



# **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

The background of the slide is a grayscale aerial photograph of a city. A river flows through the center of the city, with several bridges crossing it. The city is densely packed with buildings and streets. At the bottom of the image, there is a hand-drawn sketch of a city street scene, showing buildings, trees, and a street layout.

**Project Overview**

**Existing Physical Conditions**

**Concept Alternatives**

**Proposed Framework Plan**

**Transportation Assessment**

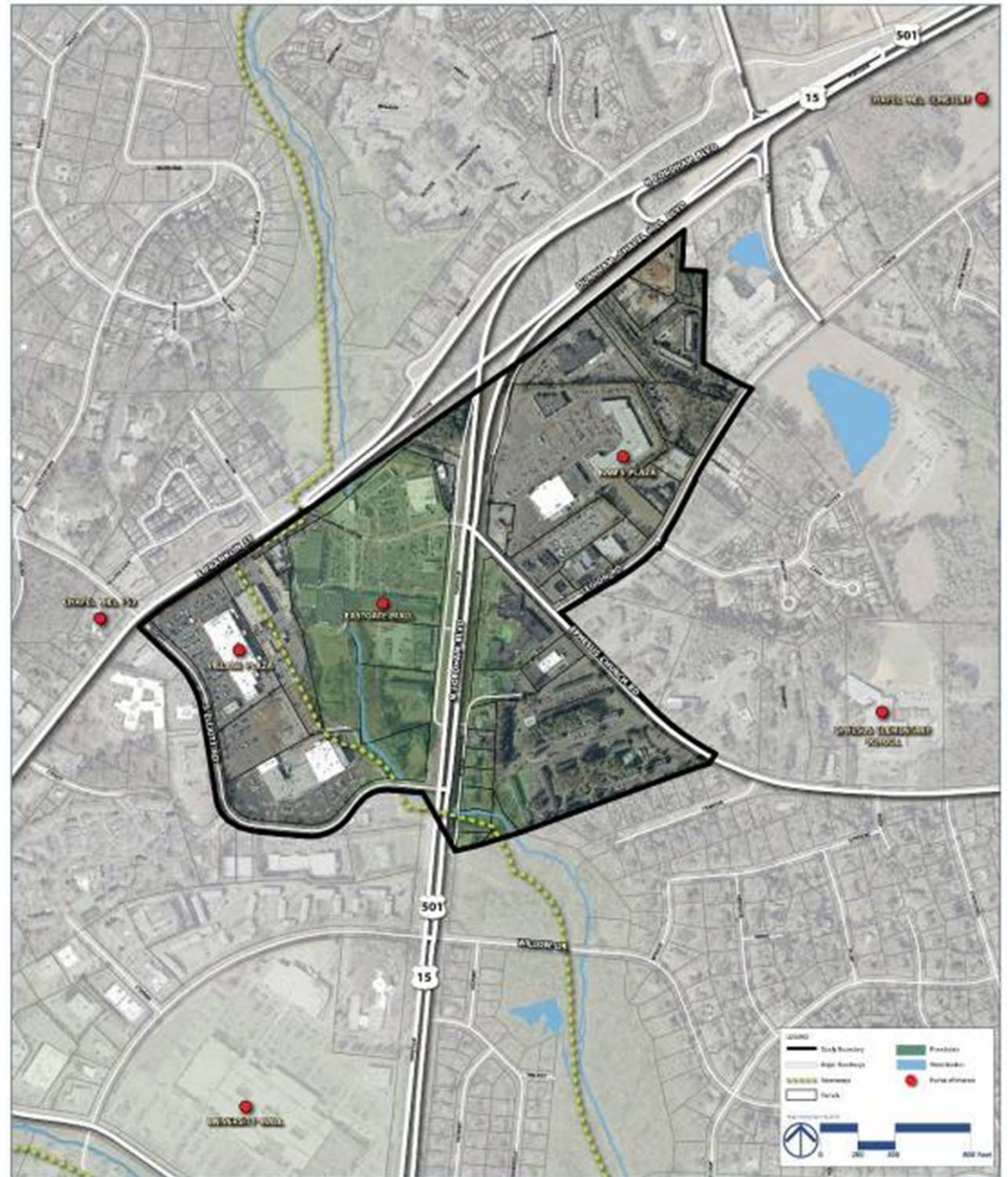
**Implementation**



An aerial photograph of a city, likely a university campus, with a sketch overlay at the bottom. The sketch shows buildings, trees, and streets in a more detailed, artistic style. The text "Project Overview" is centered in the middle of the image.

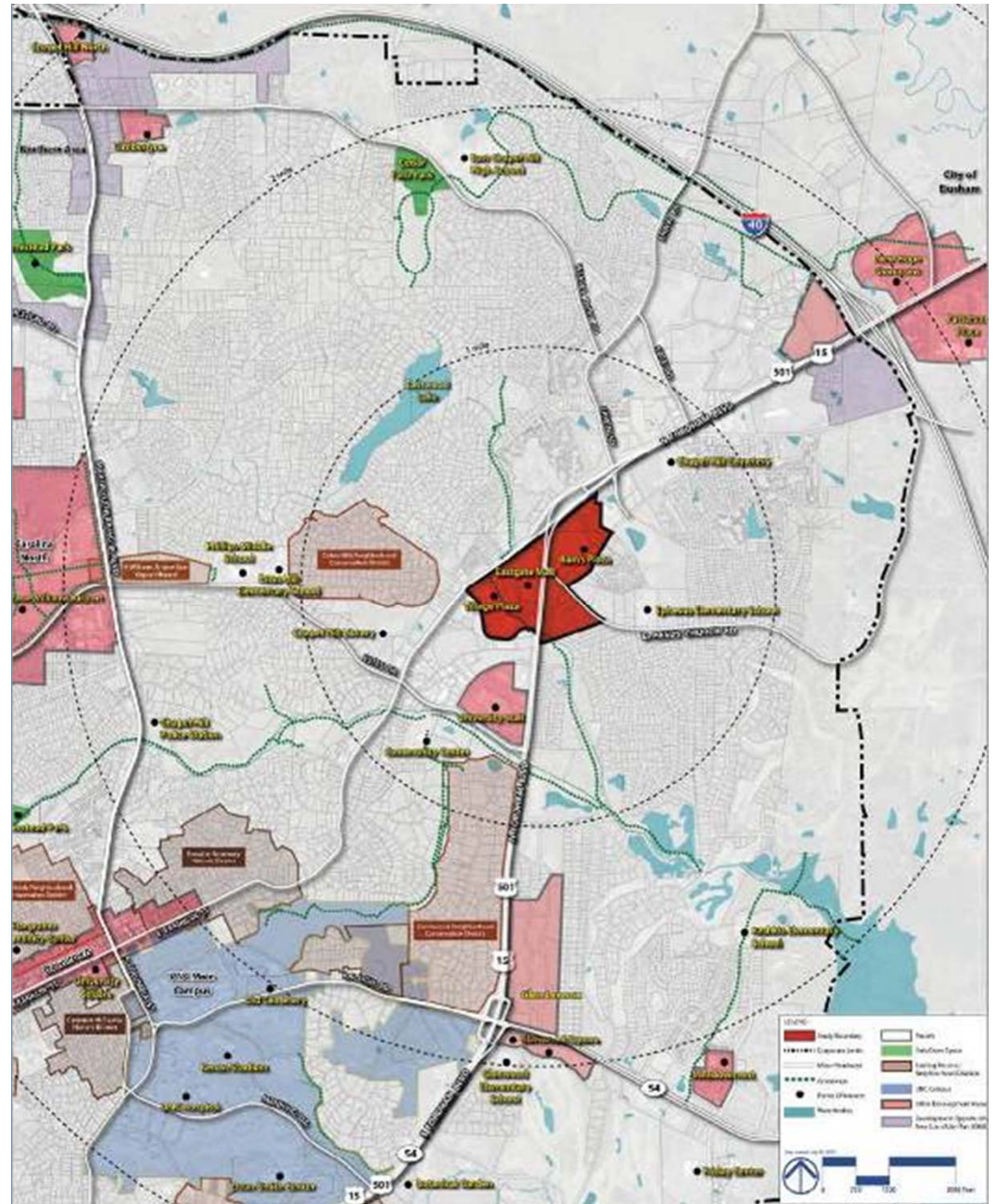
# Project Overview

# Study Area

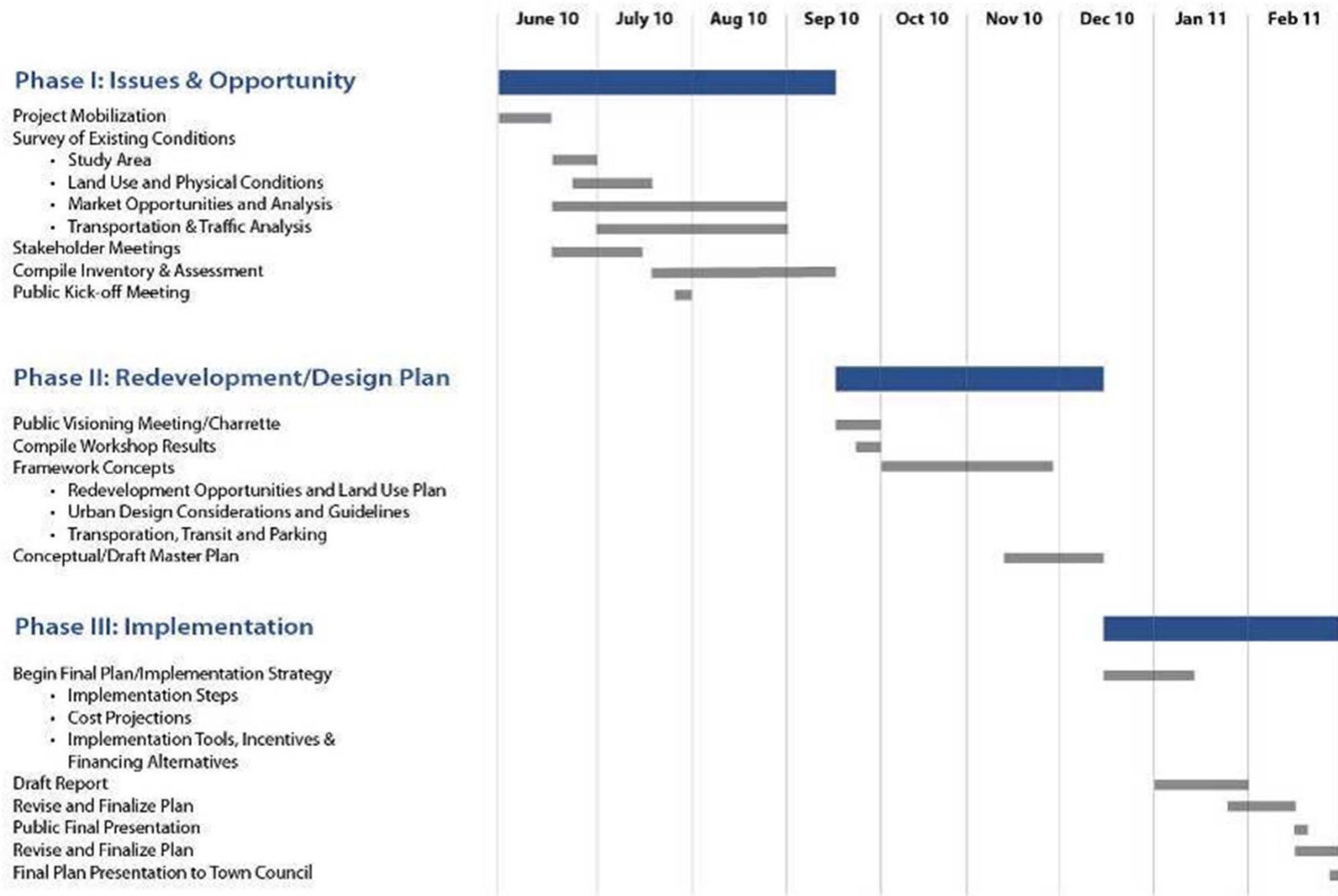




# Context Map



# Planning Process/Schedule

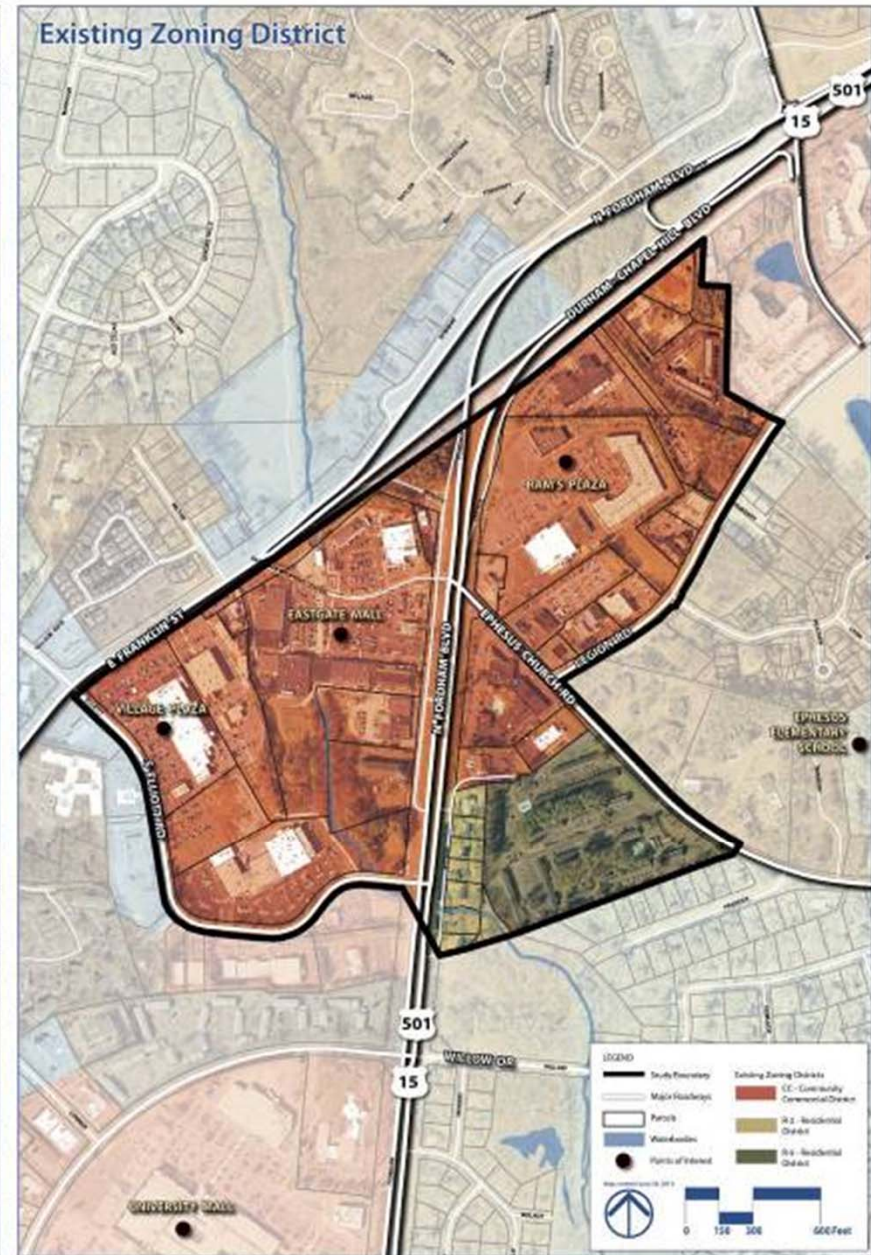
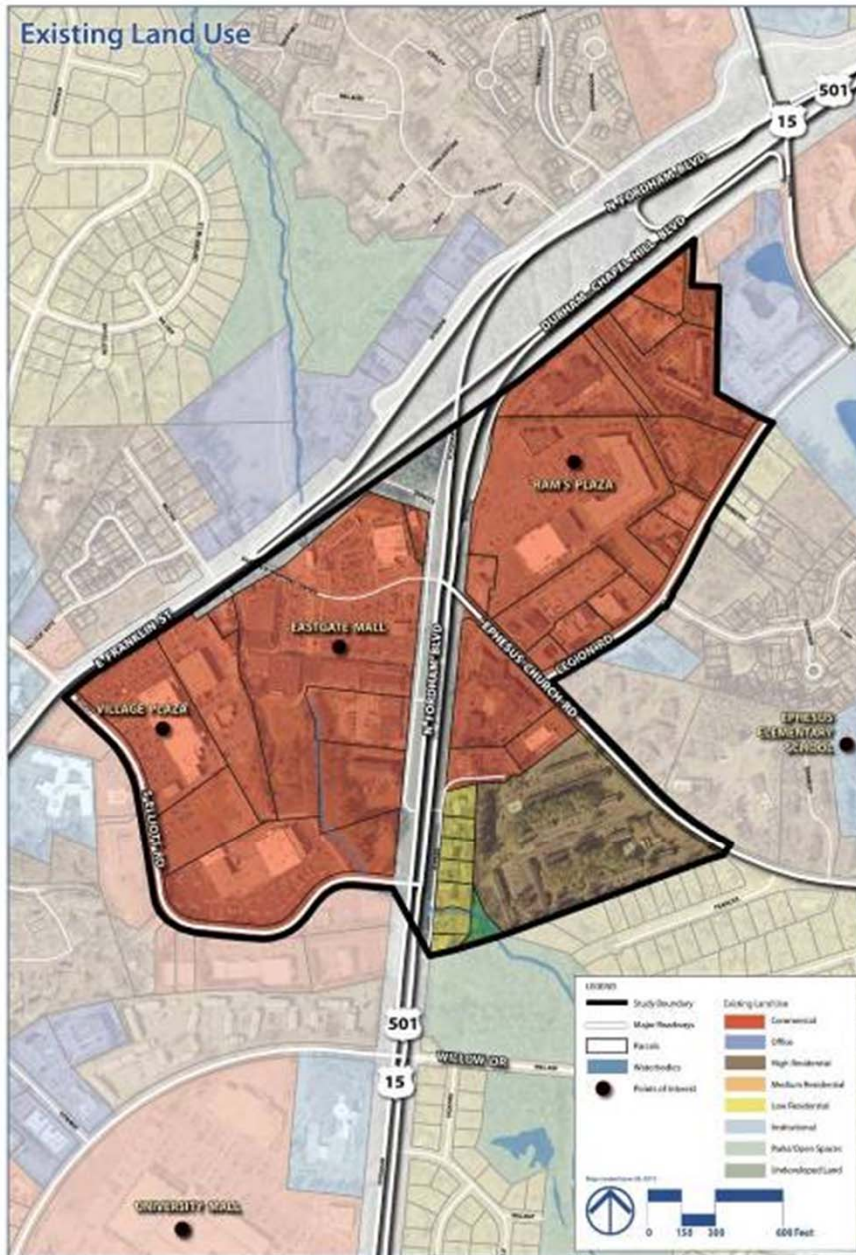




