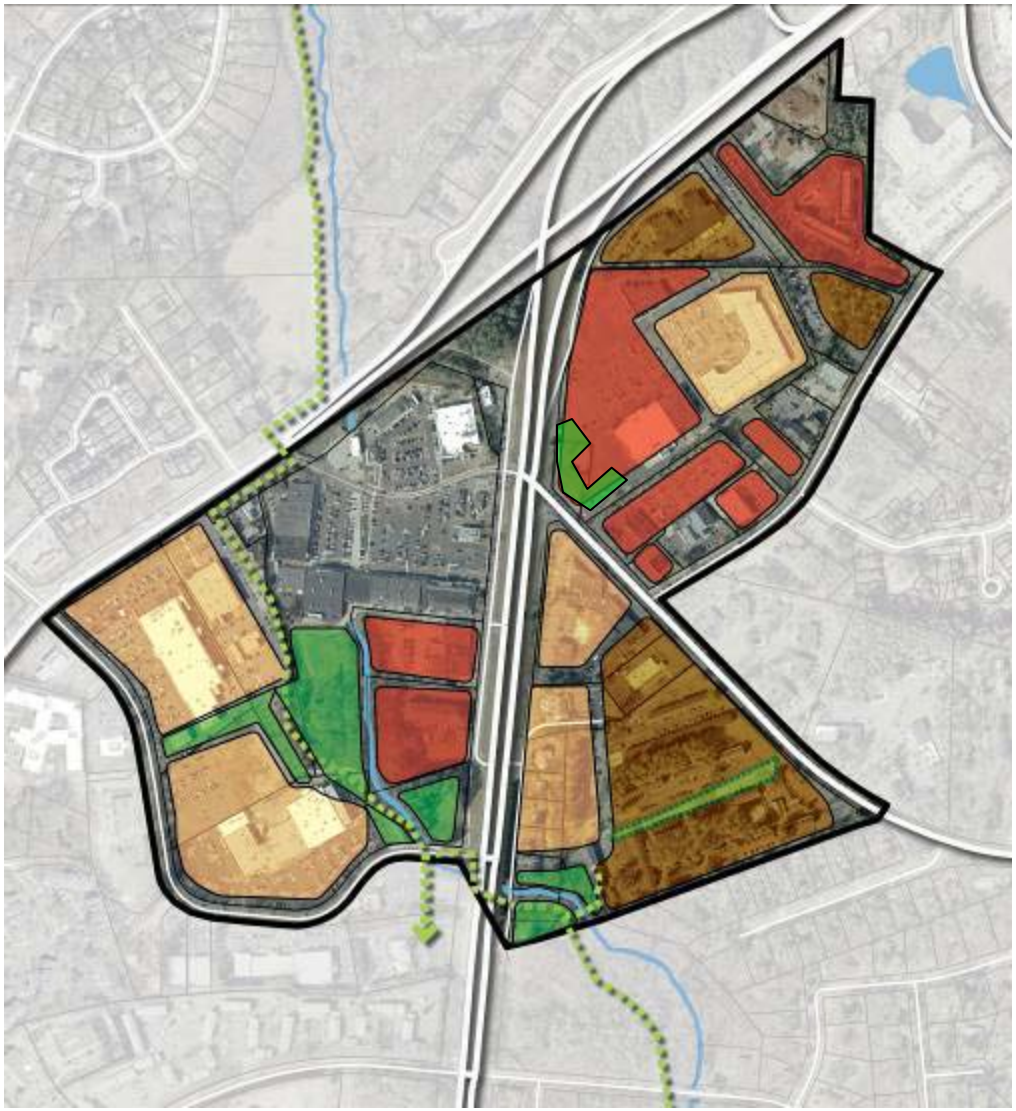


Higher Density  Lower Density

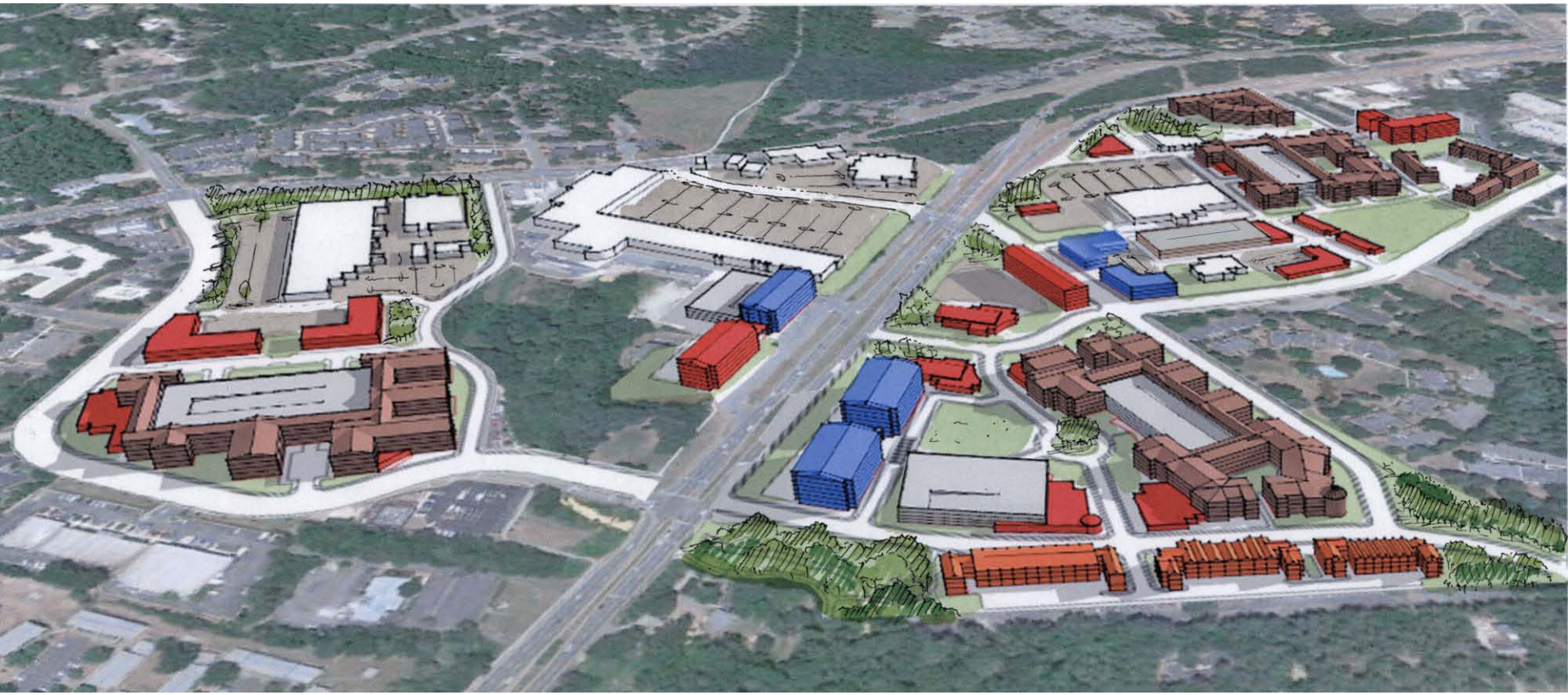
Framework Components: Land Use

- **Mixed-Use Redevelopment in Ram's Plaza, Village Plaza and Colony Apartments**
- **Commercial Redevelopment in Ram's Plaza and Eastgate Shopping Center**
- **Multi-Family Residential Development in Colony Apartments area and Ram's Plaza**

DEVELOPMENT SUMMARY		
RETAIL	+/-320,000	Square Feet
HOTEL	+/- 280,000	Square Feet
OFFICE	+/- 610,000	Square Feet
RESIDENTIAL	+/- 1020	Residential Units



Conceptual 3D Massing



Conceptual Development/Transportation Improvements

Conceptual Development/Transportation Improvements

Conceptual Development/Transportation Improvements

Transportation Assessment

The Balancing Act…

- Maximizing economic development opportunity through optimal access

- Protecting the public with safe and flowing traffic of all modes– vehicular, bicycle and pedestrian, and transit service

