

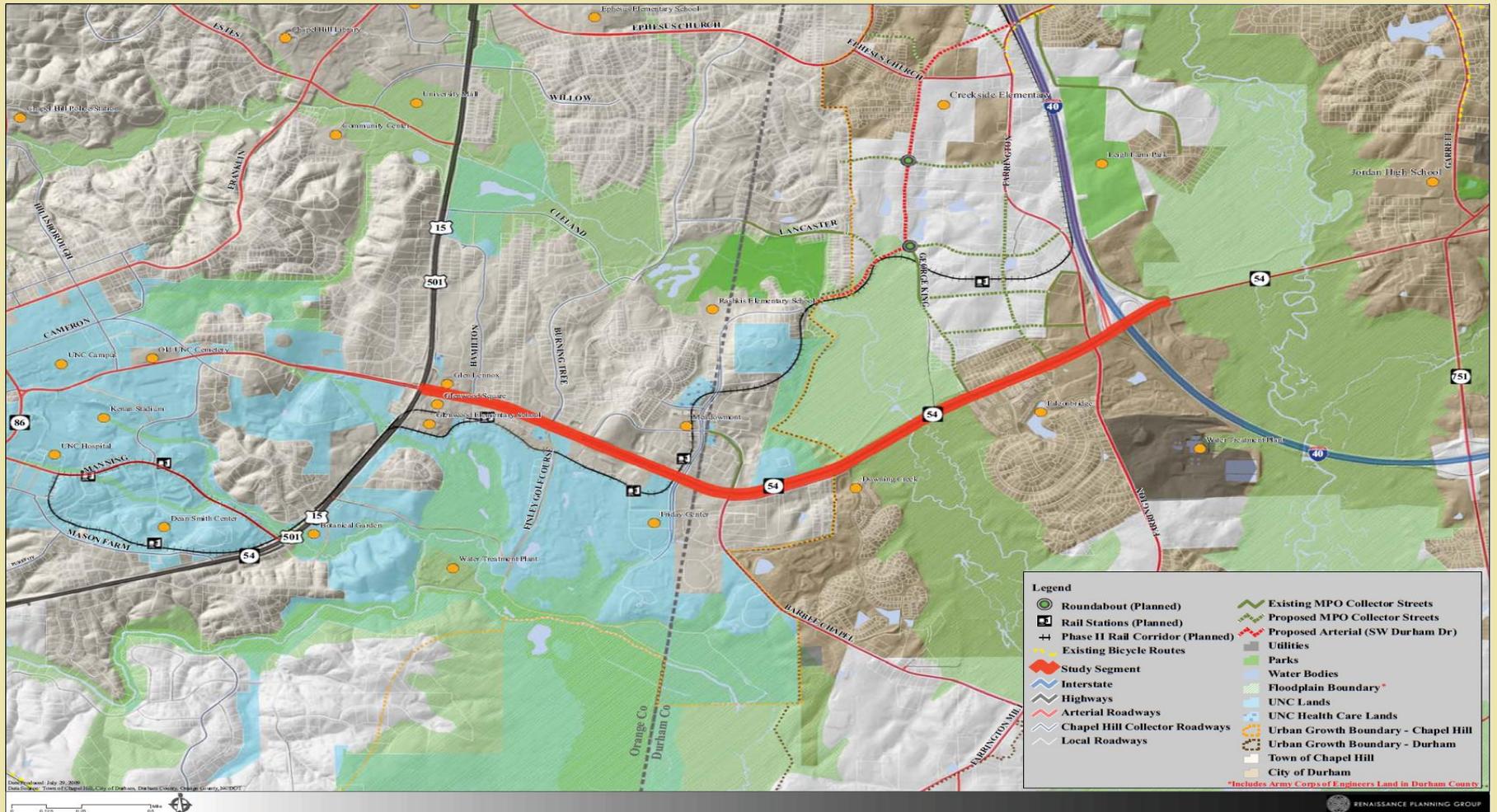
NC-54/I-40 CORRIDOR BLUEPRINT FOR MOBILITY

Final Master Plan
Durham City Council



November 7, 2013

Background



70,000 vehicles per day by 2035





Study Purpose

Analyze land use and transportation issues and trends

Evaluate opportunities and challenges for future development

Recommend short- and long-term solutions and strategies

A blue-tinted map of a region, likely in North Carolina, showing a network of roads and landmarks. A prominent road corridor is highlighted in a darker blue. Labels on the map include 'UNC Campus', 'Old UNC Cemetery', 'Glen Lennox', 'Glenwood Square', 'Glenwood Elementary School', 'HAMILTON', 'BEAUFORT', and 'Newtown'. Highway markers for 86 and 7 are also visible.