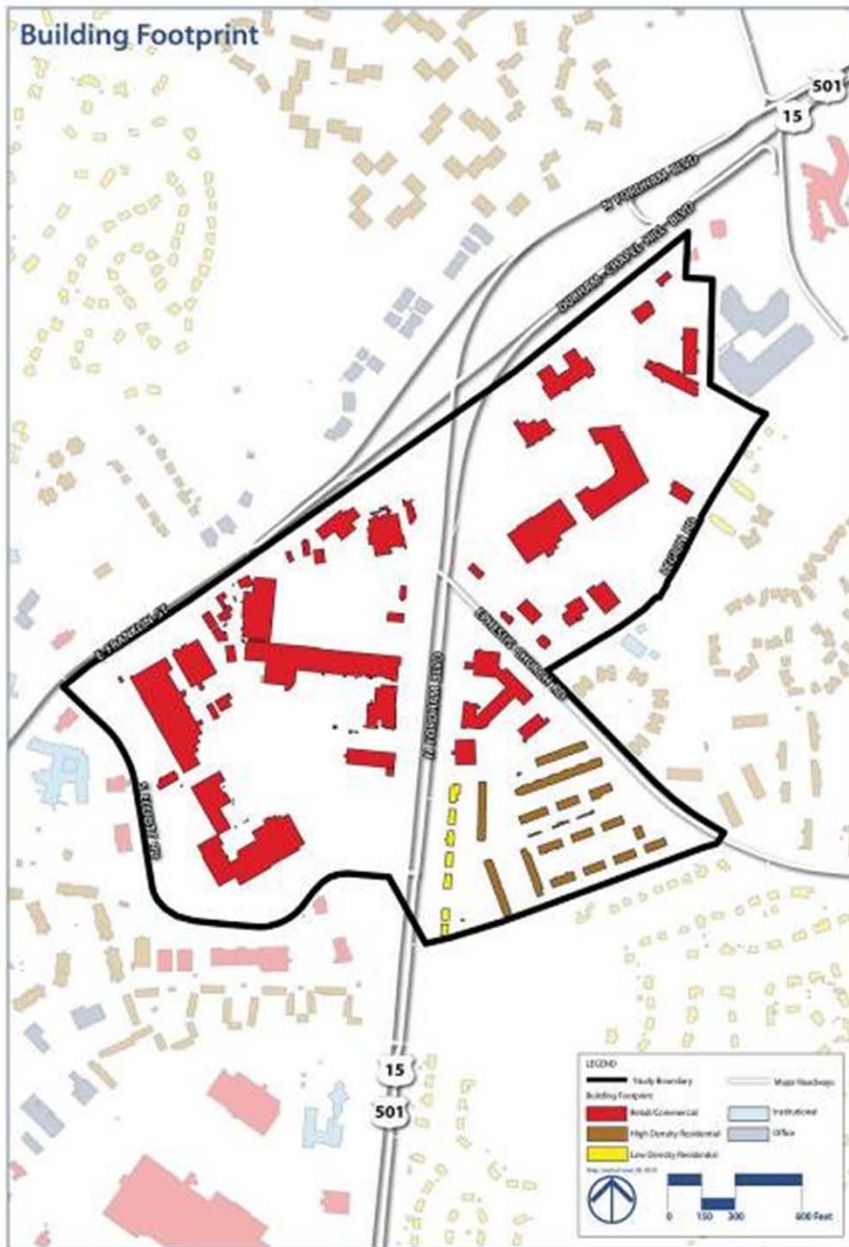
An aerial photograph of a city, likely a university campus, showing various buildings, roads, and green spaces. The image is semi-transparent, allowing the text to be clearly visible. At the bottom of the image, there is a detailed line-art sketch of the same area, showing the outlines of buildings, trees, and streets. The text "Existing Physical Conditions" is centered in a bold, dark blue font.

# Existing Physical Conditions

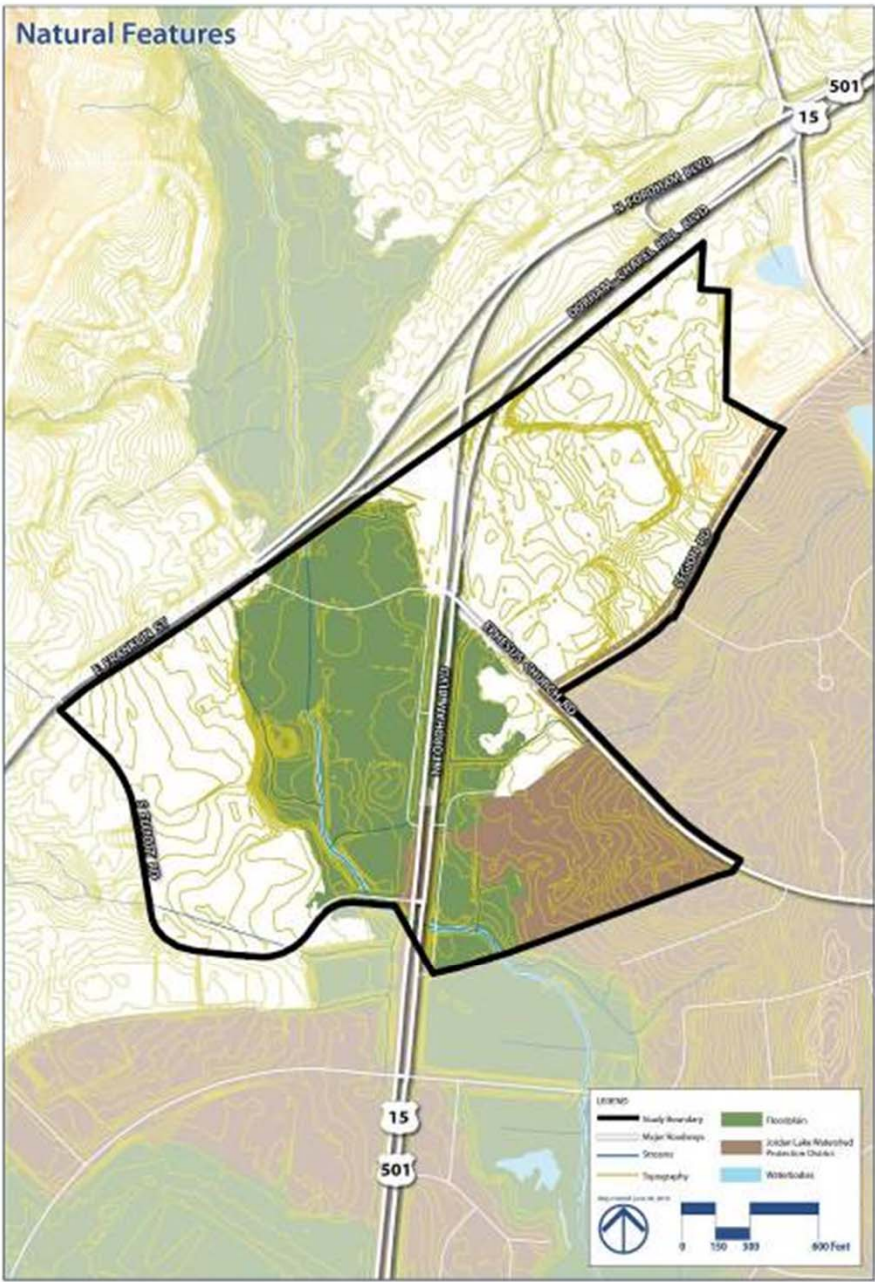




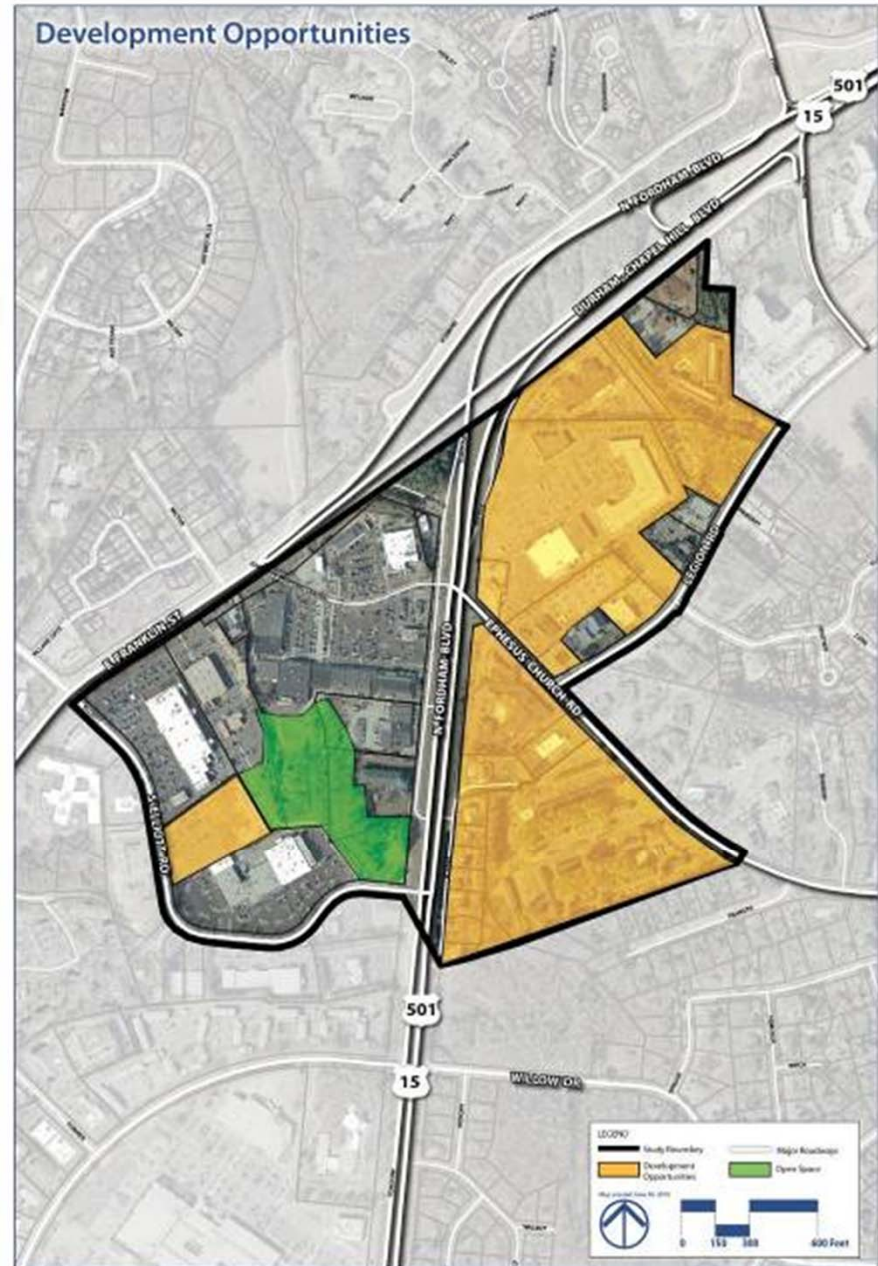
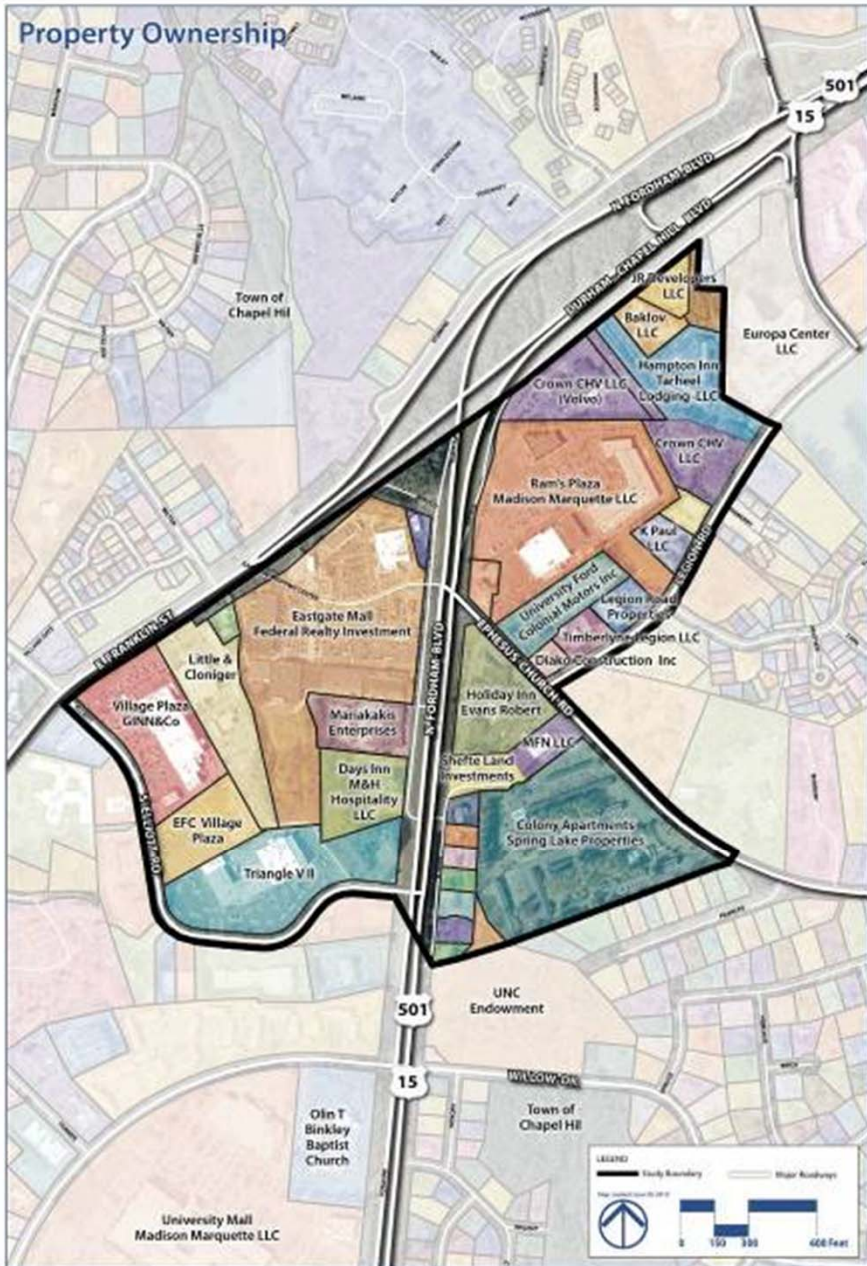
















