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Improving Access to Transit

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Introduction

- ▶ Why the Complete Streets model is so important to transit
- ▶ Designing bus stops that make transit work
- ▶ Access to Transit plan

Transit and Complete Streets

- ▶ Transit is perhaps mode that most benefits from Complete Streets approach
- ▶ Transit has to find balance between access and speed
- ▶ Two users: Bus operators and customers
 - ▶ Operators are motorists
 - ▶ Customers are pedestrians and bicyclists
 - ▶ Should be friends, but often compete for road space
- ▶ Improve access to transit, improve the street

Essential design elements for transit users

- ▶ Bus stops must be:
 - ▶ Easily-recognizable
 - ▶ ADA-accessible (all the way to the curb)
 - ▶ Located in a place where the bus can safely stop, load/unload passengers, and re-enter the stream of traffic
 - ▶ Bus pullout (over-utilized)
 - ▶ Bus bulbs (underutilized)
 - ▶ Connected to sidewalks/pathways leading to destinations
 - ▶ Close to a safe pedestrian crossing
 - ▶ Visible at all times of the day



Bus bulb

Design elements that make transit work

- ▶ If you want to make transit work, bus stops must have:
 - ▶ Amenities for passengers waiting to board
 - ▶ Shelter (or two or three)
 - ▶ Bench
 - ▶ Trash can
 - ▶ Bicycle racks/shelters/lockers
 - ▶ Real-time information displays (or other info displays)
 - ▶ Good ped/bike access to nearby neighborhoods
 - ▶ Transit stops should be active and attractive public spaces



Paired bus stops

- ▶ Most bus stops are paired to allow for bus service in both directions
- ▶ Rare to find well-designed bus stops on both sides of street
- ▶ Essential elements
 - ▶ Safe pedestrian crossing
 - ▶ Appropriate amenities depend on dominant direction of travel
 - ▶ How to incorporate into design of development that is only on one side of the street?

Important note

- ▶ Most bus stops can be moved

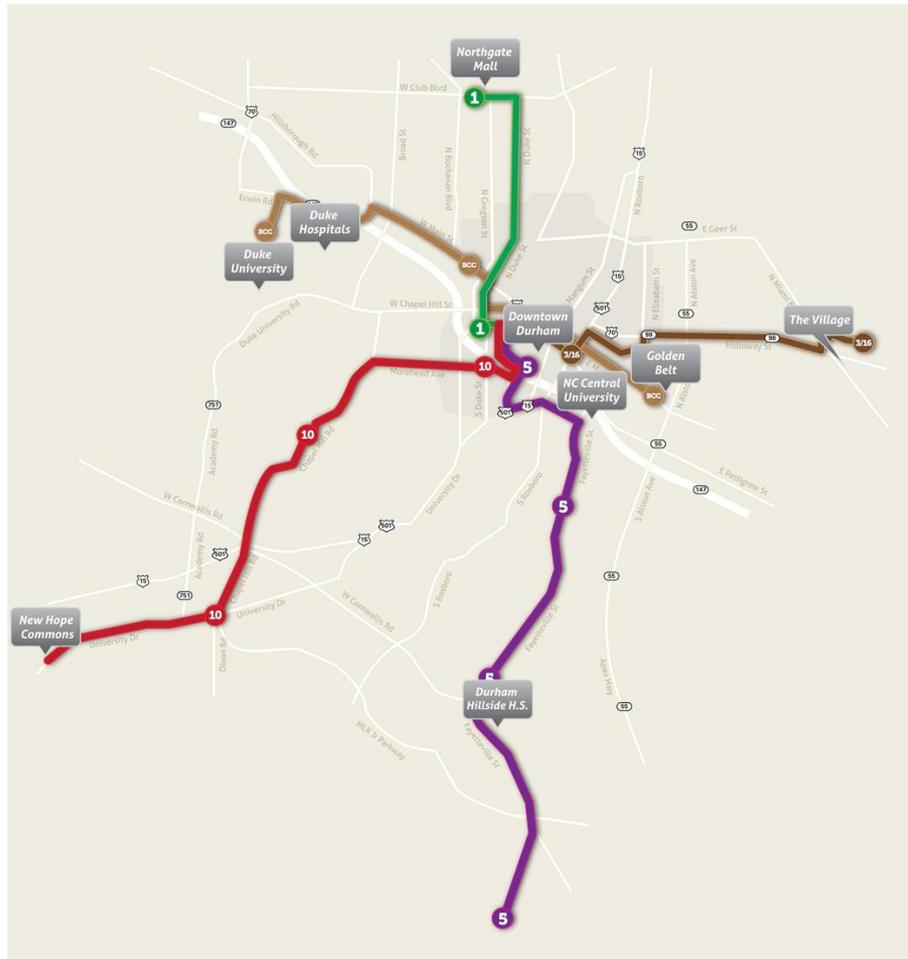
Access to Transit - Background

- ▶ Durham County Bus and Rail Investment Plan approved June 2011
- ▶ Durham County transit referendum approved by voters November 2011
- ▶ Orange County transit referendum approved by voters in November 2012
- ▶ Revenues start being collected April 2013