Vision

Regionally significant multimodal corridor that serves both regional and local travel through an expanded and more efficient network of streets, bus routes, bicycle facilities and pedestrian enhancements.

Promote community livability by guiding future development into targeted mixed-use areas to reduce trip lengths, enable greater use of non-auto travel options and provide location-efficient choices for housing and transportation.

Participants

DCHC
MPO*

City of
Durham*

Town of
Chapel Hill*

NCDOT

Durham
County*

TTA

UNC

Chapel Hill
Transit

DATA

* Funding Partners

Steering Committee

Consulting Team



RENAISSANCE PLANNING GROUP



Baker

Public

Focus
Groups

Workshops

Study Process

Focus Groups/Workshop1

- Challenges/Opportunities
- Data Collection/Analysis
- Community Profile (February 2010 workshop)

Workshop 2

- Trend Analysis
- Scenario Development/Testing
- Initial Preferred Scenario

Targeted Outreach/ Workshop 3

- Full Analysis Preferred Scenario
- Refined Recommendations
- Draft Plan

Additional Hearings and Adoption

- Additional analysis
- DCHC MPO adopts Final Master Plan (May 2012)

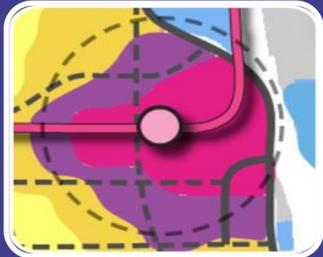
What we learned



- Development will continue to occur
- The growth in traffic from adopted plans will result in significant congestion
- There are insufficient alternatives for parallel routes
- Existing development patterns and densities do not support transit or encourage non-motorized trips
- Vehicle trips destined to the Friday Center and UNC contribute significantly to peak congestion – approximately 70% originate in Durham and points east
- There is a public desire for multimodal options

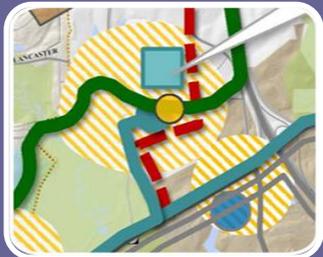
Recommendations

Land Use/Transit/Bicycle-Pedestrian



Nodal Land Development Pattern

- Guides growth into existing /emerging centers
- Opportunities to capture short trips via walking or biking
- Focal point for transit with focused, diverse activity



Transit

- Expanded service and improved connections
- LRT connects corridor with the region
- Flex route shuttle service for low density areas



Pedestrian/Bicycle Improvements

- Fill gaps in existing ped/bike facilities
- Increase safety at intersections and crossing NC 54
- Path along NC 54 and bike lanes on adjacent roads

Recommendations

Park and Ride/Roadway



Park and Ride – Linkages for Success

- Ten new locations proposed
- Nine of ten locations capture trips before entering corridor
- Frequent, reliable, and convenient transit service



Short to Mid-Term Roadway Improvements

- Connect existing roads
- Construct collector street system
- Widen NC 54 to 6-lanes in Durham County to match existing
- Increase efficiency /safety through Superstreet design



Mid to Long-Term Major Investment

- Build grade separations and interchanges
- Improve I-40 interchange (ramps and widening)

Today

Transportation Impacts



2040 Metropolitan Transportation Plan

- NC 54 widening, superstreets and grade separations
- Light Rail Transit (LRT)
- Farrington Road realignment and interchange slip ramp
- Leigh Village access to NC 54 (collector street plan)



FY2012-2018 Transportation Improvement Program

- Slip ramp, northbound Farrington to I-40 eastbound (by 2015 in FY12-18 TIP)
- NC 54 widening with bike lanes and pedestrian facilities (by 2022 in draft FY 14-20 TIP)



Development Review -- Transportation

- Development must be consistent with adopted NC 54 Corridor Master Plan

Today

Land Use Impacts



Comprehensive Plan

- NC 54 has conceptual land use plan
- Guide local governments in amending comprehensive plans and regulations



Station Area Plans

- Planning will conduct station area planning for all light rail stations
- Implementation of transit-oriented design district for the Leigh Village station area



Development Review

- Refer to NC 54 Study in development review

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www.nc54-i40corridorstudy.com

www.dchcmpo.org