# THE EPHESUS – FORDHAM COMPASS RESULTS





# 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



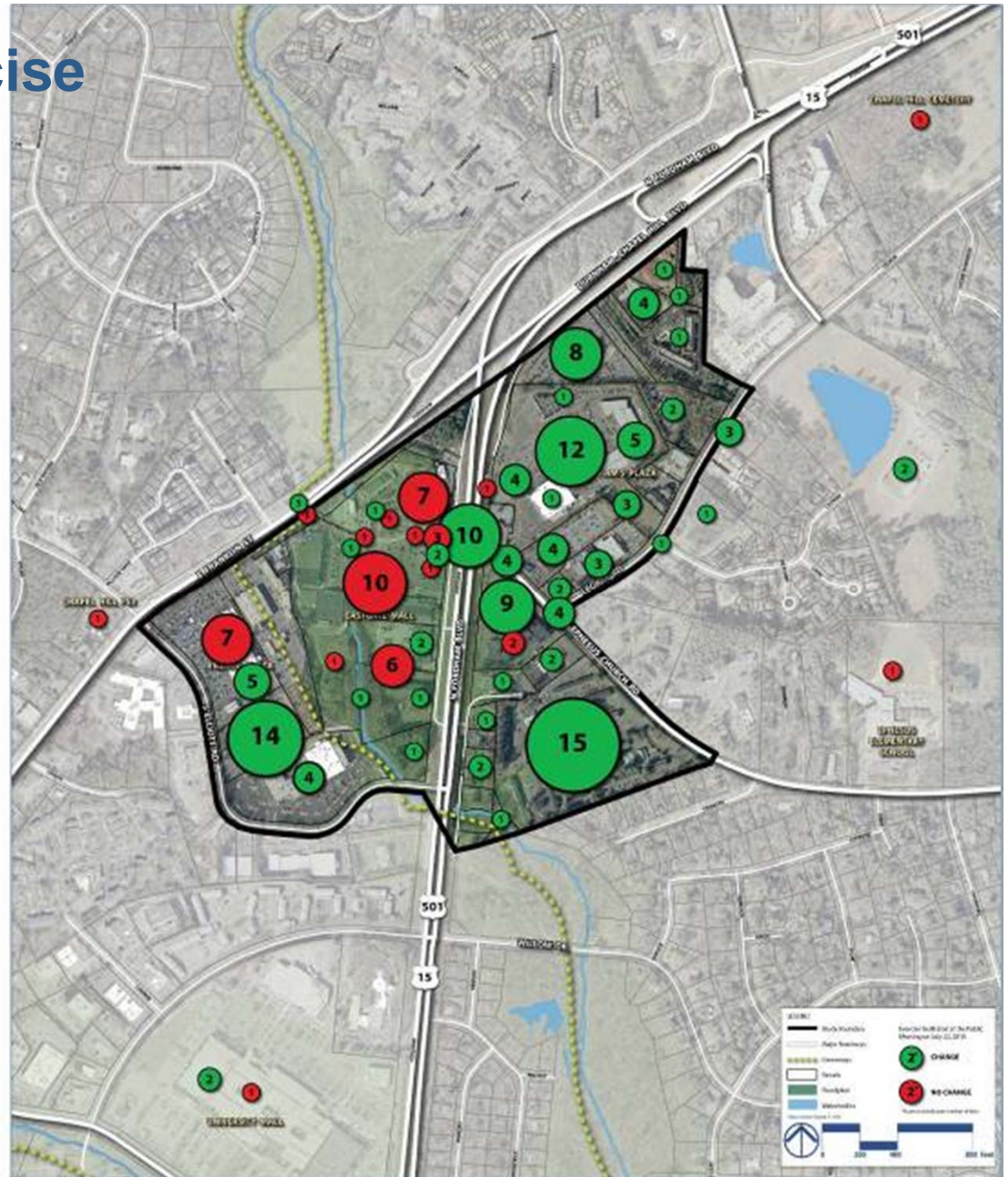
# Short-Answer Questions Summary

- 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

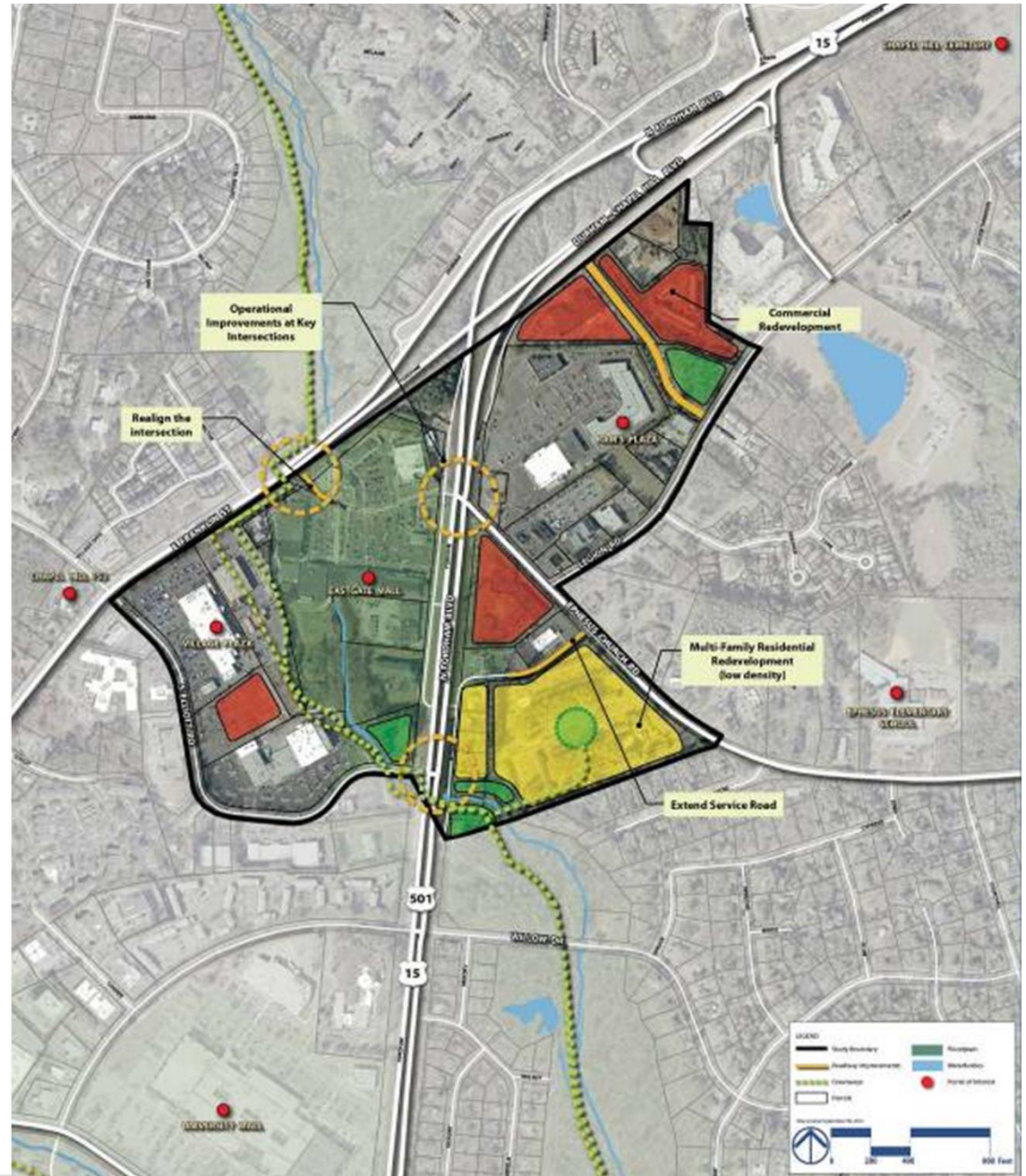


An aerial photograph of a city area, showing a mix of residential and commercial buildings, streets, and green spaces. A semi-transparent sketch is overlaid on the bottom right portion of the image, depicting a proposed development with several large, interconnected buildings, parking lots, and landscaped areas with trees. The sketch is rendered in a light, line-art style. The text 'Concept Alternatives' is centered over the image in a bold, dark blue font.