Access to Transit - Background

- ▶ October 2010 - Triangle Transit entered into contract with City of Durham to manage DATA
 - ▶ Operations
 - ▶ Marketing
 - ▶ Planning
- ▶ Expectation to Perform a Comprehensive Review of System
- ▶ Led to Designing Better Bus Service (DBBS) plan in 2012

DBBS Frequent Bus Network



Access to Transit plan

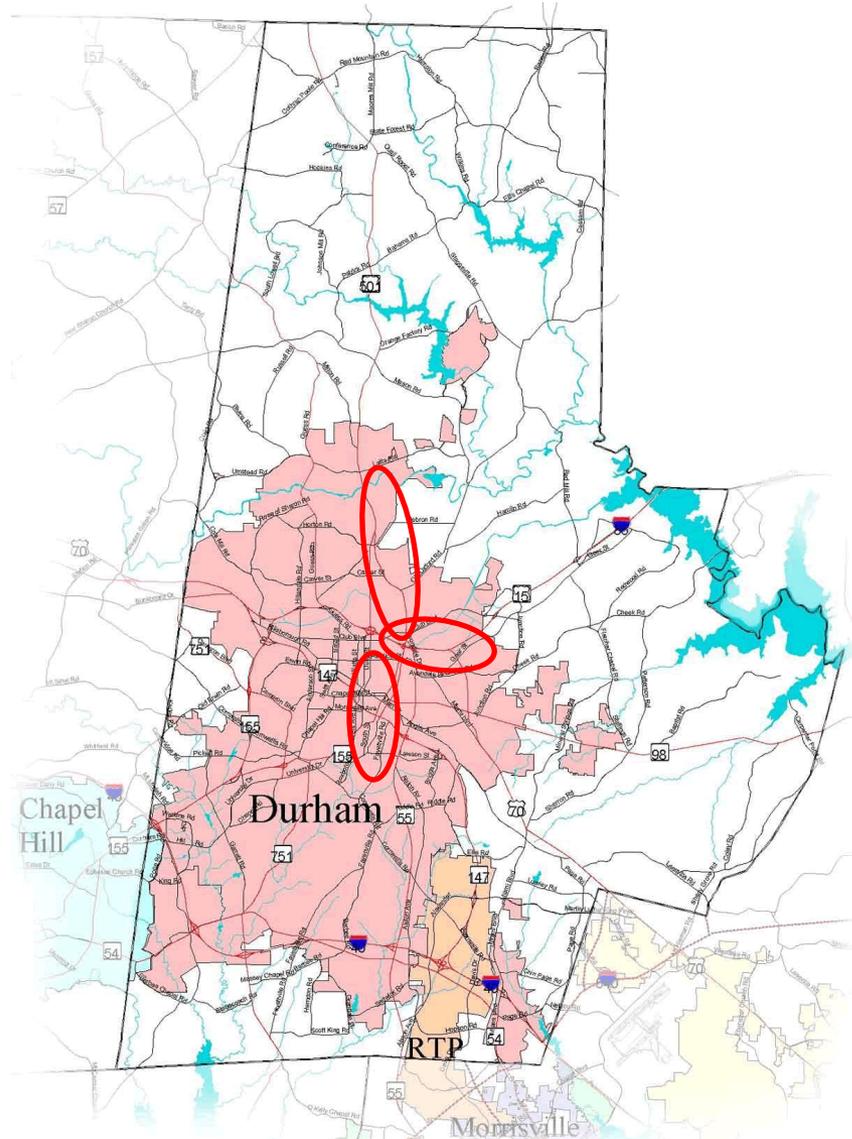
- ▶ Partnership between NCDOT Public Transit Division and Division of Bicycle and Pedestrian Transportation
- ▶ Worked with the City of Durham and Triangle Transit
- ▶ Possibility of a planning grant program to conduct studies in other communities

Access to Transit plan purpose

- ▶ Improve customer experience / expand customer base
- ▶ Comply with ADA accessibility requirements
- ▶ Access federal funding to improve bike-ped facilities along routes to stops and stations