- Recognizing constraints of the related properties and roadways

Transportation efforts

Existing conditions

Plan components

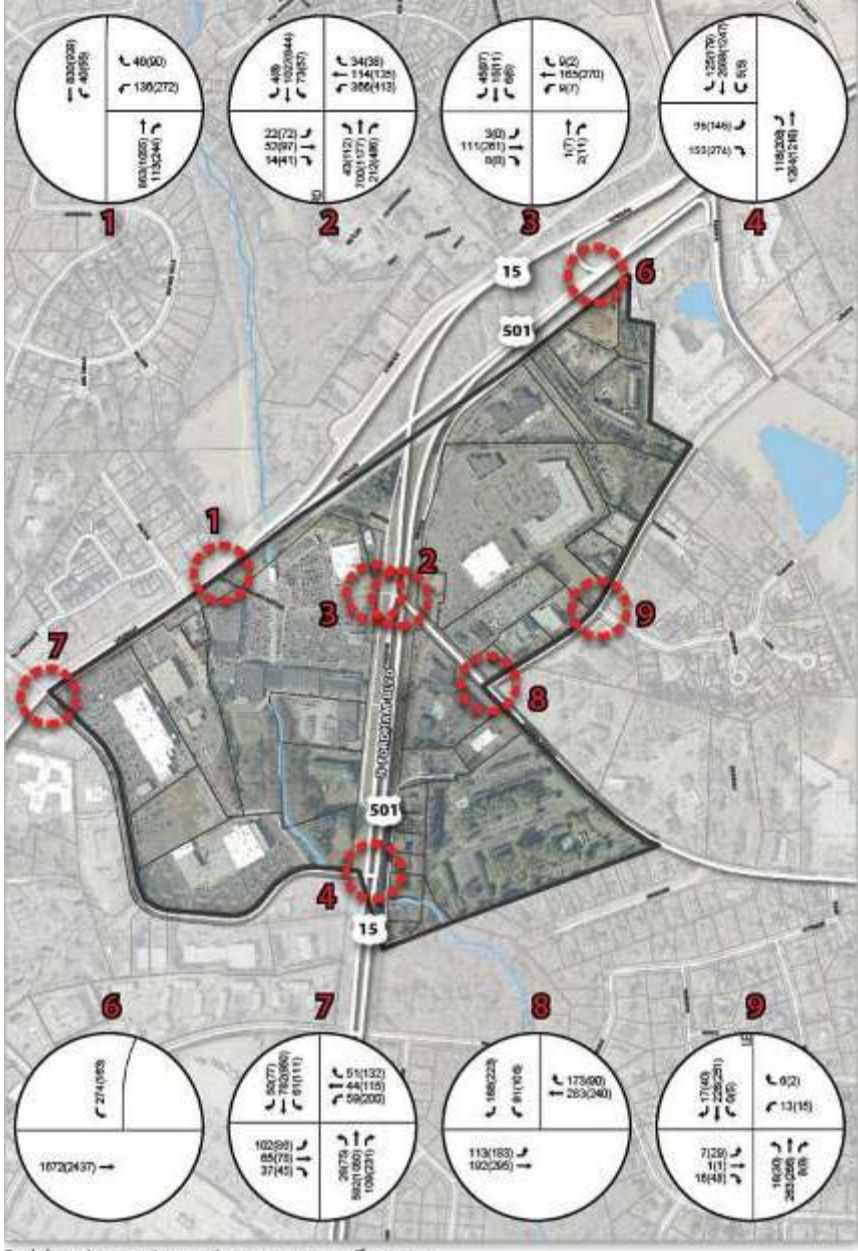
SAP Traffic Analysis

Traffic Analysis results/recommendations

What's next?

Transportation efforts…

- Collected available data
- Collaborated with Staff Team
- Performed peak-hour intersection counts
- Received input at public meetings
- Performed existing peak-hour intersection capacity analyses
- Conducted field observations
- Provided input on Small Area Plan
- Conducted SAP Traffic Analysis



Peak-hour intersection turning movement traffic counts
Legend: XX AM
(XX) PM

Existing Conditions

- Focus on Fordham/Ephesus intersecti
- Connectivity and access- internal and external
- Pedestrian/bicycle accommodations
- Access to transit

- Western Service Road proximity
- Need for alternatives to Ephesus
- NB Fordham queuing from upstream

- Overall intersections- LOS D or better
- Fordham/Ephesus- borderline, LOS F on side street approaches

Plan Components

- **Additional access and connectivity within and between development quadrants**
  - ✓ Vehicles
  - ✓ Pedestrians/bicycles
- **Realignment of Ephesus to Elliott**
  - ✓ Alternative to ECR/Fordham
  - ✓ Crosswalks/ped signals at ECR/Elliott
- **Access limitations**
  - ✓ Western Service Road
  - ✓ Rams' Ephesus entrance
  - ✓ Ephesus through Eastgate
- **Improved transit access**
- **Improvements to coordinated traffic signal system**
- **Directional wayfinding signage**

SAP Traffic Analysis

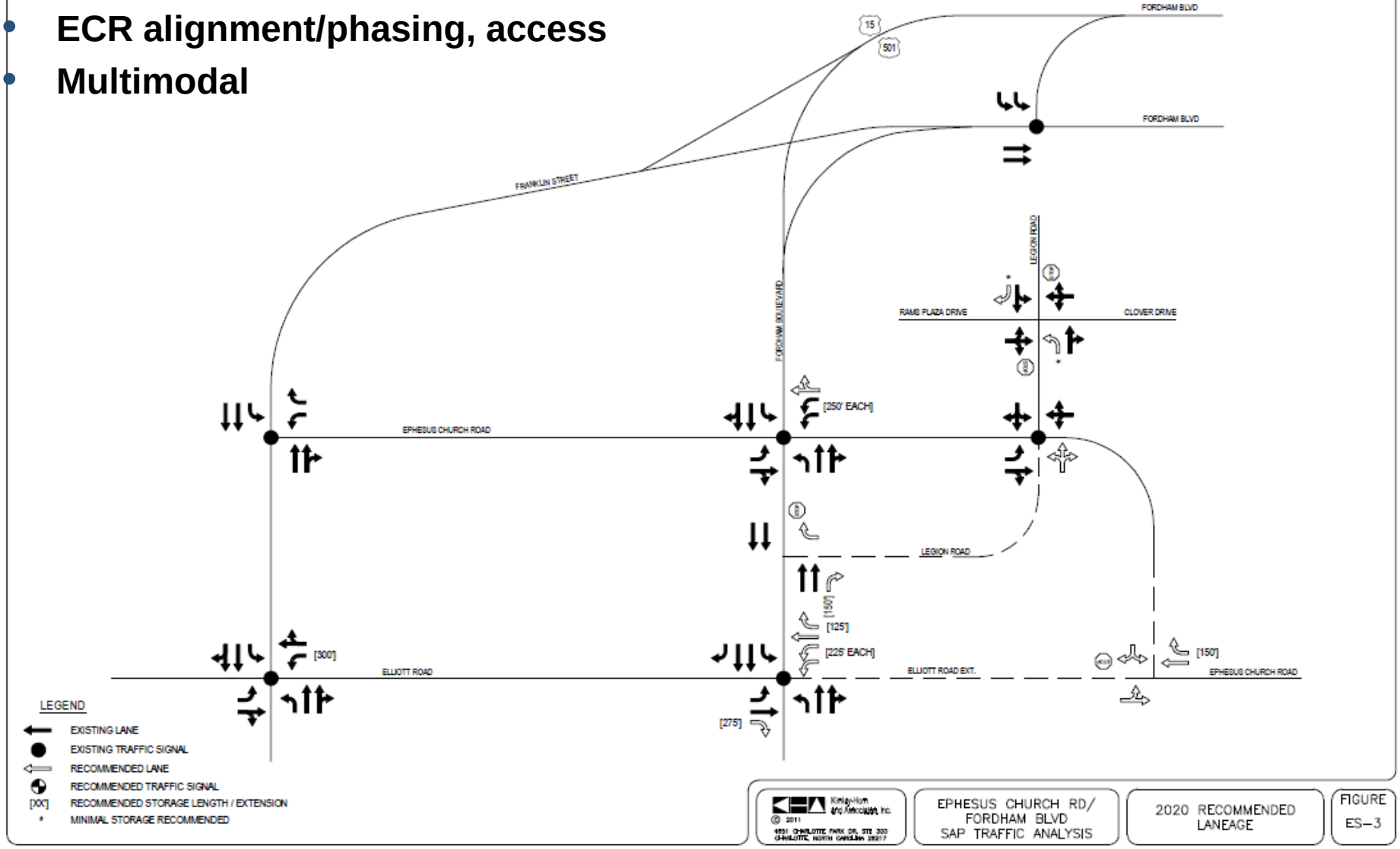
Why?