# Concept Alternatives

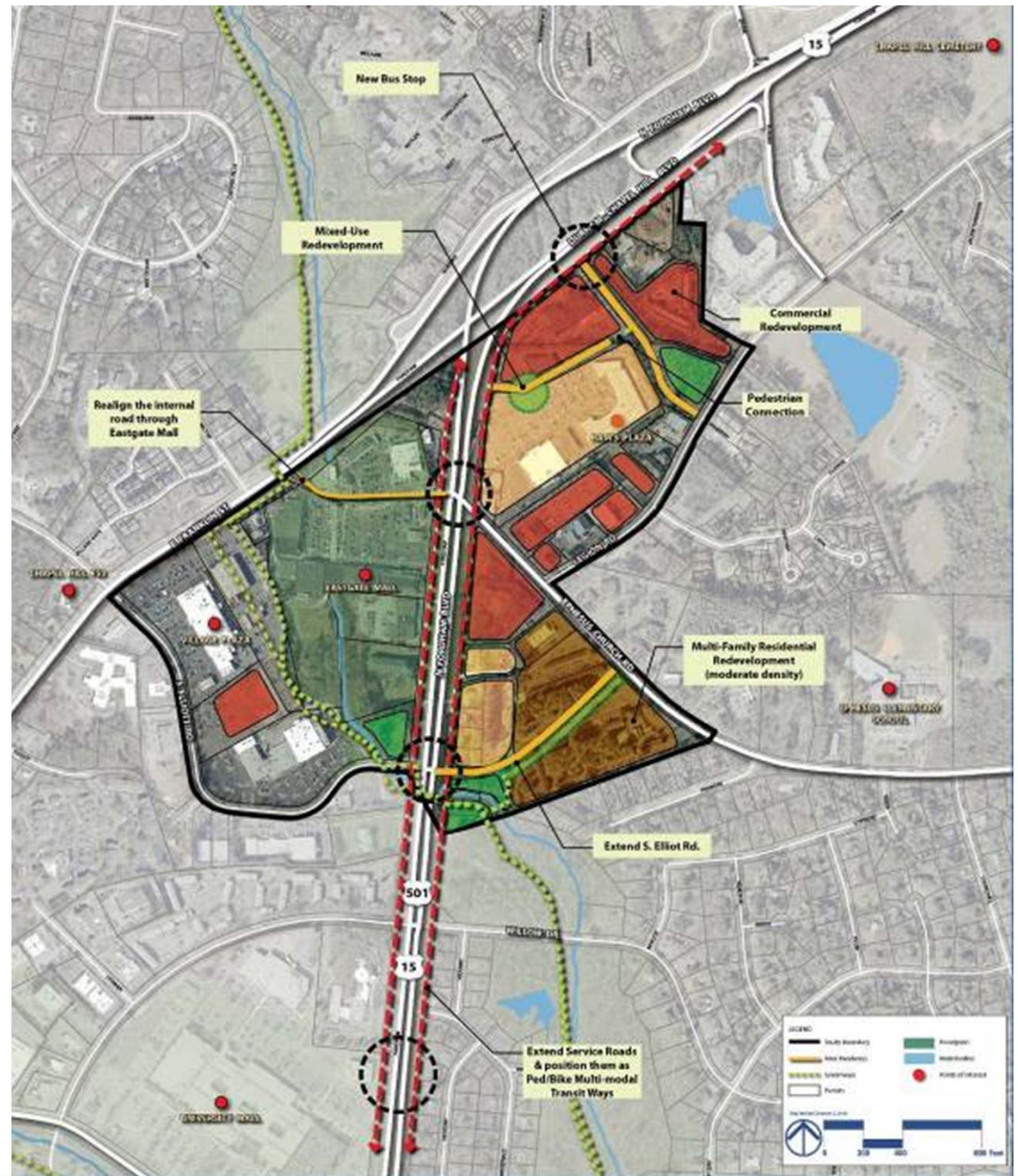


# Option A – Operational Improvements



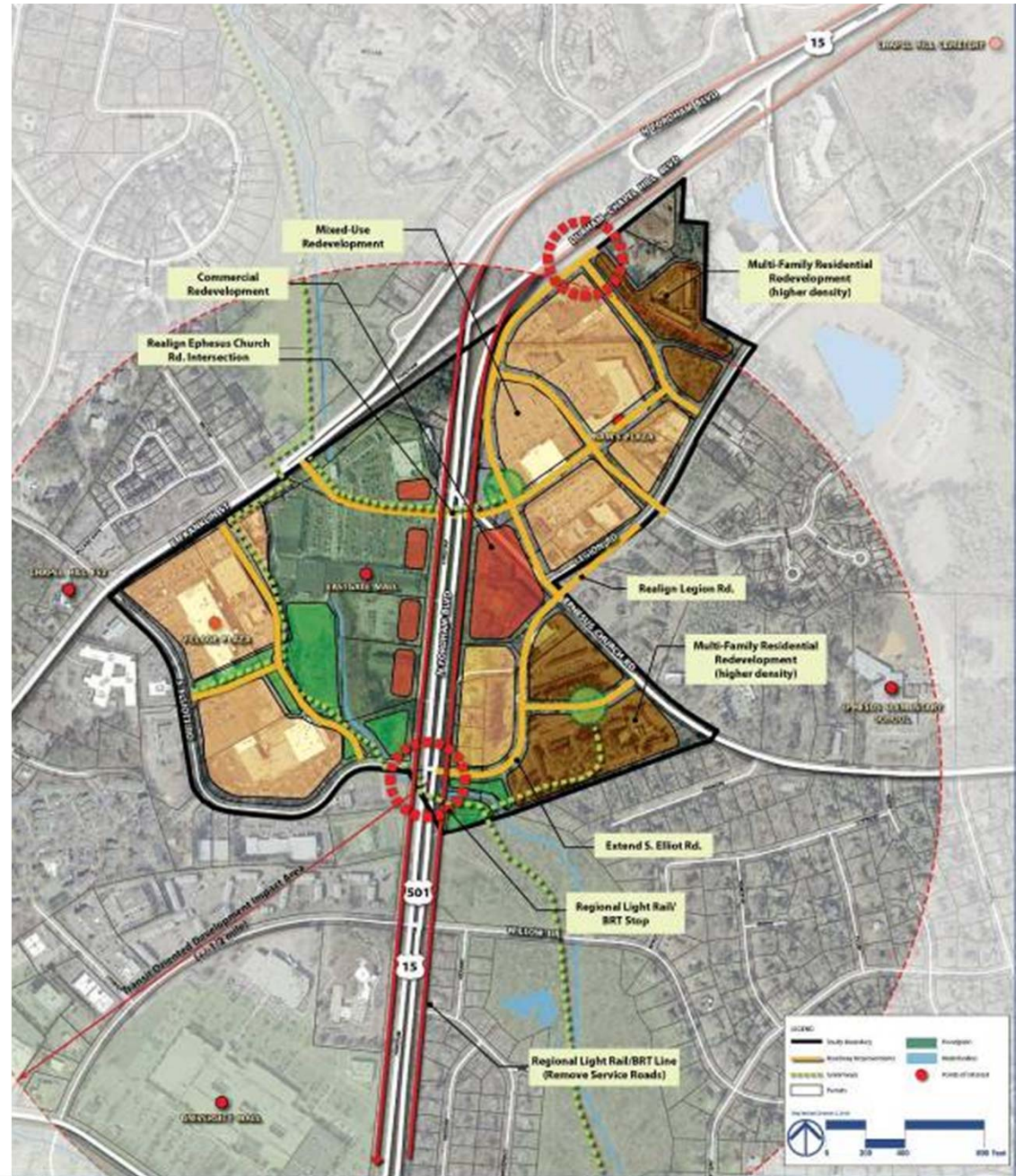


# Option B – Street Network Improvements





# Option C – Mixed Use Center



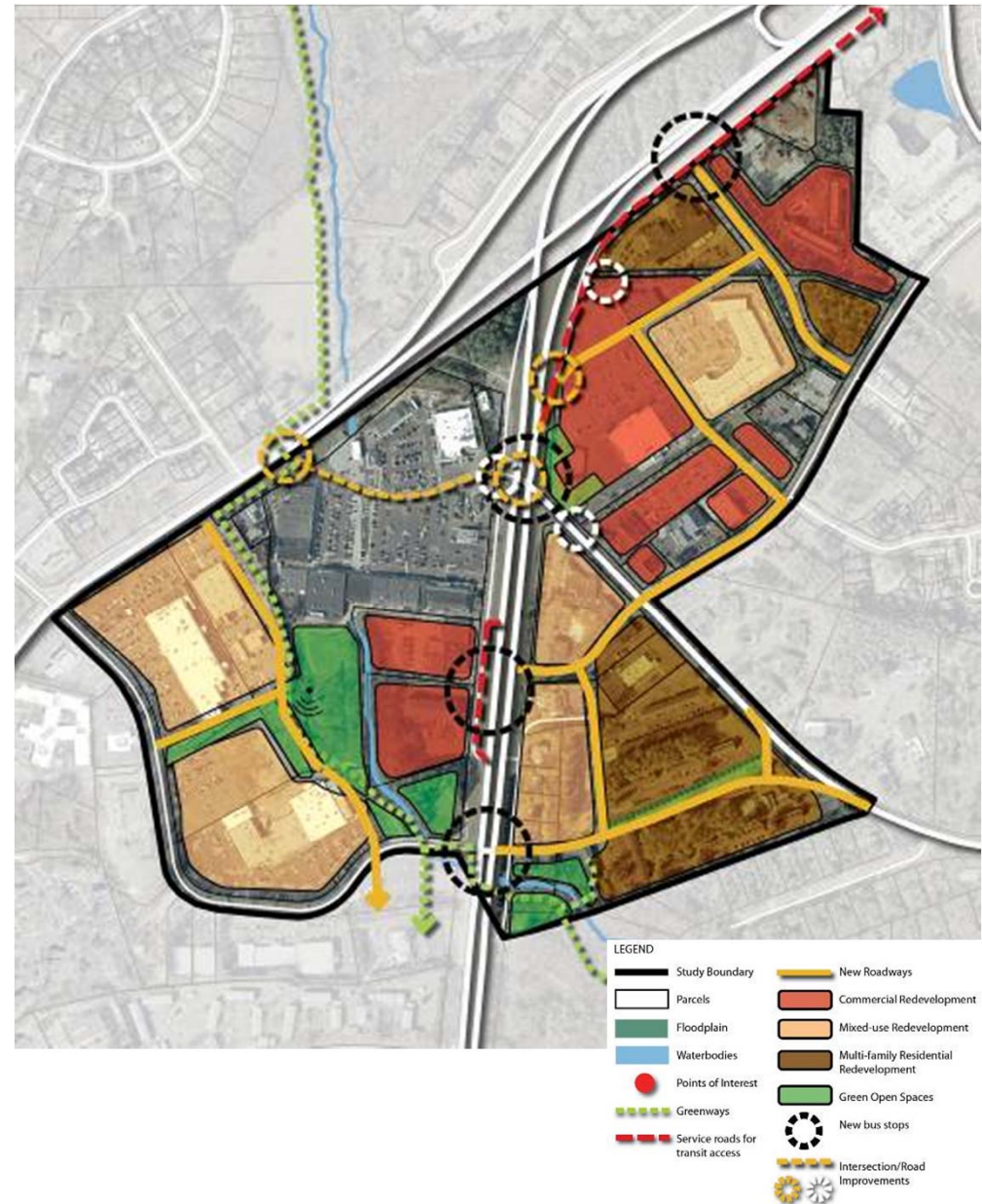
An aerial photograph of a city, likely a university campus, with a semi-transparent white overlay. The overlay shows a network of roads and building footprints. The text 'Proposed Framework Plan' is centered in the middle of the image in a bold, dark blue font. The bottom portion of the image shows a more detailed architectural rendering of buildings and trees.

# Proposed Framework Plan



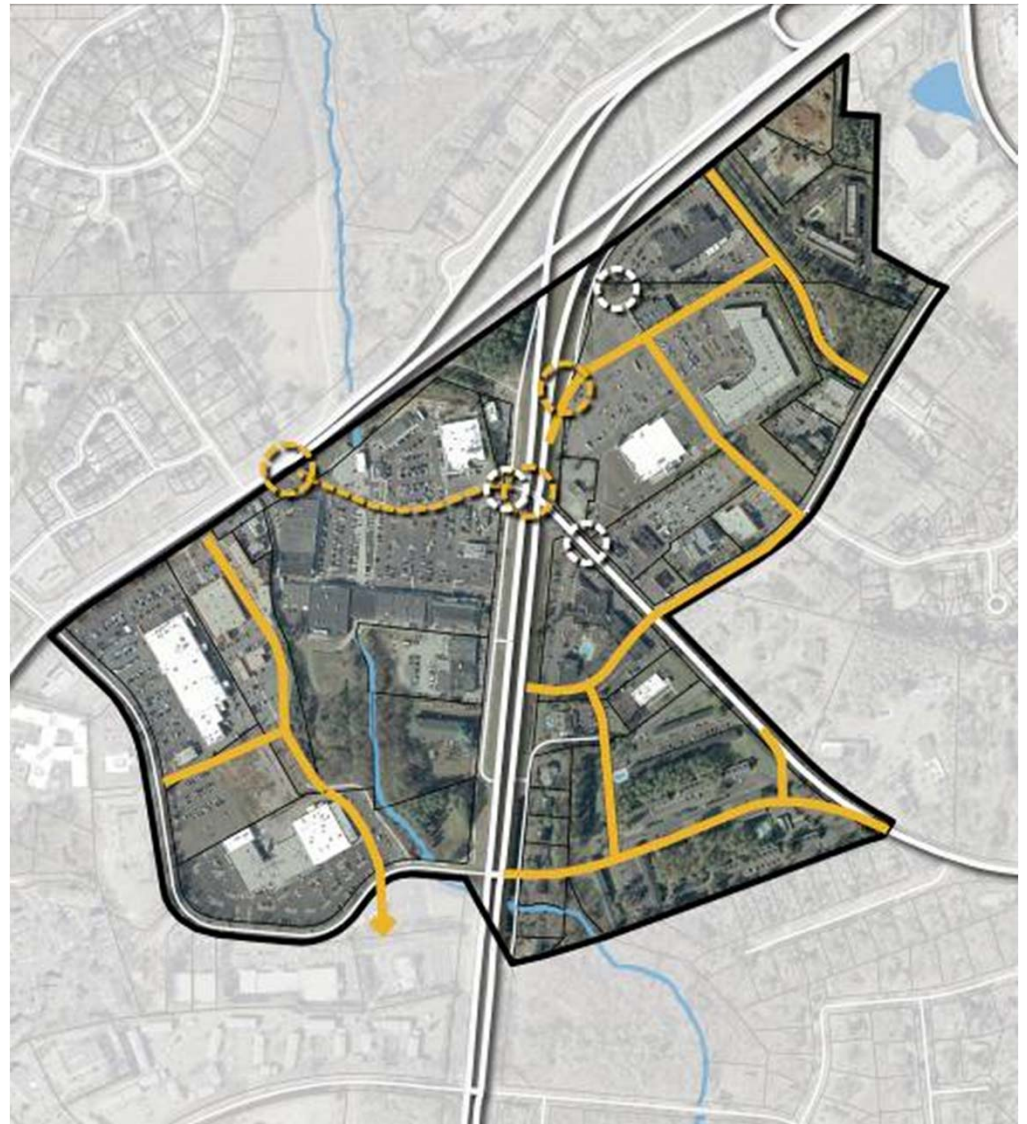
# Proposed Framework Plan

- 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

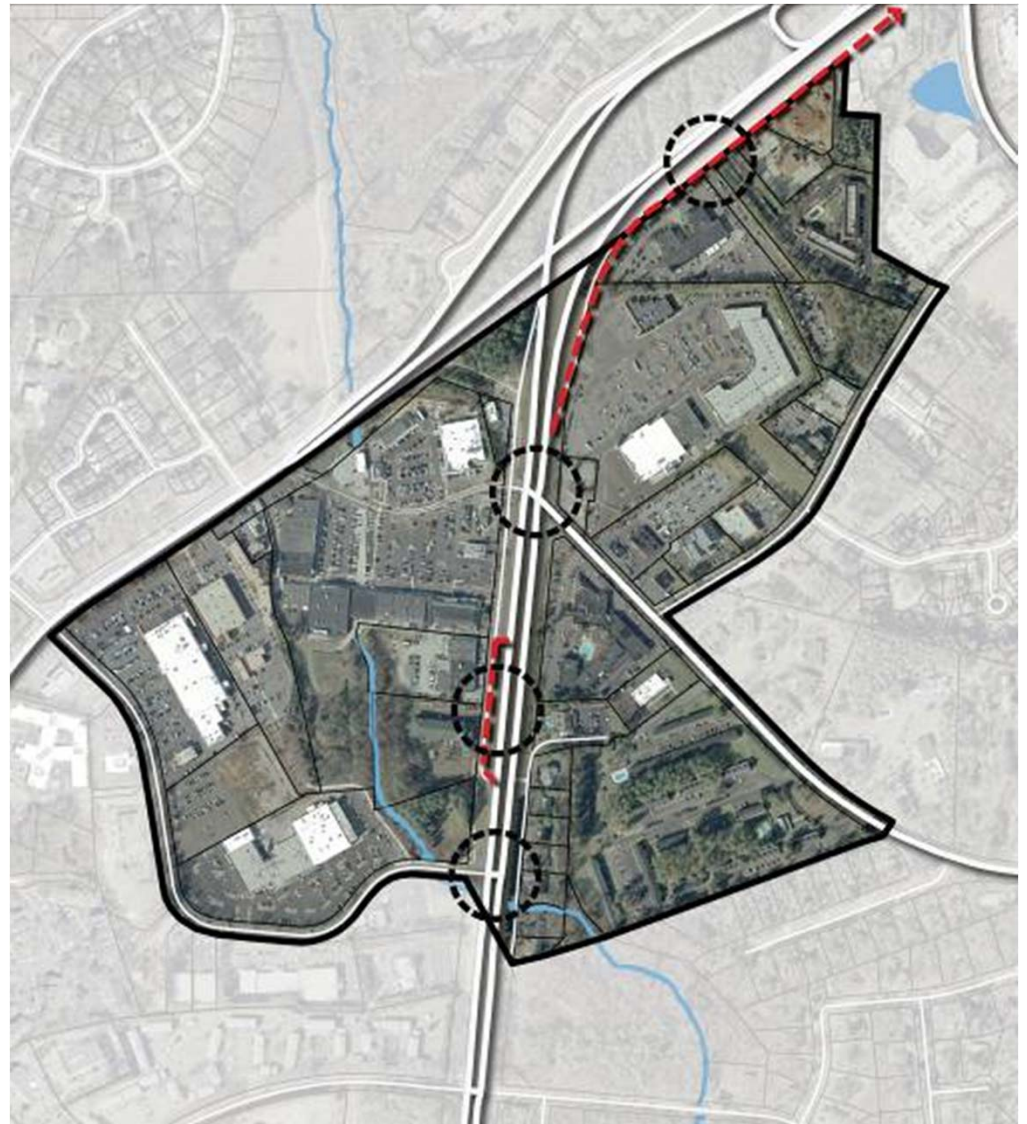
- **Extend Legion Road**
- **Extend South Elliot Road**
- **Long-Term Road Connections in Village Plaza and Ram's Plaza**
- **Intersection Improvements**
- **Operational Improvements**





# 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

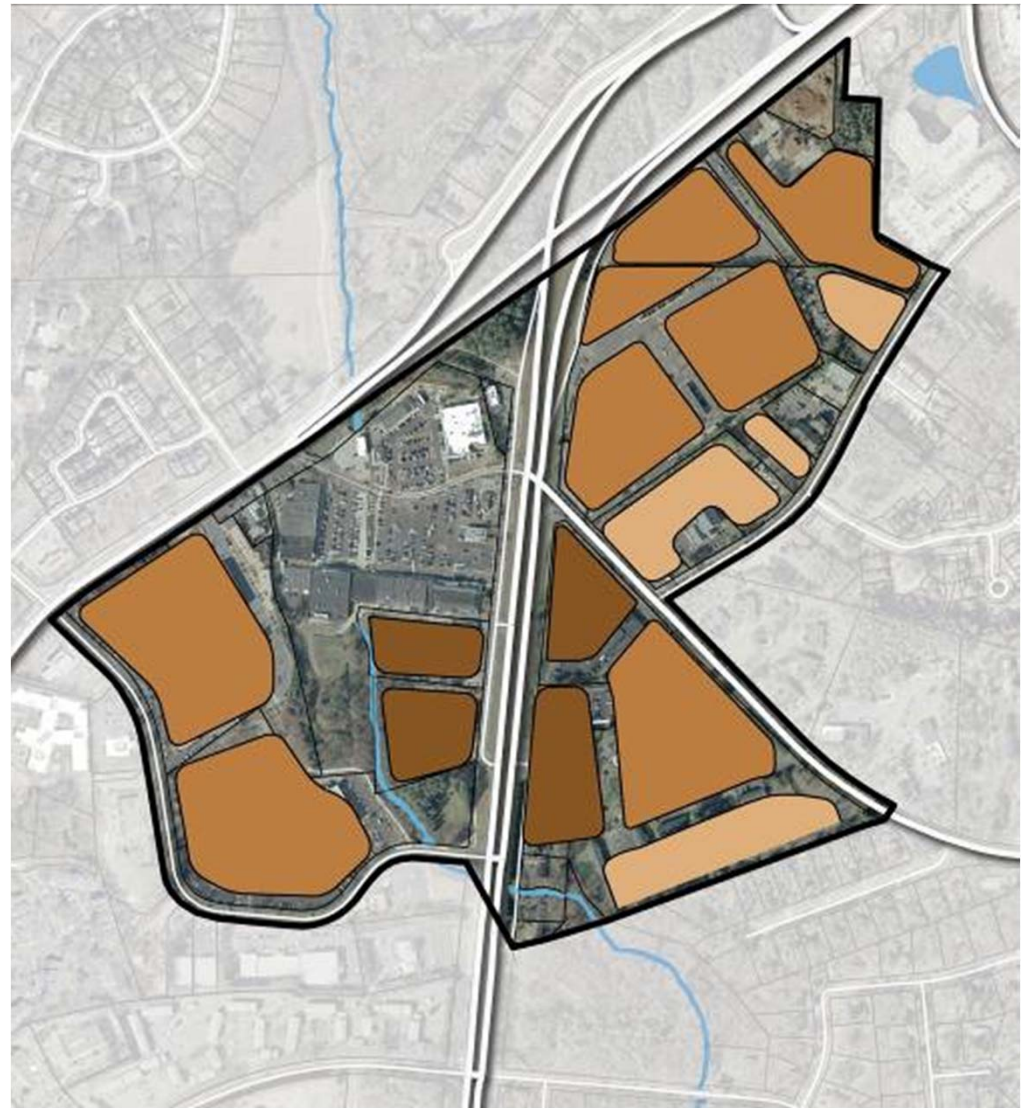
- **Potential New Greenway Connections**
- **More Comprehensive Greenspace System**
- **Consistent Landscape Treatments**
- **Public Amphitheater in formalized open space**





# Framework Components: Density

- Transitions to neighborhoods
- Highest Density along Fordham Blvd.