Project Corridors

Fayetteville Street
Roxboro Road
Holloway Street



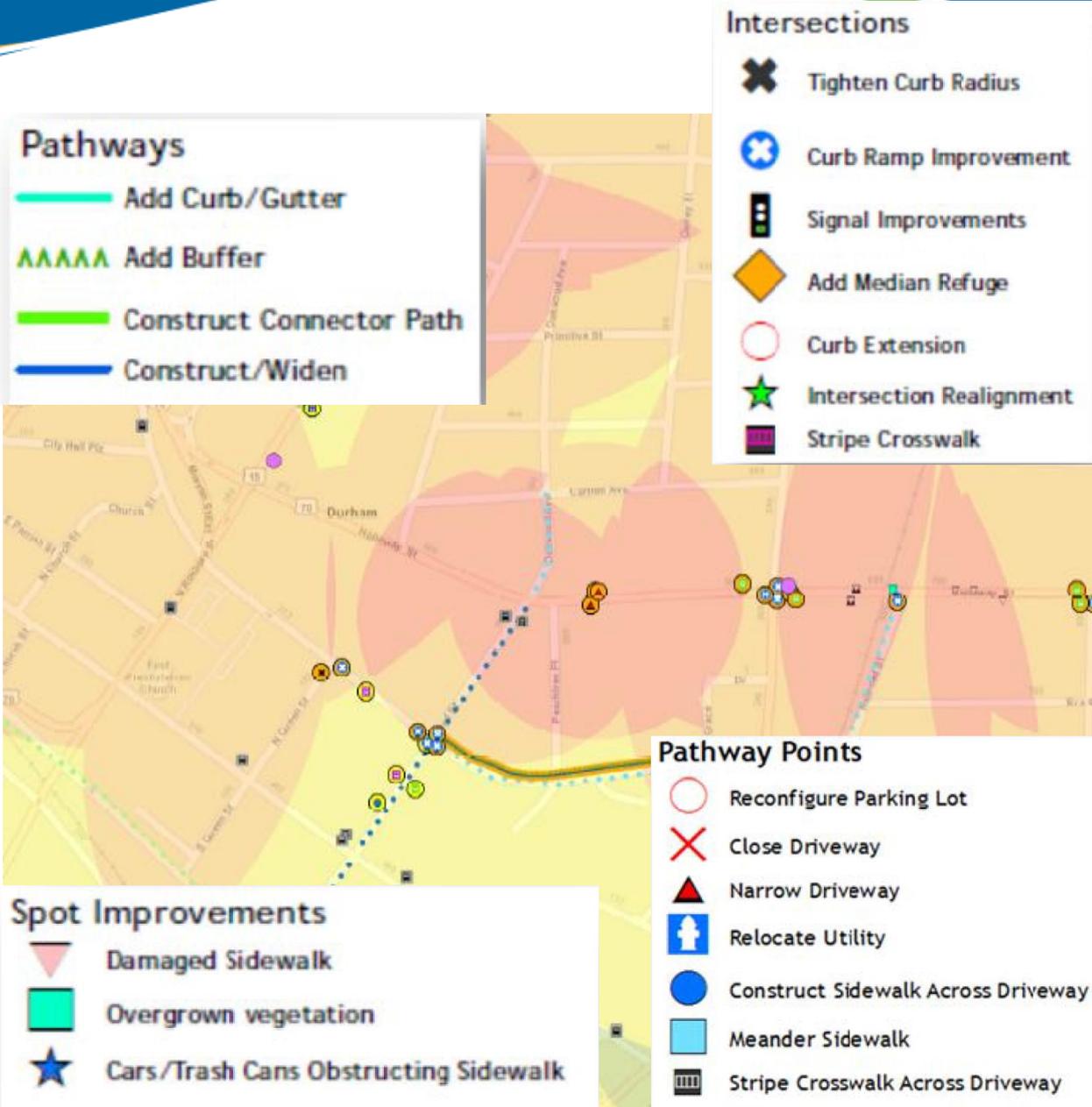
Corridor selection

- ▶ High ridership
- ▶ Identified for service and routing changes (Designing Better Bus Service)
- ▶ Identified source of funding for sidewalks and bus stop improvements (1/2 cent sales tax, Durham County Bus and Rail Investment Plan)

Study approach

- ▶ Address corridors from a Complete Streets standpoint
- ▶ Look at streets outside of the main corridor as well
- ▶ Produce detailed inventory of all improvements to the corridor along with cost estimates

Proposed Infrastructure Improvements



Implementation challenges

- ▶ City of Durham does not have Complete Streets policy, procedures, or design guidelines
- ▶ Unclear what level of approvals and additional outreach is needed
- ▶ Challenges of an outside transit agency making infrastructure improvements within a municipality

Conclusion

- ▶ Finding right balance for transit can lead to finding right balance for street as a whole
- ▶ Design bus stops to make them safe, accessible, comfortable and attractive
- ▶ Recognize that every bus stop has a different context
- ▶ Engage transit agencies early in each project

Questions?



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