…establish intersection improvements needed to accommodate existing + new traffic

- **Project future traffic volumes**
  1. Existing traffic (actual)
  2. Annual background growth (%)
  3. Small Area Plan traffic (calculations)
  4. Staff Team input
- **Conduct analyses**
  - ✓ Demand (traffic) vs supply (capacity of road network/geometry)
  - ✓ Intersections during AM and PM peak
  - ✓ Results: LOS and queuing
- **Develop recommendations**
  - ✓ Intersection lane configurations
  - ✓ Lane additions

Traffic Analysis Results/Recommendations

- **Study area: LOS D or better overall during peak hours**
- **ECR/Fordham: Less delay overall + improved side street LOS**
- **ECR alignment/phasing, access**
- **Multimodal**



What's next?

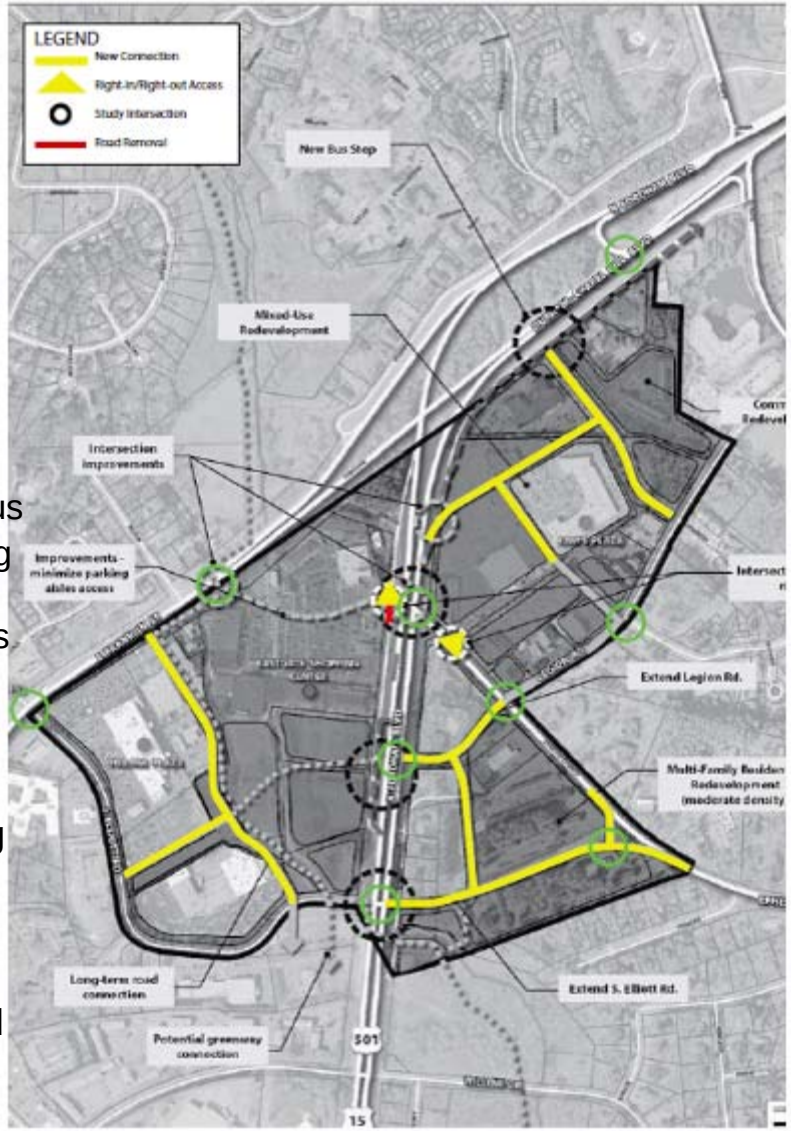
- Develop concept layouts/**functional designs**
- Prepare opinions of probable **construction cost**
- Explore **Rams access opportunities** from Superstreet
- Plan/implement **wayfinding signage**
- Plan/implement **access limitations**
- Perform traffic **signal coordination** improvements

- Perform TIAs for proposed developments
- Field-monitor actual conditions as development occurs

Implementation

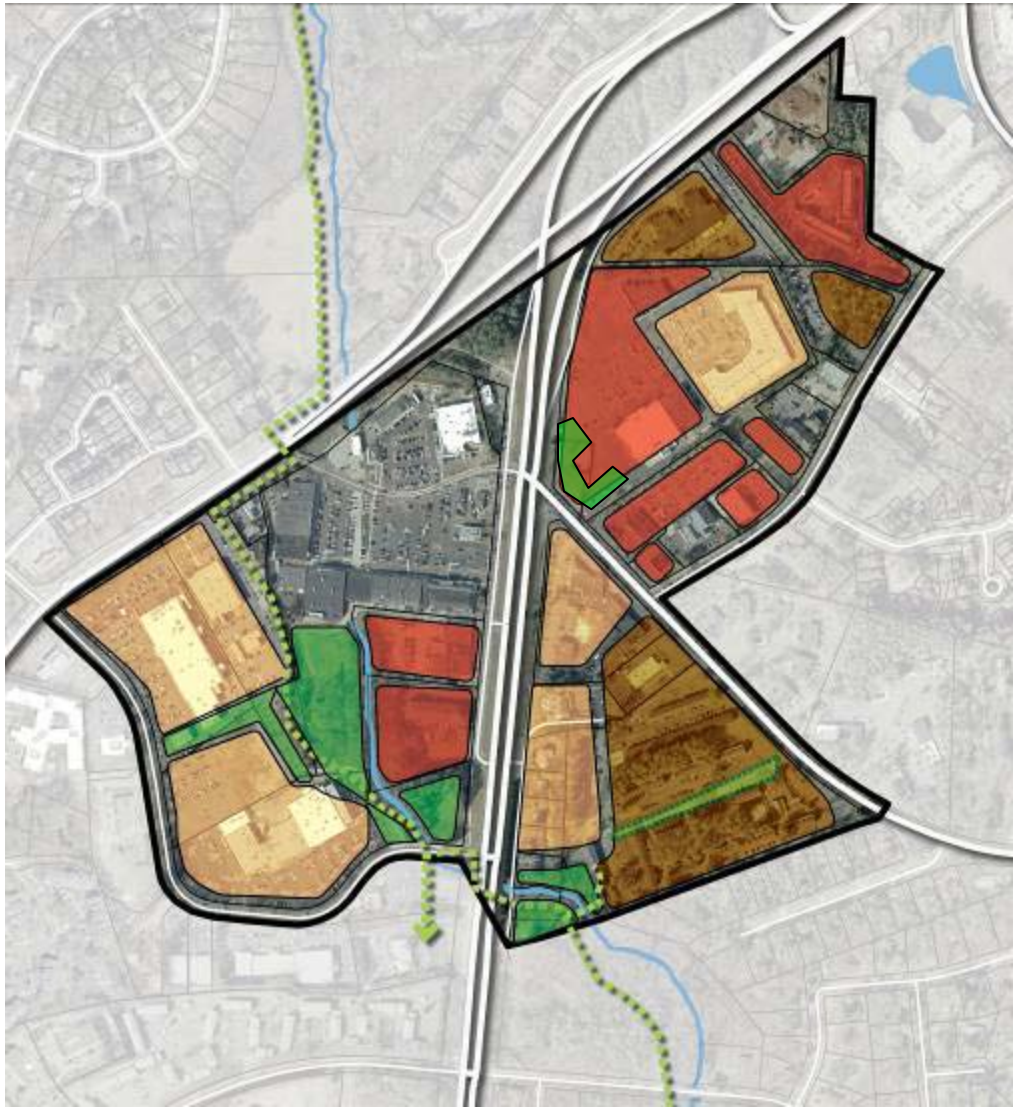
Infrastructure Improvements

- Extension of Elliot Rd across Fordham
- Realignment of Ephesus Church to Elliot Rd extension
- Extension of Legion Road to Fordham Blvd
- Access improvements:
  - Disconnect southern leg of western service road at Ephesus
  - Consolidate number of parking aisles on Ephesus Rd going through Eastgate Mall
  - Limit Ram's Plaza and car dealership entrance on Ephesus to right in and right out
- Connectivity improvements:
  - New road behind Staples and Village Plaza connecting to Elliot Rd
  - New internal roads in Rams Plaza
  - New road by Hampton Inn connecting to Legion Road
  - New road connecting Legion Rd extension to realigned Elliot extension-Ephesus Church Rd