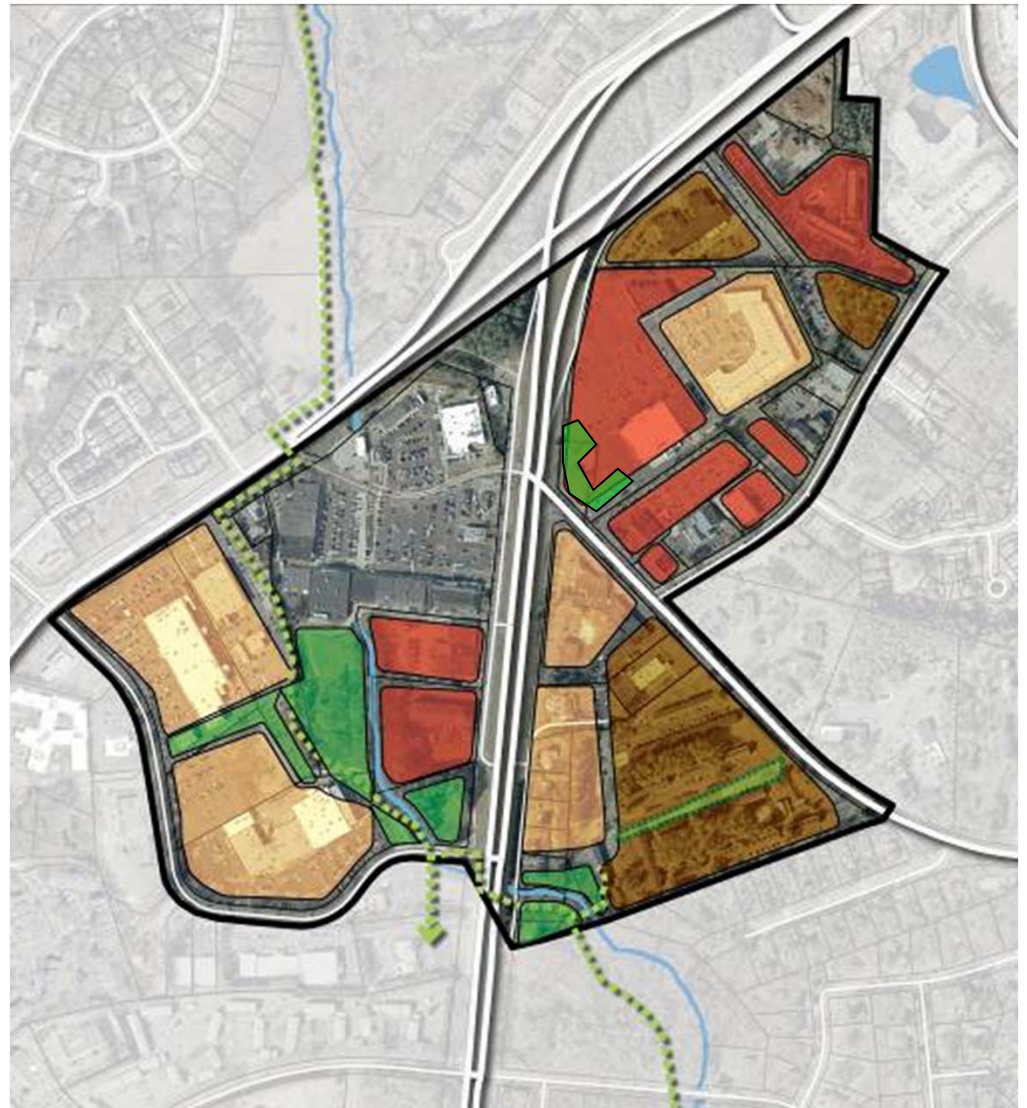


Higher Density   Lower Density



# Framework Components: Land Use

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

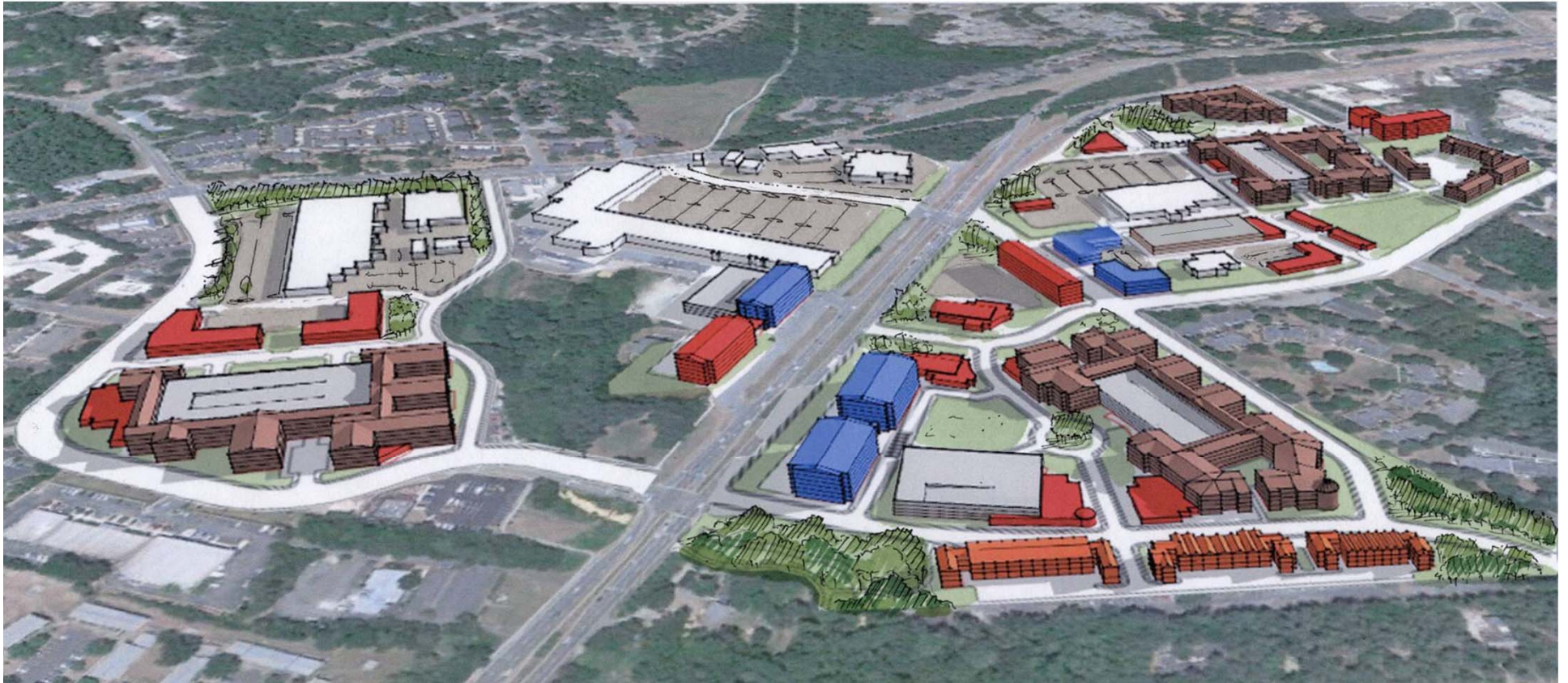


DEVELOPMENT SUMMARY		
Retail	+/-258,000	Square Feet
Office	+/-368,000	Square Feet
Residential Units	+/-1,084	Units
Hotel	+/-280,000	Square Feet





# Conceptual 3D Massing





# Conceptual Development/Transportation Improvements





# Conceptual Development/Transportation Improvements



# Conceptual Development/Transportation Improvements





An aerial photograph of a city street grid, with a prominent road running vertically through the center. The image is overlaid with a semi-transparent sketch of a city street scene at the bottom, showing buildings, trees, and a street layout. The text "Transportation Assessment" is centered over the image in a bold, dark blue font.

# 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**

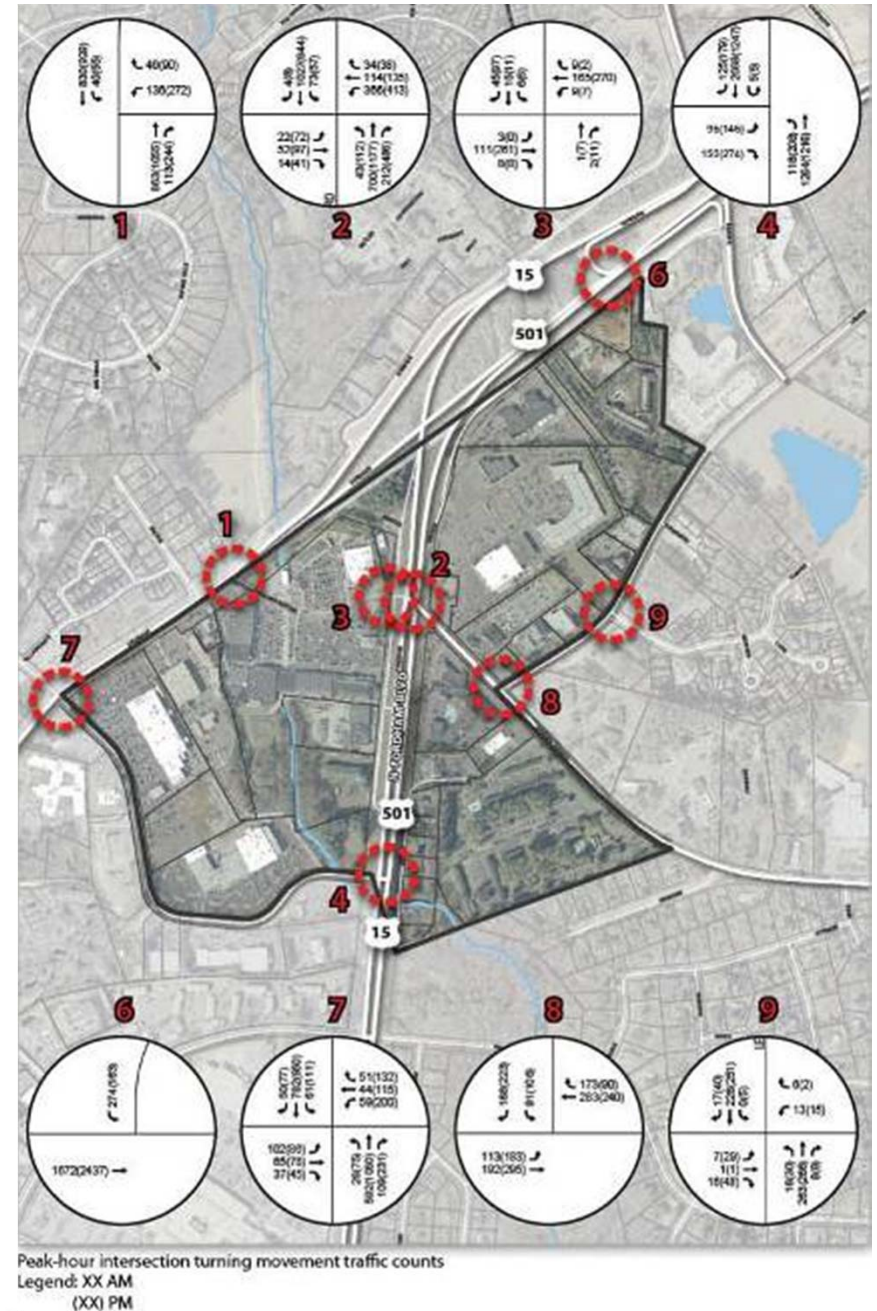
**What's next?**





# 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



# Existing Conditions

- Focus on Fordham/Ephesus intersection
- 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

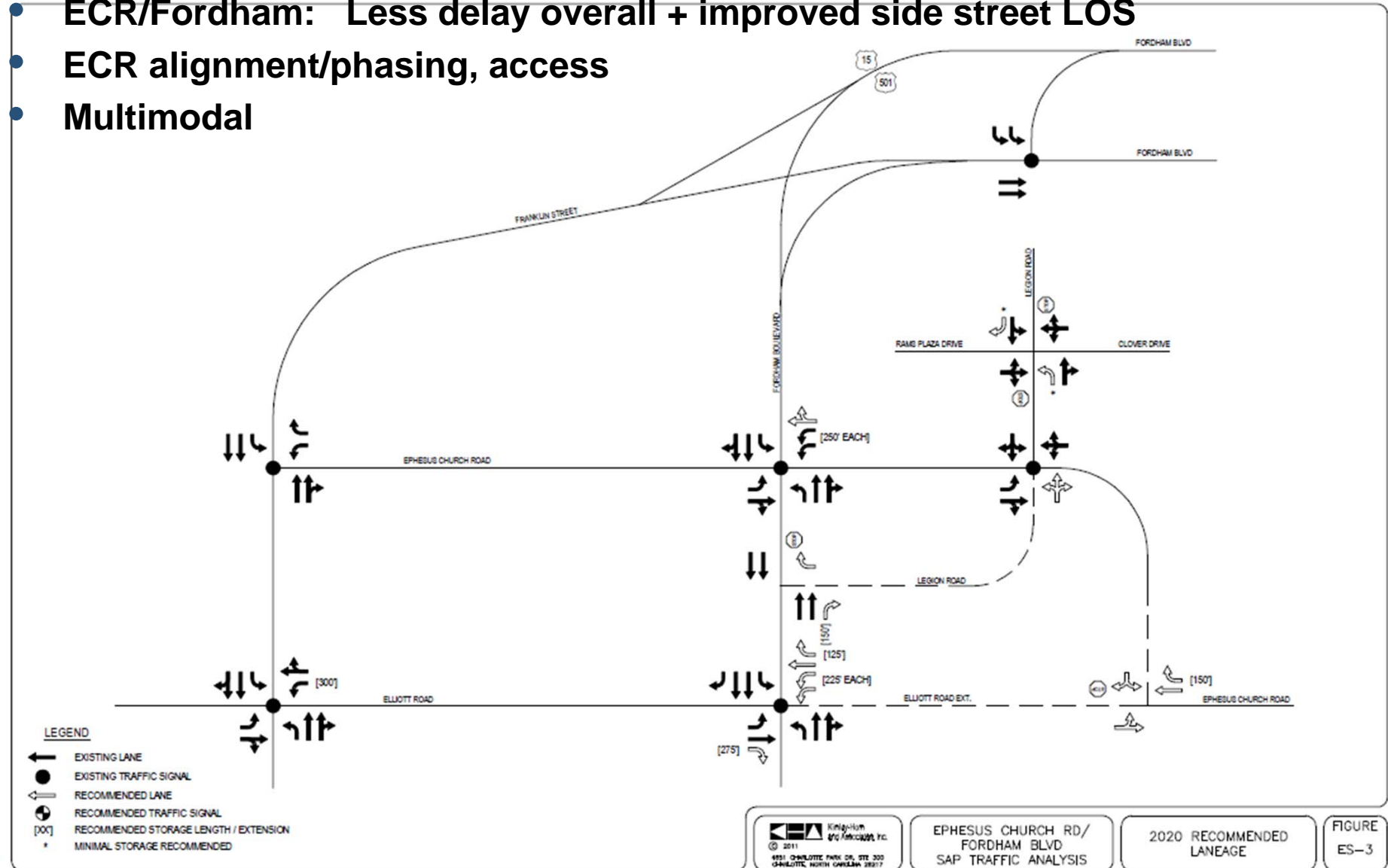
- **Project future traffic volumes**
  1. Existing traffic (actual)
  2. Annual background growth (%)
  3. Small Area Plan traffic (calculations)
  4. Staff Team input
- **Conduct analyses**
  - ✓ Demand (traffic) vs supply (capacity of road network/geometry)
  - ✓ Intersections during AM and PM peak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



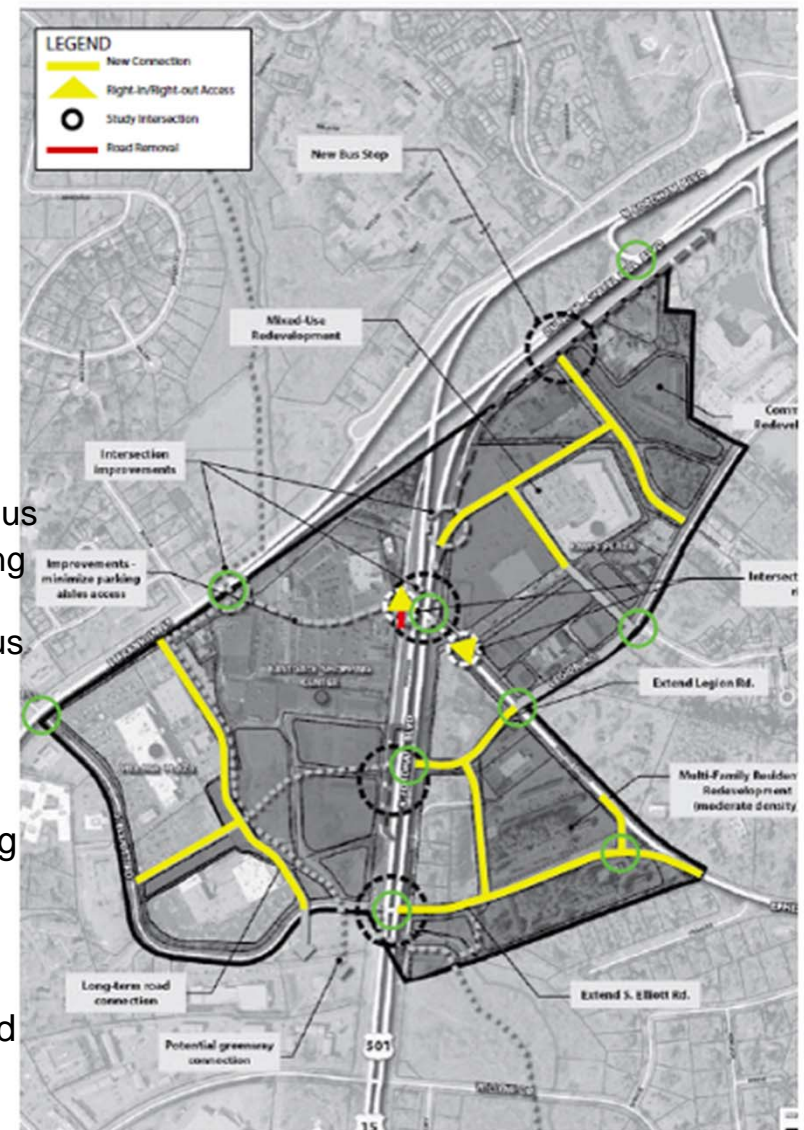


An aerial photograph of a city, likely a university campus, with a semi-transparent sketch overlay. The sketch shows buildings, trees, and roads in a more detailed, hand-drawn style. The word "Implementation" is centered in a bold, dark blue font.

# Implementation

# Infrastructure Improvements

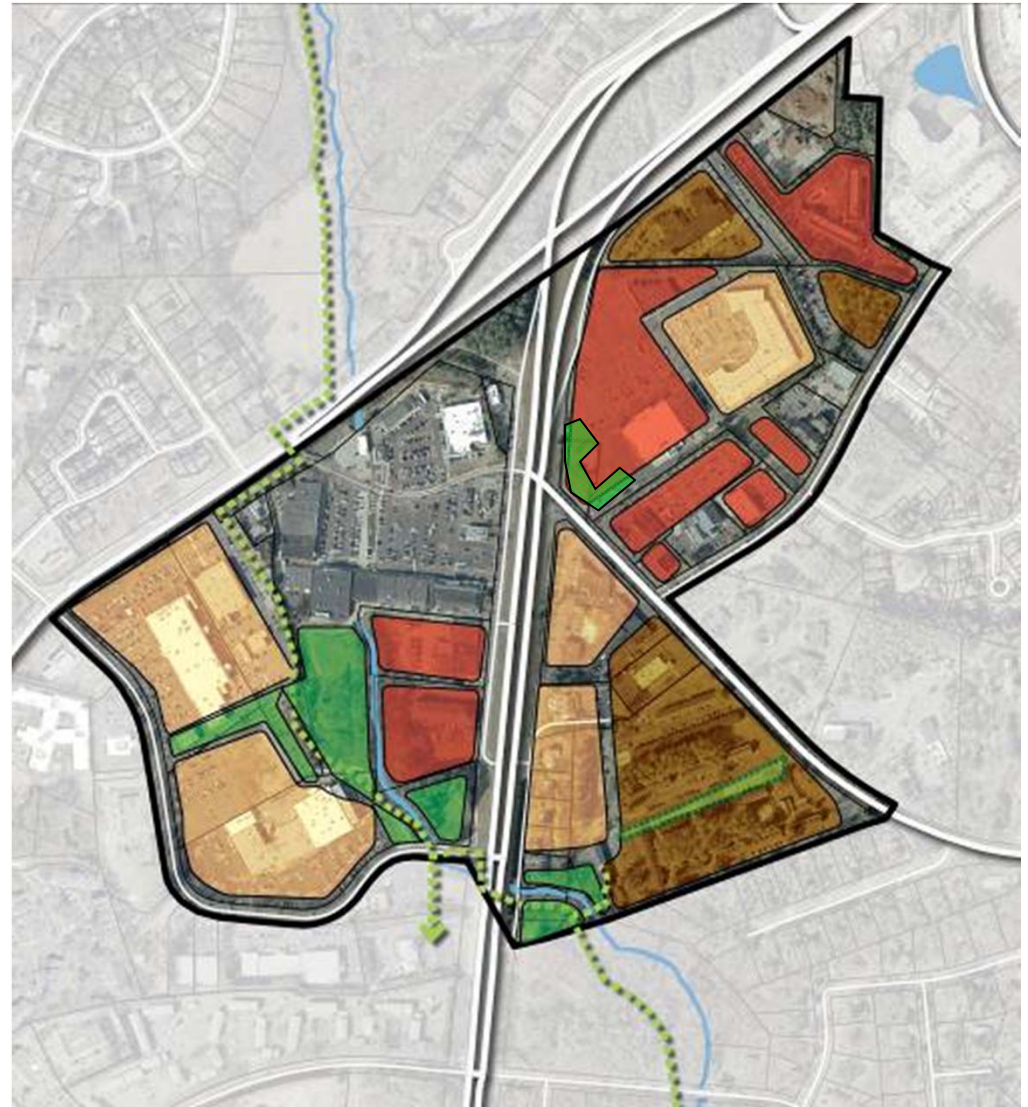
- Extension of Elliot Rd across Fordham
- Realignment of Ephesus Church to Elliot Rd extension
- Extension of Legion Road to Fordham Blvd
- Access improvements:
  - Disconnect southern leg of western service road at Ephesus
  - Consolidate number of parking aisles on Ephesus Rd going through Eastgate 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





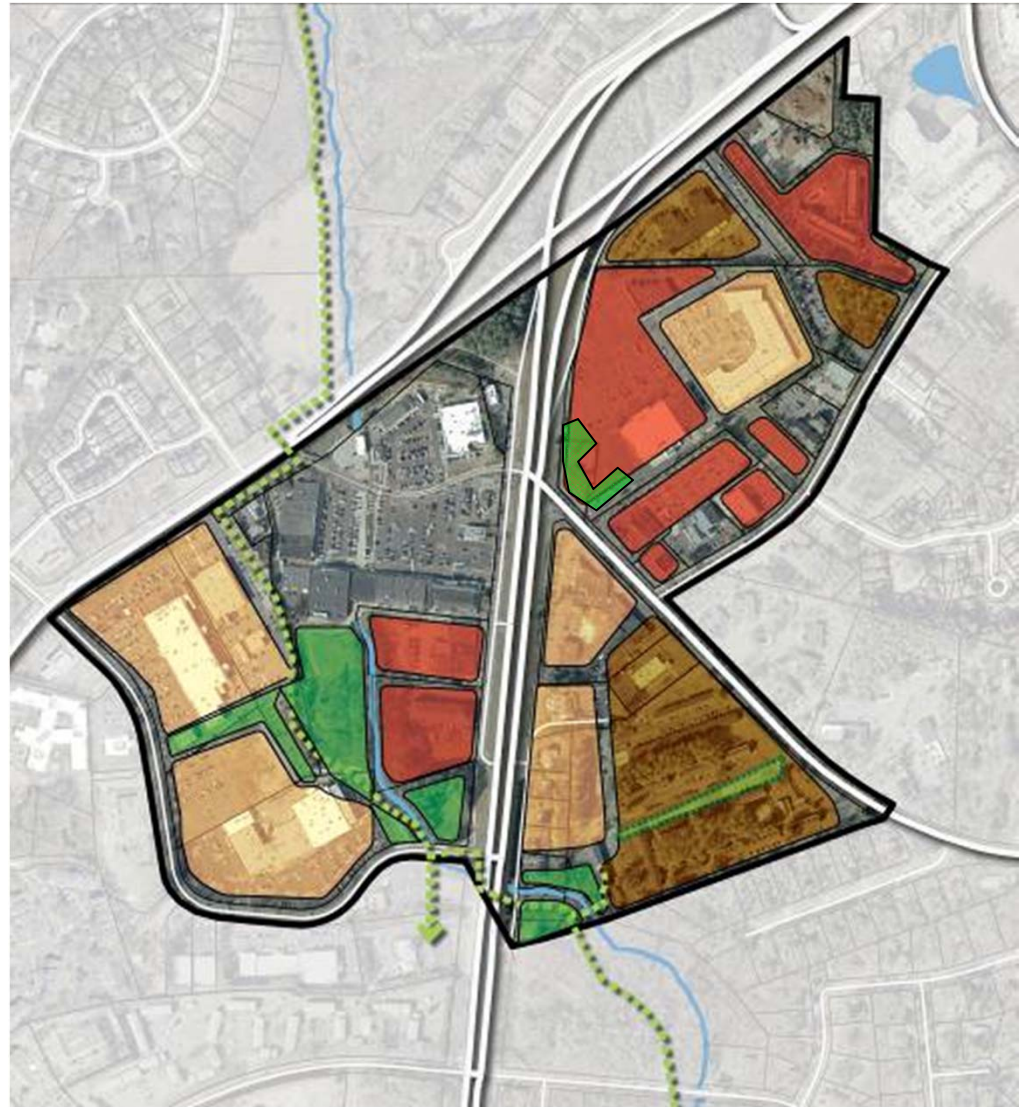
# Land Use and Zoning Tools

- 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



An aerial photograph of a city, likely a university campus, with a semi-transparent sketch overlay. The sketch shows buildings, trees, and roads in a more detailed, hand-drawn style. The text "Thank You" is centered in the middle of the image.

**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.

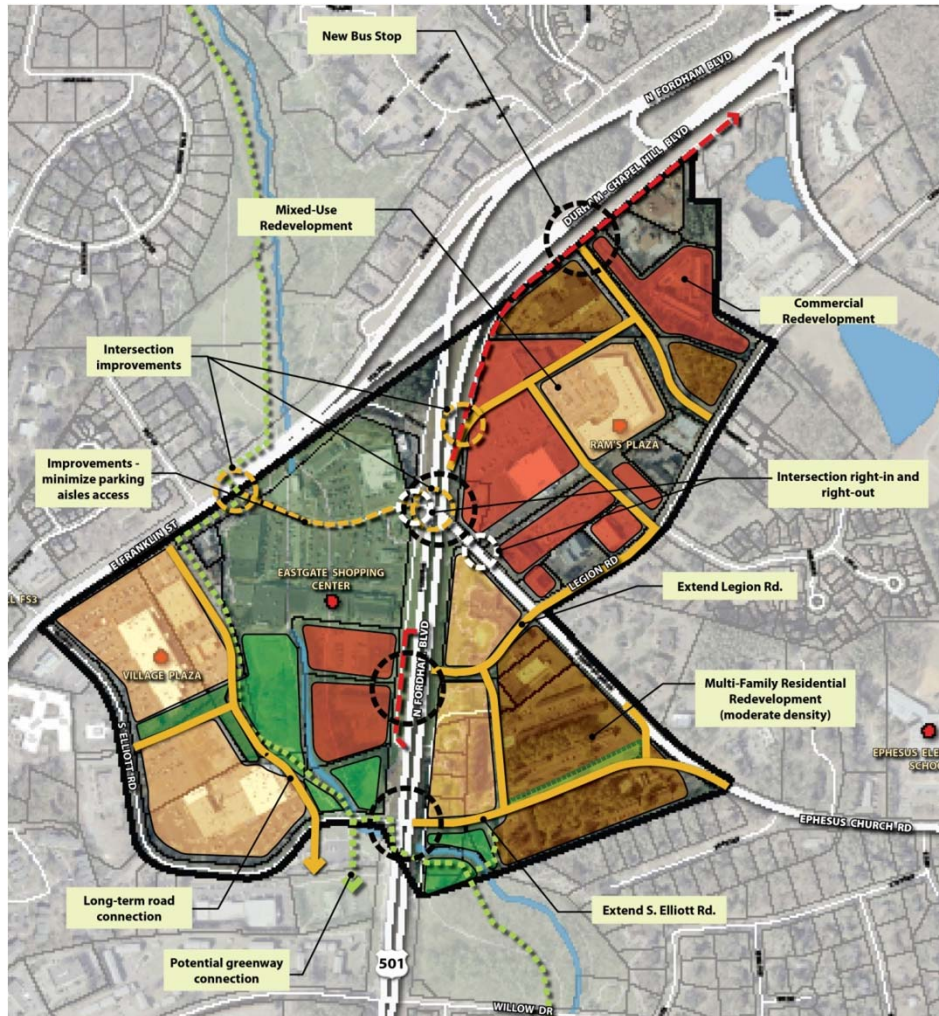
- **OFFICE**

- 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.