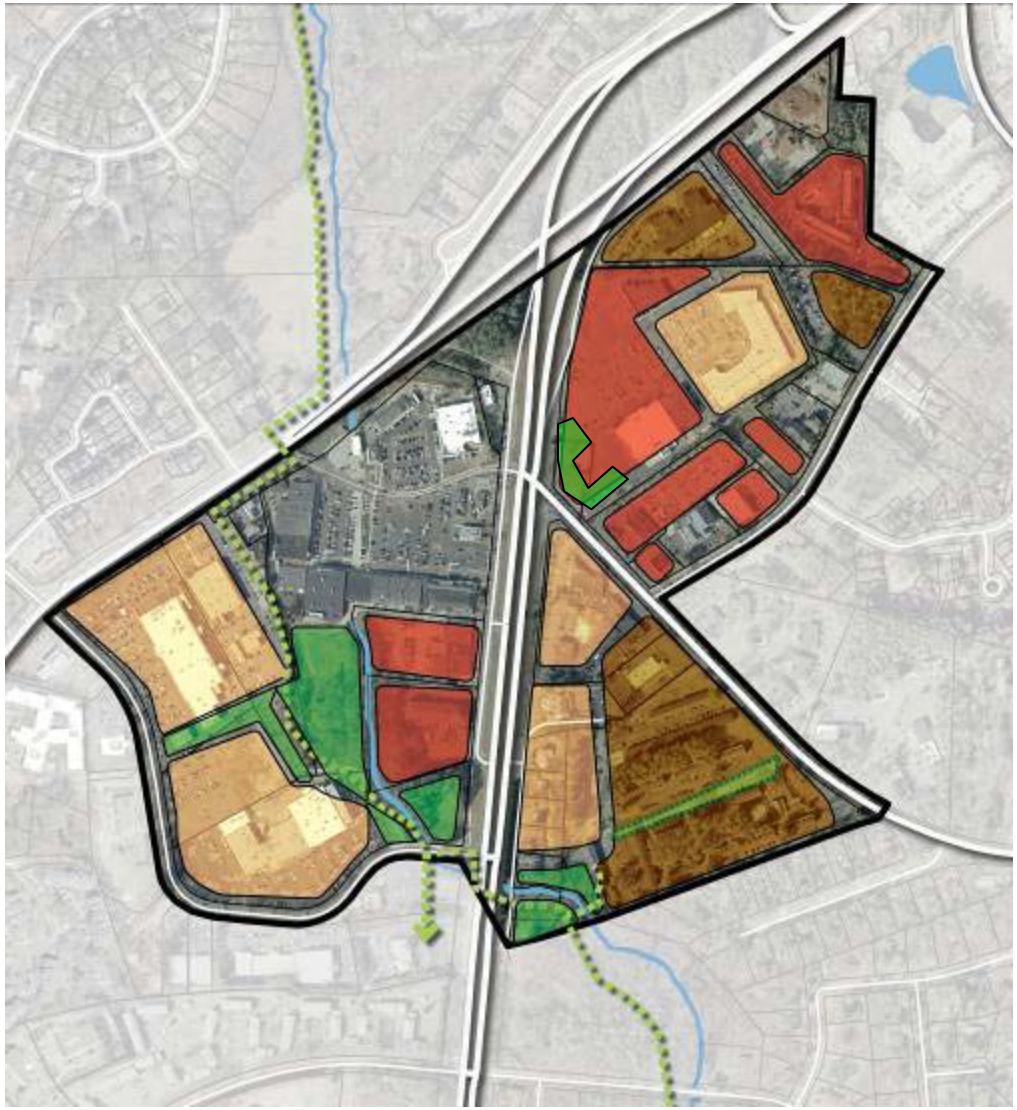
Land Use and Zoning Tools

- Utilize Existing Zoning Categories
- Create a New Redevelopment Zoning District
- Create Development Agreements



Financing Tools

- Municipal Service District
- TIF/Synthetic TIF
- Revenue Bonds
- Loan Guarantees



Implementation: Next Steps

- Work with area stakeholders to implement “low hanging fruit” improvements
- Conduct preliminary engineering on priority projects to establish feasibility and refined cost
- Continue project-by-project negotiations with property owners and development interests to communicate intent of the plan
- Explore the feasibility of public/private financing mechanisms such as MSD, TIF and/or a synthetic TIF
- Work with NCDOT to identify future partnerships on transportation projects of regional significance
- Work with Planning to establish the best mechanism for regulatory changes and the timing associated with it
- Continue ongoing discussions with community citizens as implementation continues


Thank You

Market Analysis Overview

Strengths

- Major Town / Regional intersection
- Existing successful commercial properties
- High traffic counts, good visibility
- One of few commercial areas in Chapel Hill
- High quality retailers

Weaknesses

- Awkward / confusing traffic intersections and circulation
- Poor accessibility makes some sub-areas undesirable to tenants
- Poor visibility for properties off of main streets (i.e. Hampton Inn)

Opportunities

- Chapel Hill is desirable market
- Desire of land owners / developers to re-develop certain pieces of property

Threats

- Accessibility
- Entitlement Process
- Land acquisition / assembly
- Development competition from Durham (South Square, Patterson Place, etc.)
- Environmental Constraints

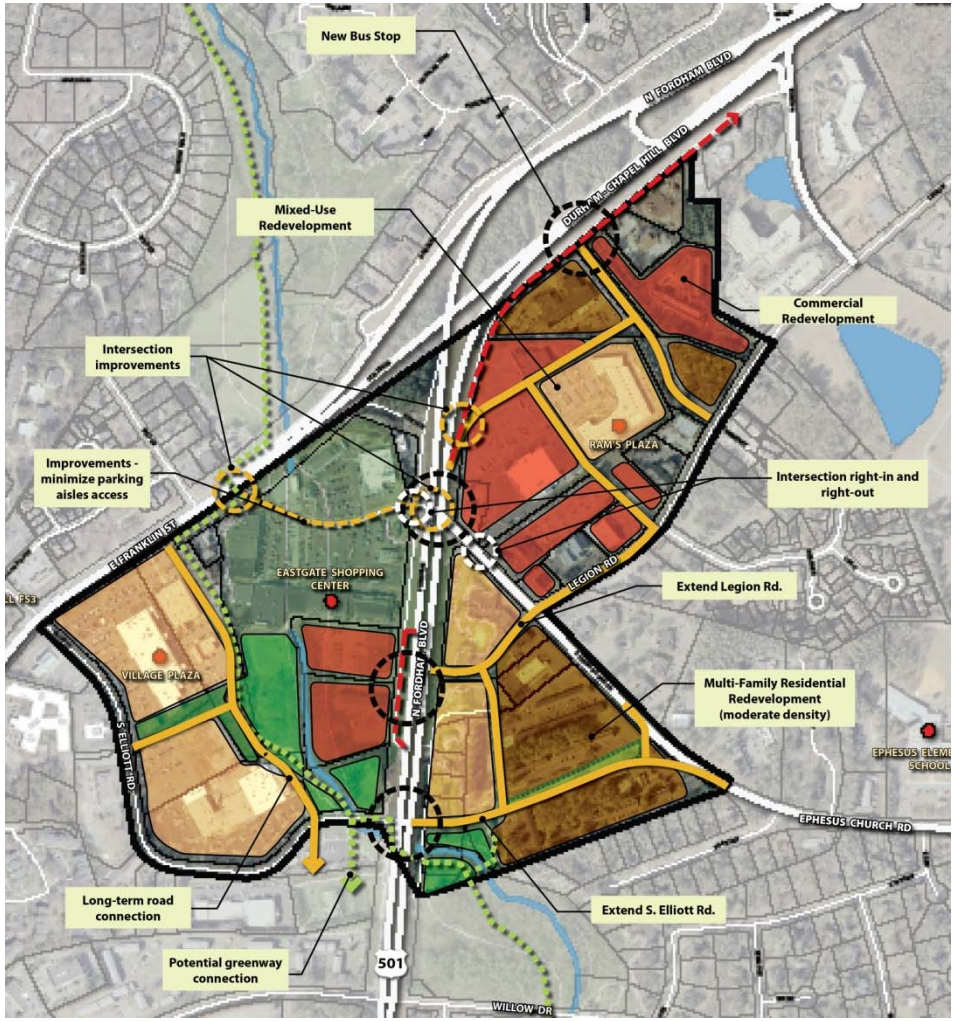
Summary of Market Demand

- **RETAIL**
  - Retail Leakage in Chapel Hill = 400,000 – 700,000 sq. ft. of retail

- **RESIDENTIAL**
  - Metro housing market projected to add 30,000 households in next 10 years (State of North Carolina). Chapel Hill is extremely desirable housing market, but costly.
  - Opportunity for many types of housing, with particular needs for housing affordable to single professionals, working families, middle-market families and general low-income households.

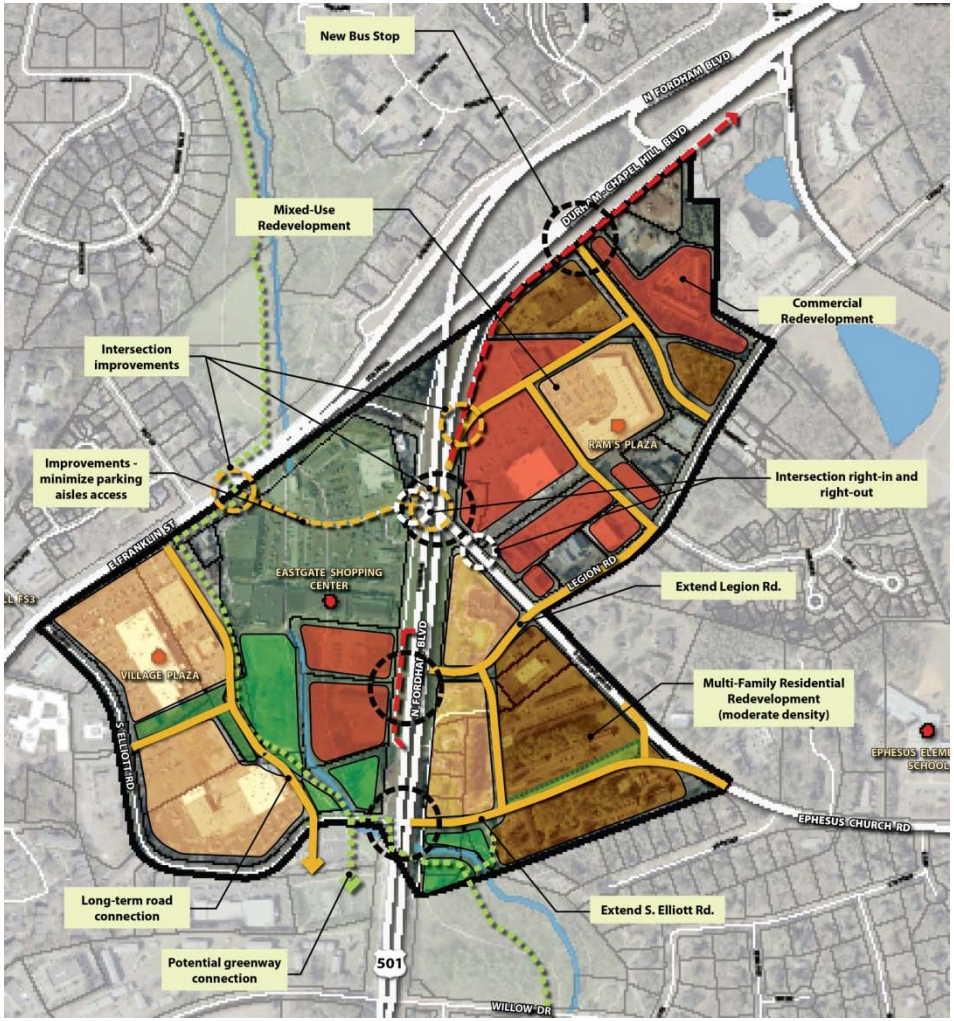
- **OFFICE**
  - Metro area projected to add 25,000 jobs by 2014 (Moody's Economy.com). Chapel Hill is strong office market, but previously approved projects may absorb most demand for the next decade.

Market Analysis Overview



- From a pure market perspective, there is strong short and long-term demand across real estate markets
- This, combined with location advantages, allows opportunities for higher intensities of use, including mixed-use and higher densities.

Market Analysis Overview



- Excellent opportunity for housing that is affordable for several different market segments
- Opportunities to re-configure existing retail centers to make them more viable, while using new retail space as an amenity to leverage others types of development (i.e. office, housing, hotels)
- New connections solve site access problems, increasing viability for entire sub-area

Implementation: Investment/Operating Tools

- **Municipal Services District**
  - Provides funding for the implementation and maintenance of roads, utilities and other infrastructure within a designated area.
  - a special taxation district, similar to those that exist in Downtown Chapel Hill
  - for new construction, MSD revenue can be used to support the payments on a bond issuance.

- **Tax Increment Finance (TIF) District / Project Development Financing**
  - Means for local governments to encourage economic development that would not occur without assistance from the public sector.
  - TIF districts allows bond debt from public investments in infrastructure and other public facilities development to be secured by the increase in tax revenue anticipated from private development spurred by those public investments.
  - Some communities in North Carolina use “synthetic” TIFs.
    - unofficial project development financing - does not officially establish the mechanism to collect the incremental revenues, such as in TIF.
    - local municipalities needs to identify and allocate tax increment from a project to support the public investment.

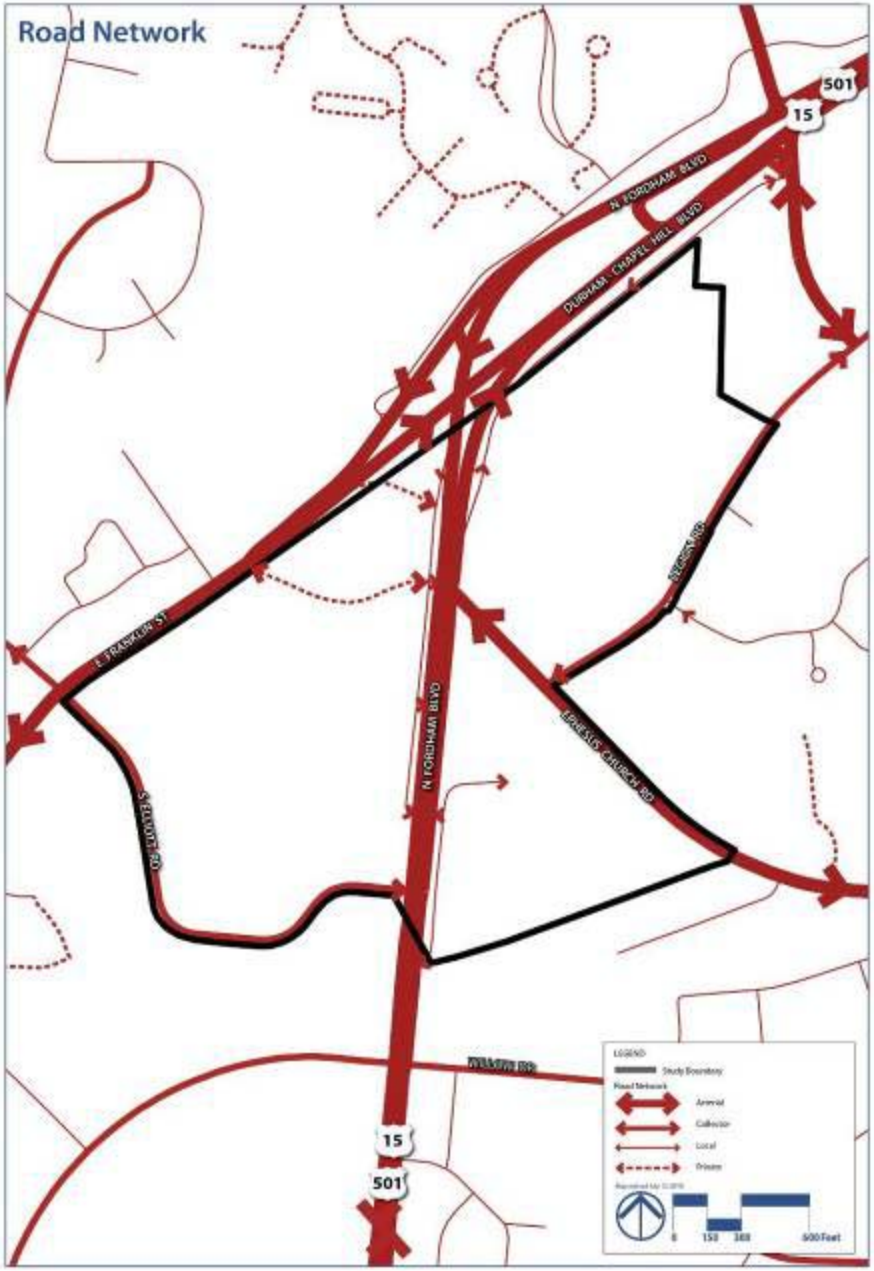
Implementation: Investment/Operating Tools

Revenue Bonds

- special type of municipal bond
- repayment primarily from revenues generated by a specific project, as opposed to tax.
- do not burden other revenue sources within a municipality, such as tax revenue.
- often used to finance water and wastewater utilities, toll roads, airports, and power plants.
- Any government agency or fund that generates operating revenues (like a municipal services district) can issue revenue bonds.
- In regard to private development, revenue bonds are often used for the finance of parking garages

Loan Guarantees

- provide project financing without specifically providing funds to a project, or issuing a municipal bond.
- guaranteeing a conventional loan from a bank, leaving a private developer to pay for the required infrastructure improvements.
- Loans can be guaranteed through general funds, but also TIF or MSD funds.