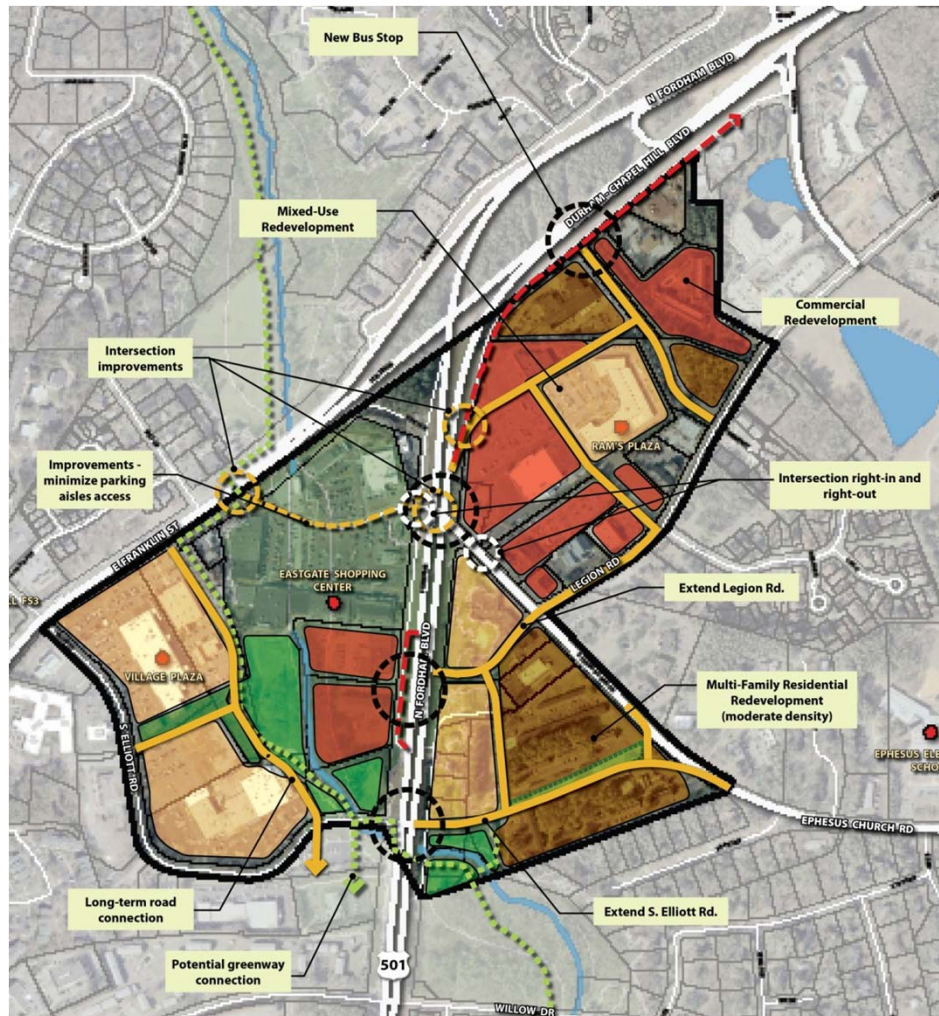
# Market Analysis Overview



- 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

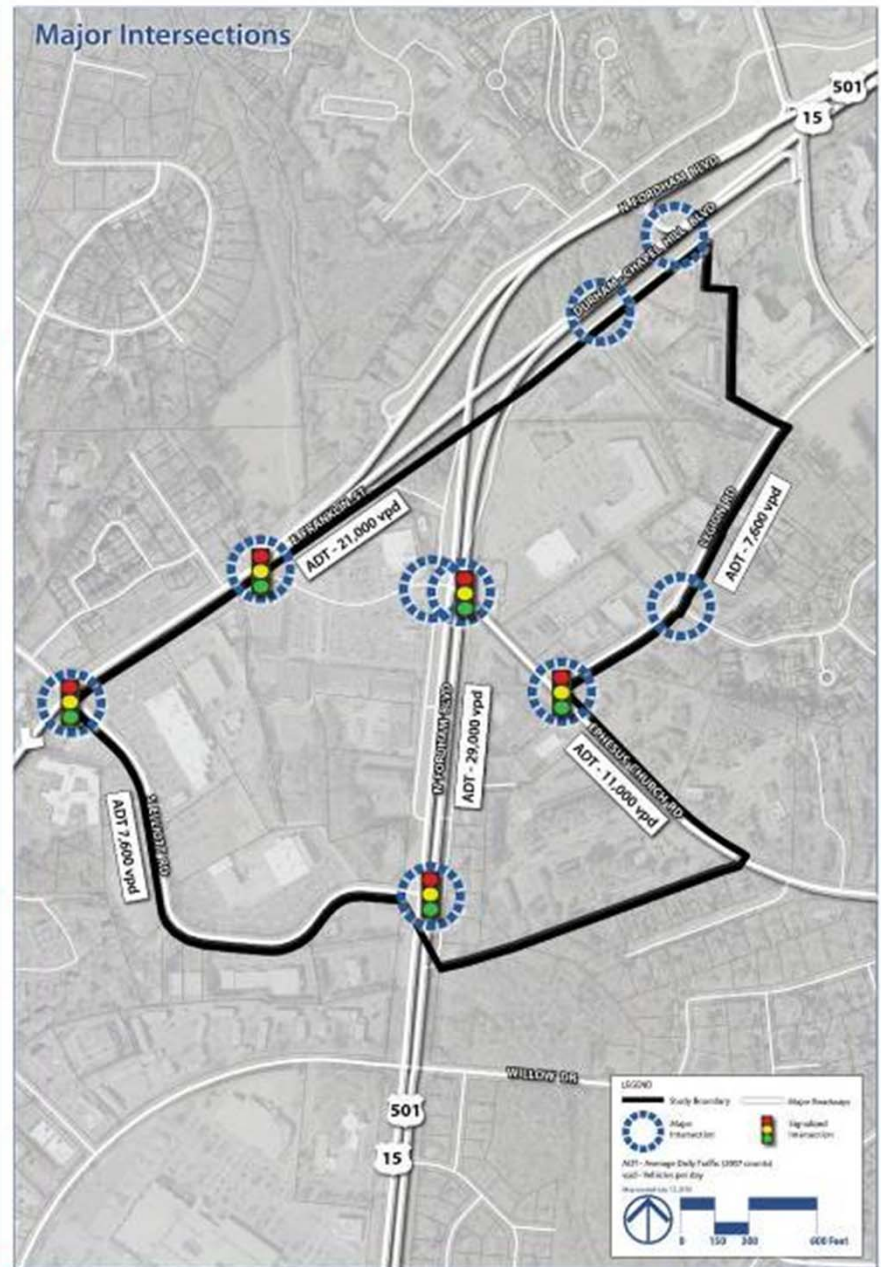
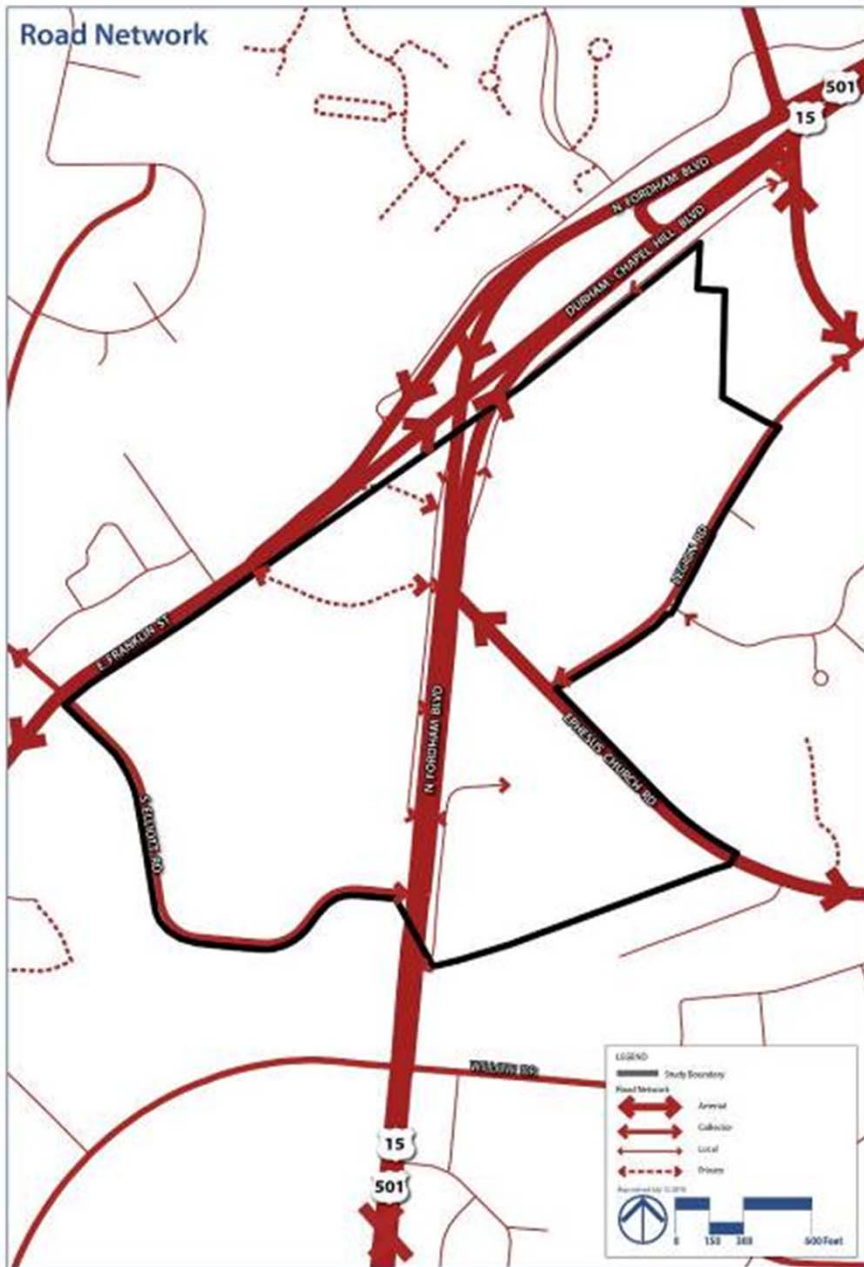
- special type of municipal bond
- repayment primarily from revenues generated by a specific project, as opposed to tax.
- do not burden other revenue sources within a municipality, such as tax revenue.
- often used to finance water and wastewater utilities, toll roads, airports, and power plants.
- 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

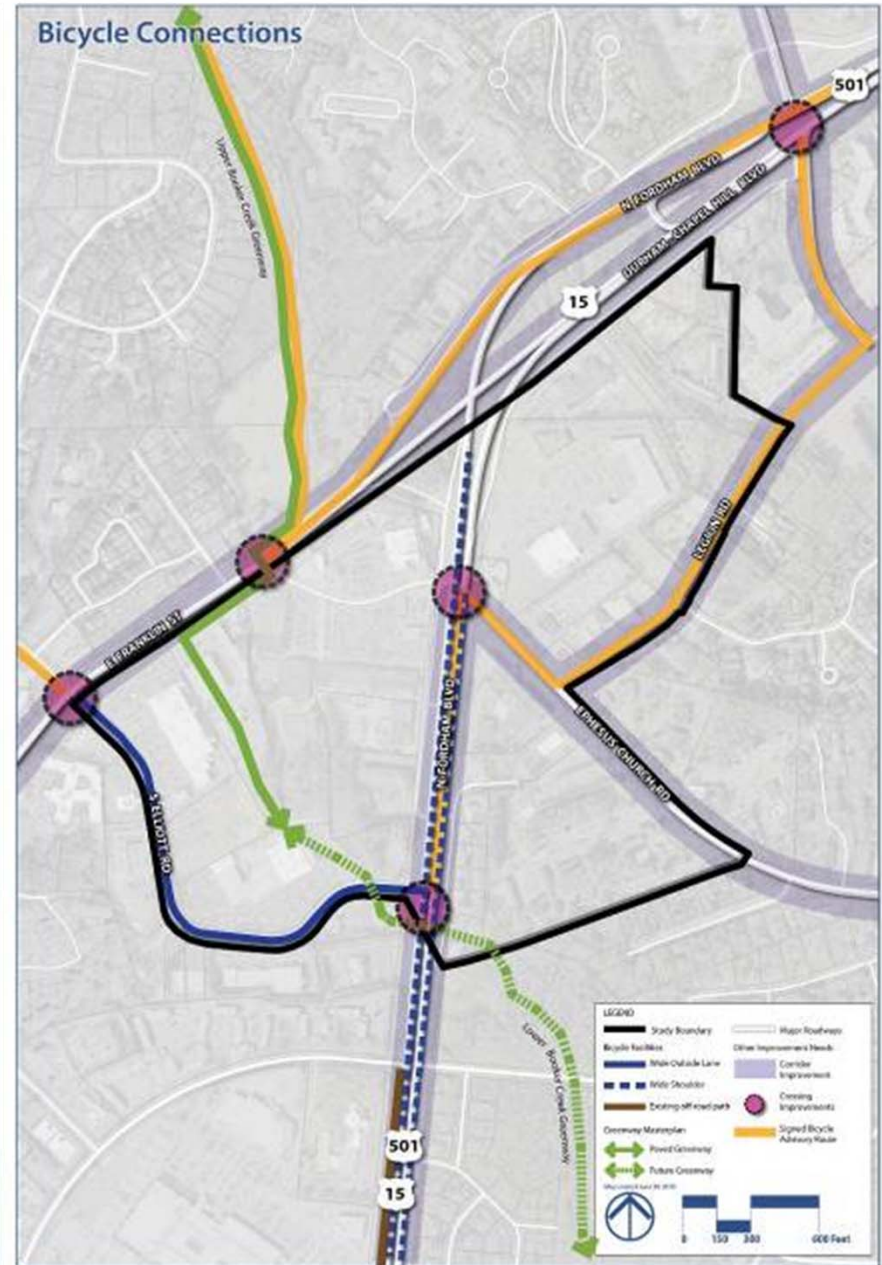
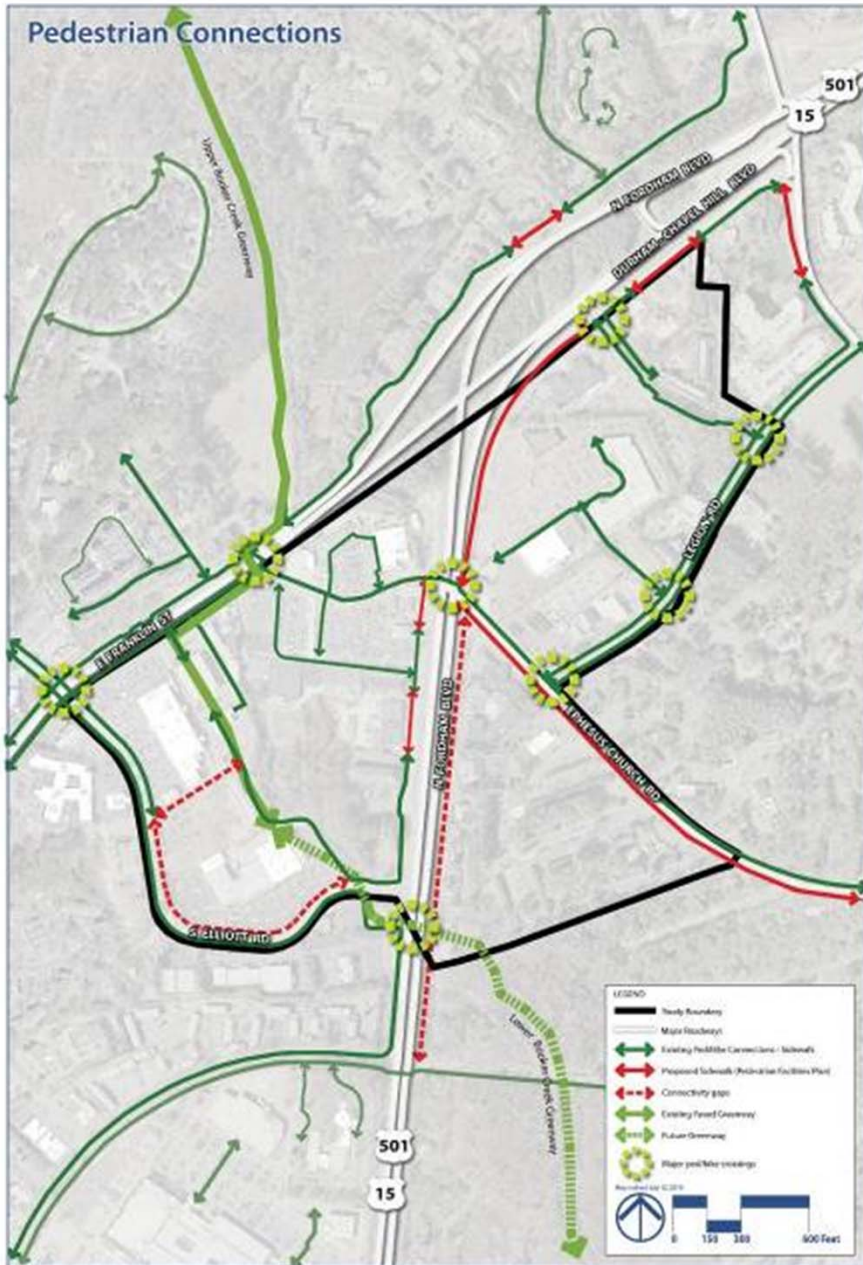
- provide project financing without specifically providing funds to a project, or issuing a municipal bond.
- guaranteeing a conventional loan from a bank, leaving a private developer to pay for the required infrastructure improvements.
- Loans can be guaranteed through general funds, but also TIF or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