Road Network
501
15
N. FORDHAM BLVD
DURHAM - CHAPEL HILL BLVD
E. FRANKLIN ST
S. ELLIOTT RD
N. FORDHAM BLVD
EPHESUS CHURCH RD
WILLOW DR
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LEGEND
Study Boundary
Road Network
Arterial
Collector
Local
Private
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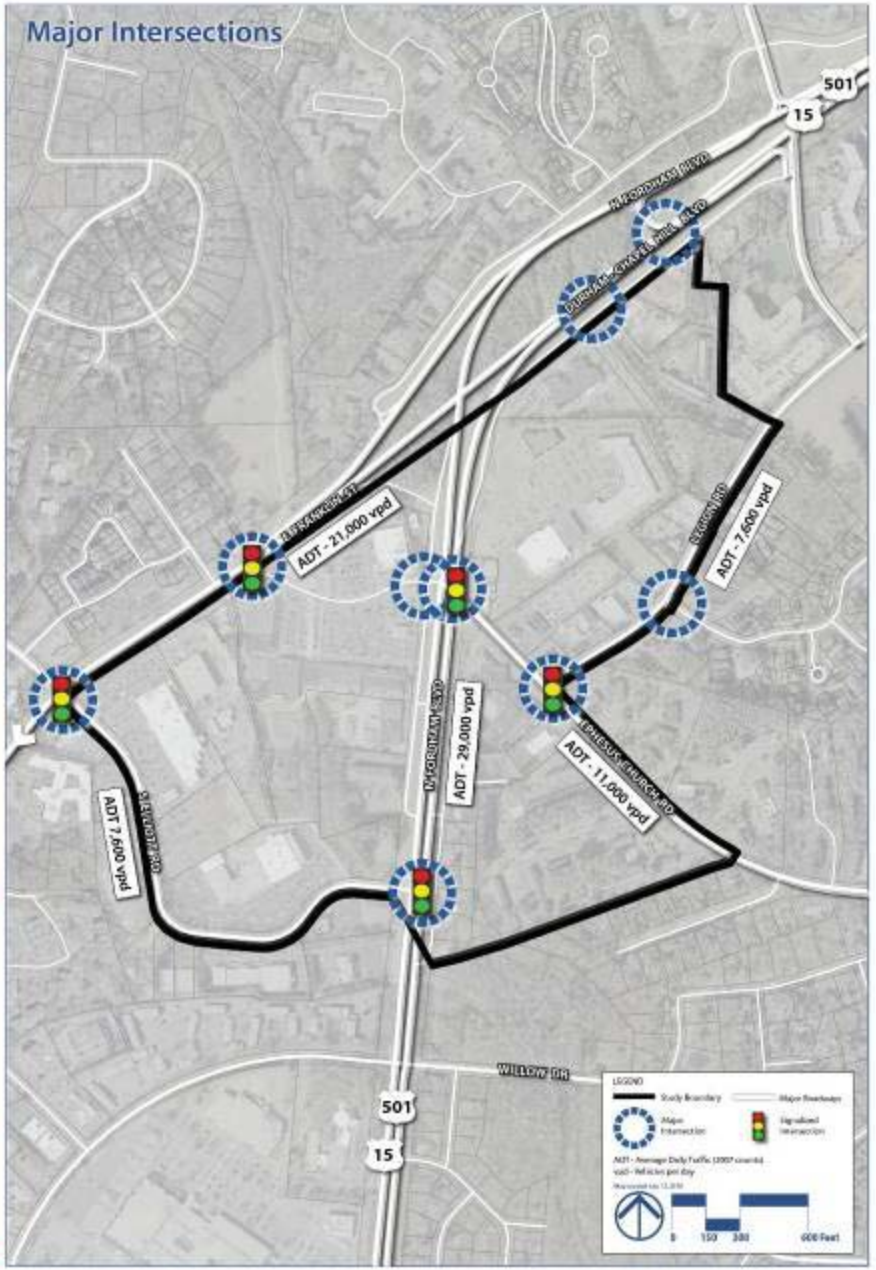
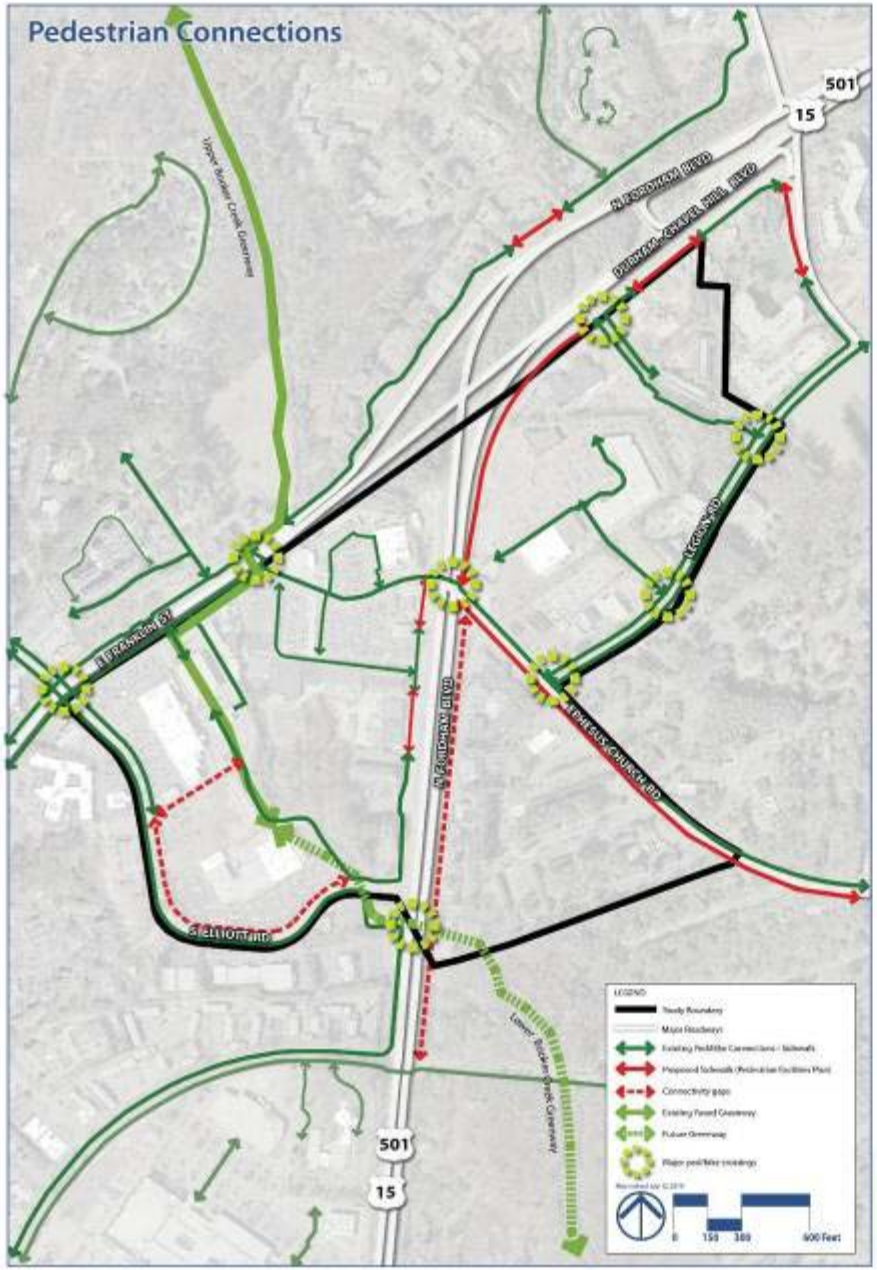
600 Feet