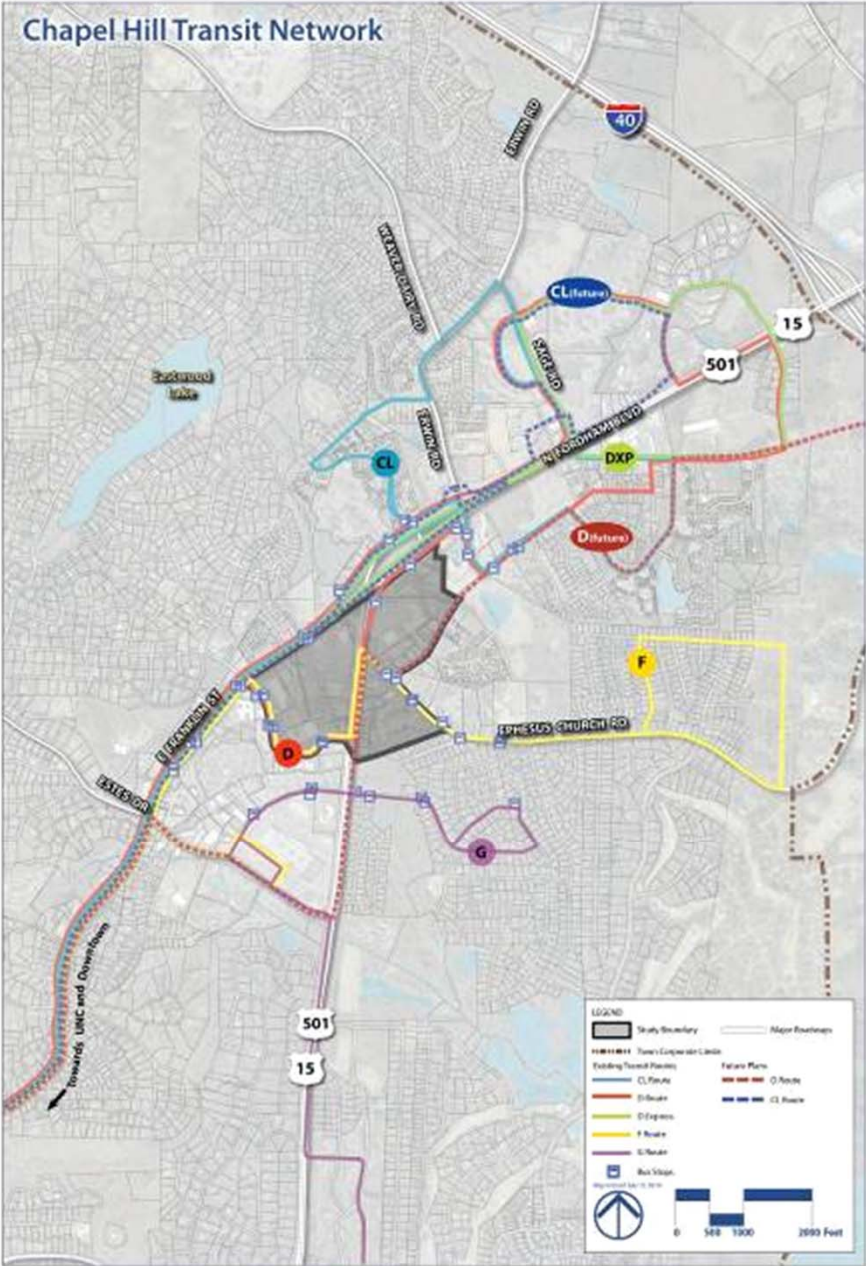
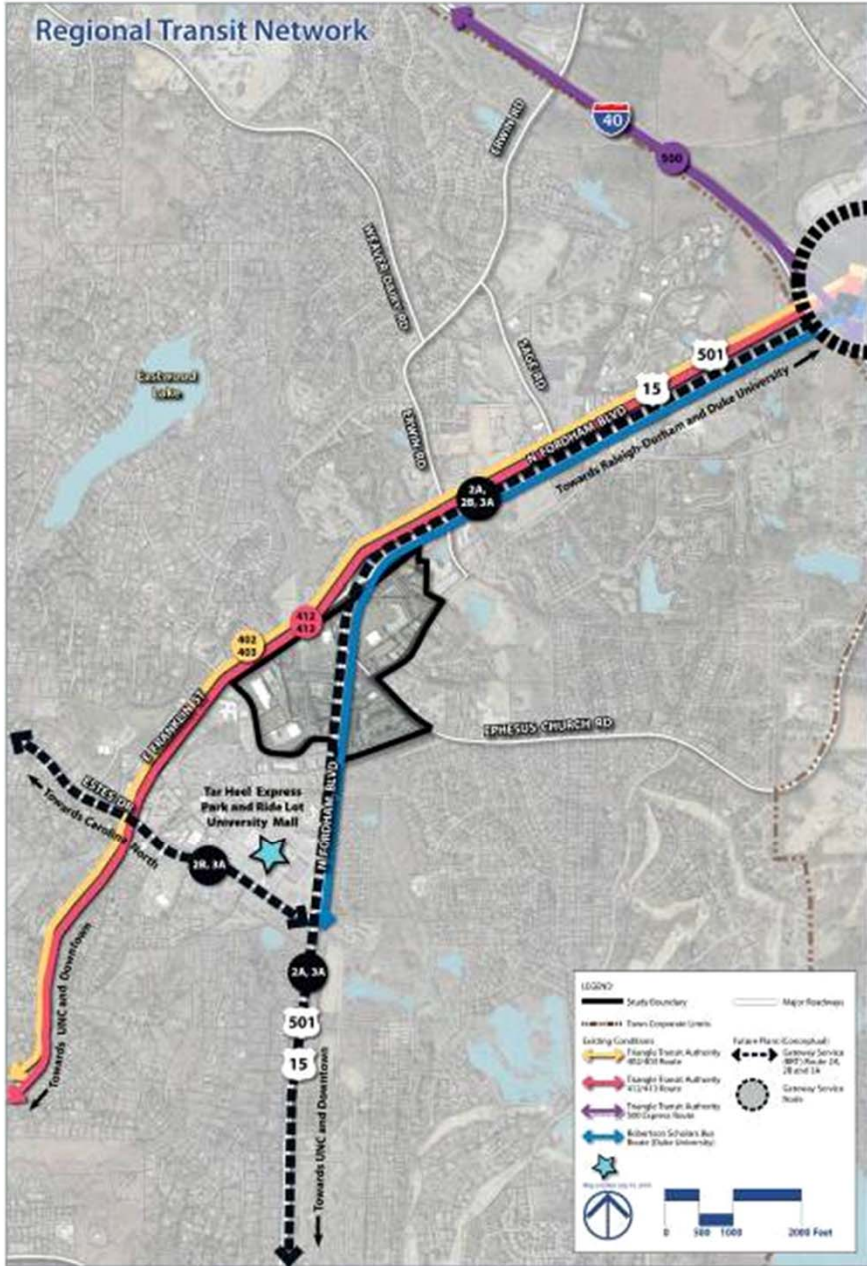














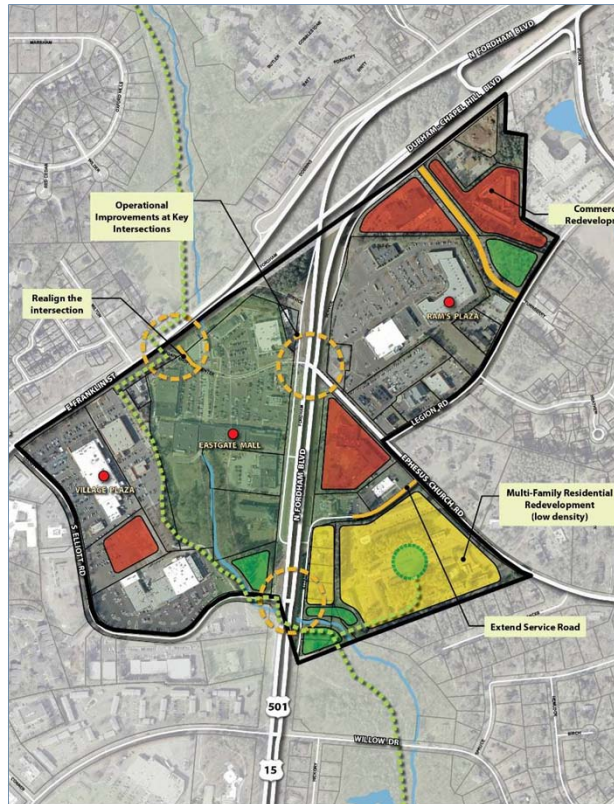
# Development Frameworks Comparison

OPTION	Operational Improvements	New Streets	Transit Improvements	Conceptual Development	Level of Public Investment
<b>A</b> 	<ul style="list-style-type: none"> <li>• Improve intersections along Fordham Blvd, in study area.</li> <li>• Realign intersection at Eastgate Mall and E. Franklin Street to create a more sensible 90° intersection of streets.</li> <li>• Explore dedicated turn lanes where possible.</li> <li>• Analyze signal timing.</li> </ul>	<ul style="list-style-type: none"> <li>• Create new road through Hampton Inn property for commercial to front along and increase connectivity to the north and south.</li> </ul>	<p>Route improvements and dedicated bus shelters and pull-offs.</p>	<p>Option A - \$75-100M</p> <p>Commercial Sq. Ft. ~200,000-260,000 Mixed-use N/A Residential Units ~180-240</p> <p>Open Space ~6 acres</p>	<p>Minimal</p> <p>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.</p>
<b>B</b> 	<ul style="list-style-type: none"> <li>• Improve intersections along Fordham Blvd. within the study boundary, as well as near University Mall</li> <li>• Realign intersection at Eastgate Mall and E. Franklin Street to create a more sensible 90° intersection of streets.</li> <li>• Explore dedicated turn lanes where possible.</li> <li>• Analyze signal timing.</li> </ul>	<ul style="list-style-type: none"> <li>• Create infrastructural framework within Ram's Plaza for increased connectivity and improved development potential.</li> <li>• Realign Ephesus Church Rd. intersection and extend Ephesus to E. Franklin St. through Eastgate Mall.</li> <li>• Extend S. Elliot Rd. to Ephesus.</li> <li>• Extend service road to University Mall.</li> </ul>	<p>Position service roads as ped/bike and bus transit ways.</p>	<p>Option B - \$130-170M</p> <p>Commercial Sq. Ft. ~300,000-360,000 Mixed-use ~100,000-200,000 sf com. Residential Units ~250-400</p> <p>Open Space ~6 acres</p>	<p>Moderate</p> <p>Option B creates a much more connected framework and proposes much more aggressive redevelopment strategy, housing density is bumped up to increase critical mass.</p>
<b>C</b> 	<ul style="list-style-type: none"> <li>• Improve intersections along Fordham Blvd. within the study boundary, as well as near University Mall</li> <li>• Realign intersection at Eastgate Mall and E. Franklin Street to create a more sensible 90° intersection of streets.</li> <li>• Explore dedicated turn lanes where possible.</li> <li>• Analyze signal timing.</li> </ul>	<ul style="list-style-type: none"> <li>• Formalized road network within Ram's Plaza, realign Ephesus Church Road.</li> <li>• Realign Legion Rd. Extend S. Elliot Road.</li> <li>• New road network around Village Plaza connecting E. Franklin St. and S. Elliot Rd.</li> </ul>	<p>Regional Light Rail Transit or Bus Rapid Transit along a widened N. Fordham Blvd.</p>	<p>Option C - \$200-300M</p> <p>Commercial Sq. Ft. ~100,000-125,000 Mixed-use ~350,000-500,000 sf com. Residential Units ~400-900</p> <p>Open Space ~9 acres</p>	<p>Maximum</p> <p>Option C includes options for a very aggressive public transit system as well as the most density within the study area.</p>





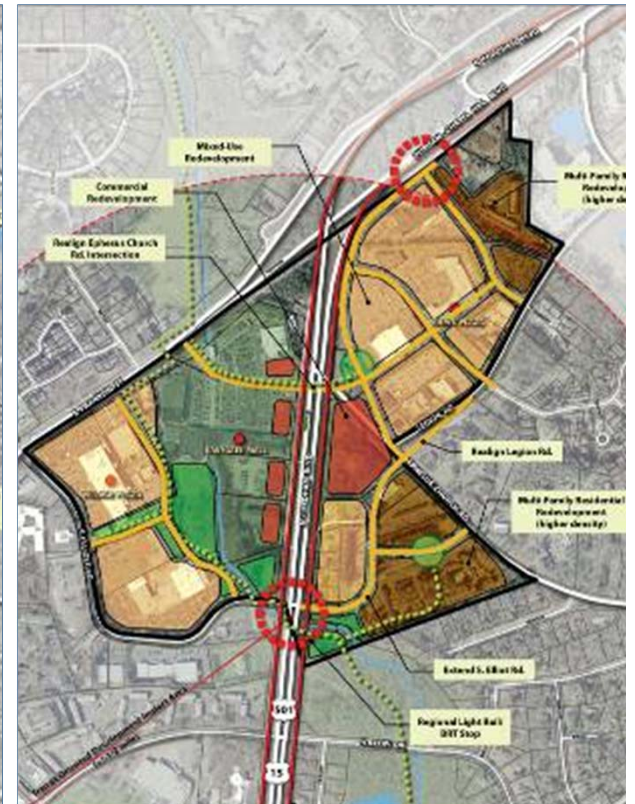
# Framework Plans



Option A



Option B



Option C