Major Intersections
501
15
N. FORDHAM BLVD
DURHAM - CHAPEL HILL BLVD
E. FRANKLIN ST
ADT - 21,000 vpd
ADT - 7,600 vpd
ADT - 29,000 vpd
EPHESUS CHURCH RD
ADT - 11,000 vpd
ADT 7,600 vpd
S. ELLIOTT RD
WILLOW DR
501
15
LEGEND
Study Boundary
Major Intersection
0
150
300
600 Feet


Pedestrian Connections
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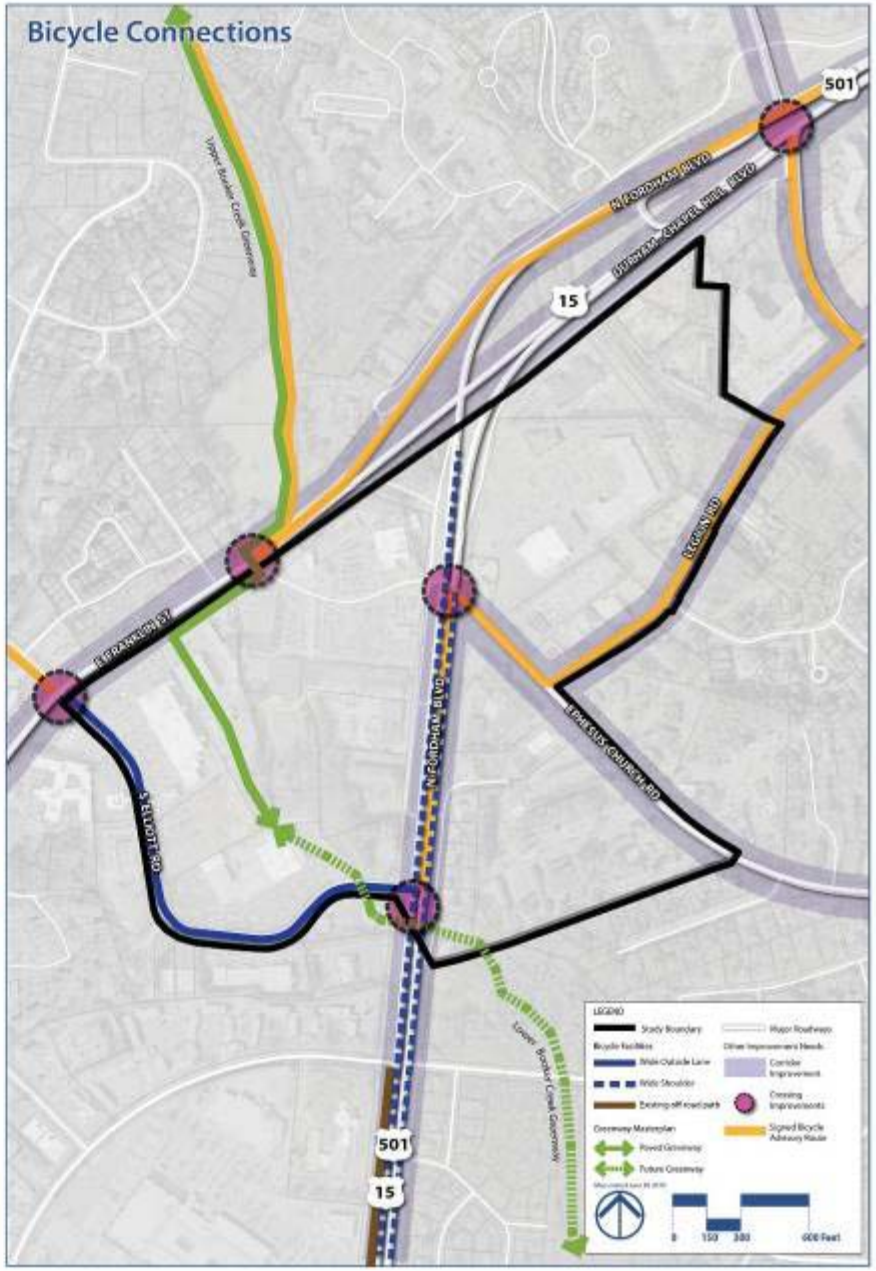
N FORDHAM BLVD
DURHAM-CHAPEL HILL BLVD
LEGION RD
E FRANKLIN ST
MAIN ST
EPHESUS CHURCH RD
S ELLIOTT RD
Lower Booker Creek Greenway


Bicycle Connections
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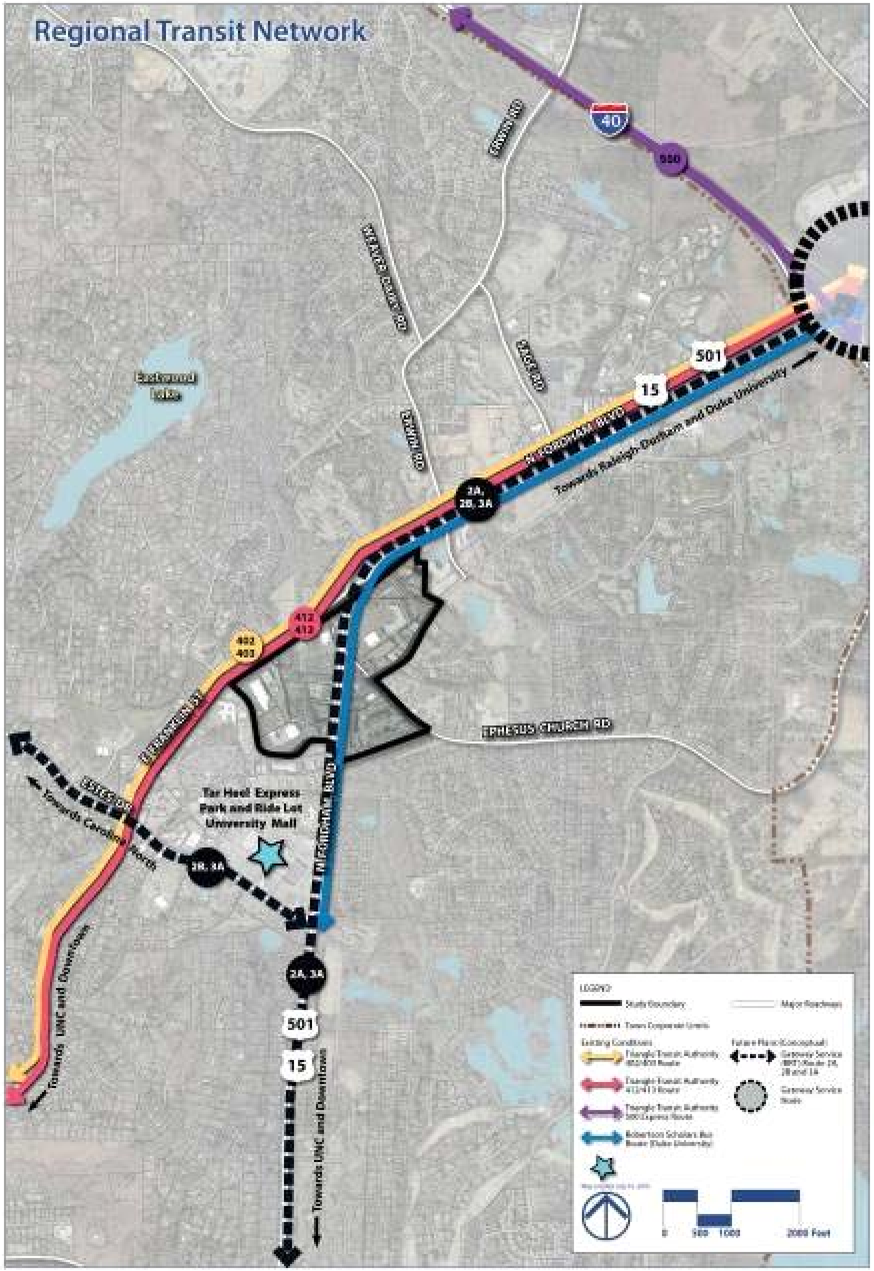
DURHAM-CHAPEL HILL BLVD
LEGION RD
E FRANKLIN ST
S ELLIOTT RD
EPHESUS CHURCH RD
Lower Booker Creek Greenway


Regional Transit Network
N FORDHAM BLVD
Towards Raleigh-Durham and Duke University
EPHESUS CHURCH RD
Tar Heel Express Park and Ride Lot University Mall
Towards Carrboro North
Towards UNC and Downtown
501
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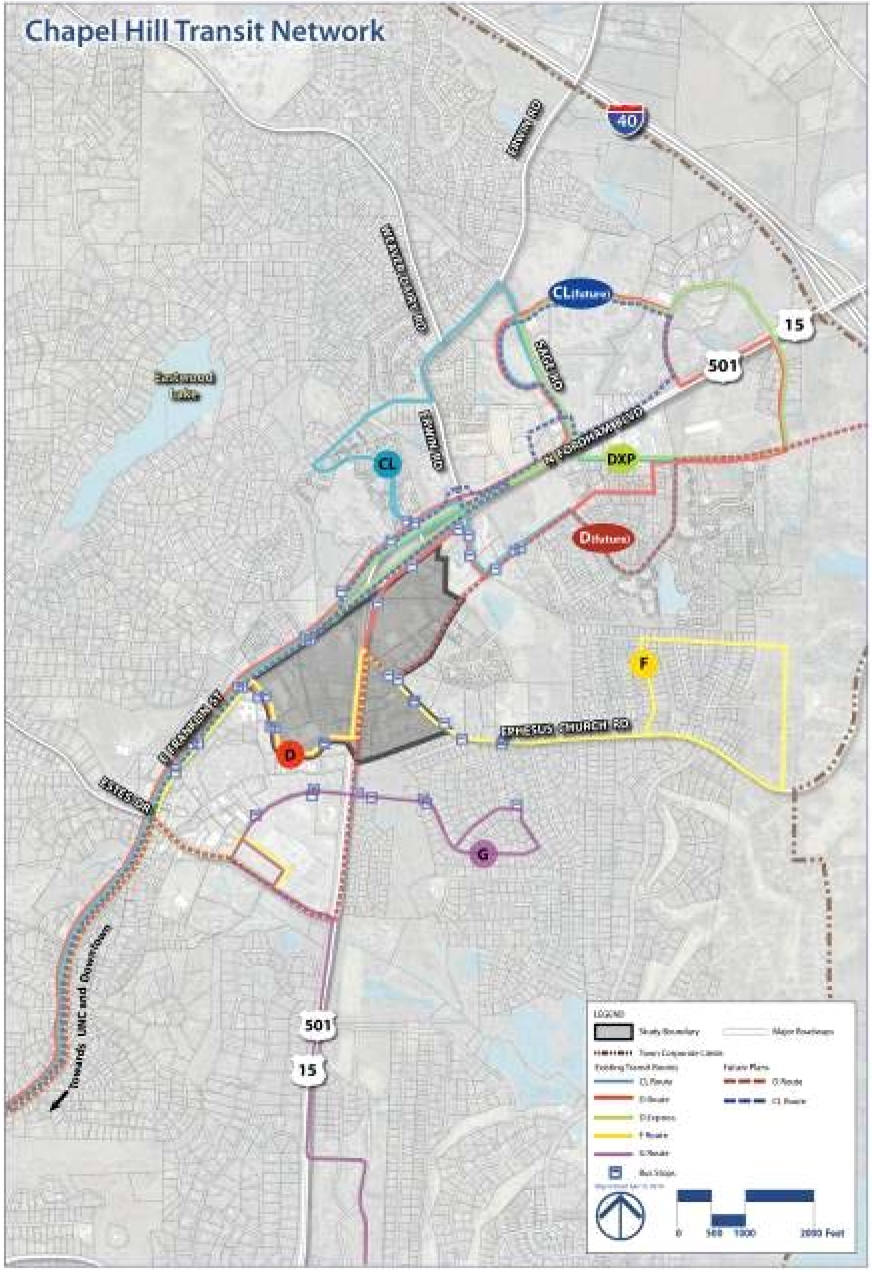
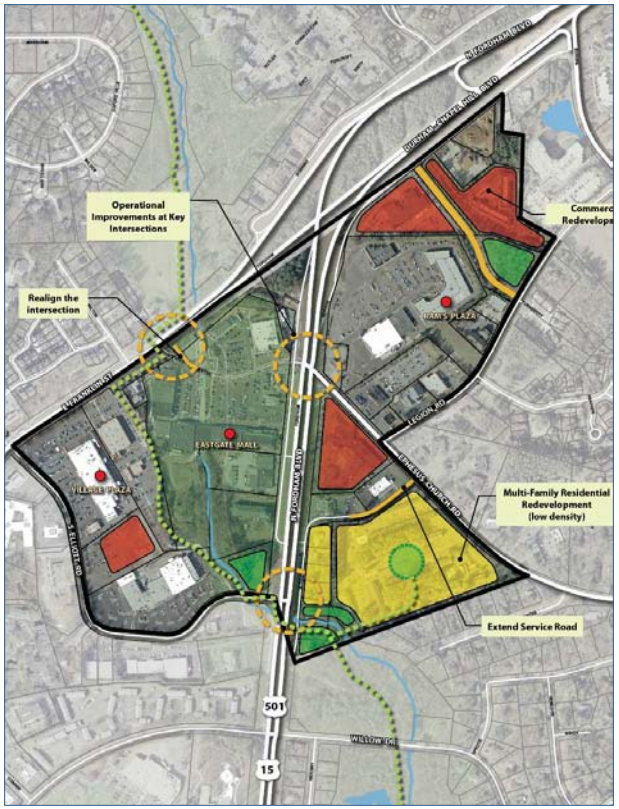
40


Chapel Hill Transit Network
N FORDHAM BLVD
EPHESUS CHURCH RD
CL
CL(future)
DXP
D(future)
D
F
G
Towards UNC and Downtown
501
15
40

Development Frameworks Comparison

OPTION		Operational Improvements	New Streets	Transit Improvements	Conceptual Development	Level of Public Investment
A		• Improve intersections along Fordham Blvd, in study area. • Realign intersection at Eastgate Mall and E. Franklin Street to create a more sensible 90° intersection of streets. • Explore dedicated turn lanes where possible. • Analyze signal timing.	• Create new road through Hampton Inn property for commercial to front along and increase connectivity to the north and south.	Route improvements and dedicated bus shelters and pull-offs.	Option A - $75-100M Commercial Sq. Ft. ~200,000-260,000 Mixed-use N/A Residential Units ~180-240 Open Space ~6 acres	Minimal Option A includes the least amount of land acquisition, for development and new roadways and is the least aggressive in public transportation and increased density.
B		• Improve intersections along Fordham Blvd. within the study boundary, as well as near University Mall • Realign intersection at Eastgate Mall and E. Franklin Street to create a more sensible 90° intersection of streets. • Explore dedicated turn lanes where possible. • Analyze signal timing.	• Create infrastructural framework within Ram's Plaza for increased connectivity and improved development potential. • Realign Ephesus Church Rd. intersection and extend Ephesus to E. Franklin St. through Eastgate Mall. • Extend S. Elliot Rd. to Ephesus. • Extend service road to University Mall.	Position service roads as ped/bike and bus transit ways.	Option B - $130-170M Commercial Sq. Ft. ~300,000-360,000 Mixed-use ~100,000-200,000 sf com. Residential Units ~250-400 Open Space ~6 acres	Moderate Option B creates a much more connected framework and proposes much more aggressive redevelopment strategy, housing density is bumped up to increase critical mass.
C		• Improve intersections along Fordham Blvd. within the study boundary, as well as near University Mall • Realign intersection at Eastgate Mall and E. Franklin Street to create a more sensible 90° intersection of streets. • Explore dedicated turn lanes where possible. • Analyze signal timing.	• Formalized road network within Ram's Plaza, realign Ephesus Church Road. • Realign Legion Rd. Extend S. Elliot Road. • New road network around Village Plaza connecting E. Franklin St. and S. Elliot Rd.	Regional Light Rail Transit or Bus Rapid Transit along a widened N. Fordham Blvd.	Option C - $200-300M Commercial Sq. Ft. ~100,000-125,000 Mixed-use ~350,000-500,000 sf com. Residential Units ~400-900 Open Space ~9 acres	Maximum Option C includes options for a very aggressive public transit system as well as the most density within the study area.

Framework Plans



Option A

Option B

Option C