

# A Statewide Intercity Bus Network Plan for North Carolina

19<sup>th</sup> National Rural Public and Intercity Bus Conference

October 25, 2010

**Thomas Cook** 

Institute for Transportation Research and Education



#### **Overview**

- 1. Background
- Development of the Statewide Intercity Bus Network Plan
- 3. Experience from implementing new services
- 4. Future goals



### **Background**

- Operating subsidies for intercity bus services from submissions to needs assessment
- Reactionary—resulted in mixed success
- Some routes continued after demonstration; others ceased operation
- No overall plan or prioritization for new intercity bus services



- Individual and comparative analysis of potential services from FY 2007 needs assessment:
- Population—city and counties
- Trip attraction—Gravity Model
- Ridership—US DOT method by Fravel,
  Burkhardt, and Menzer (1987)
- Estimated operating costs (total and per passenger)
- Two routes consistently scored highest
- Statewide Plan should be developed



#### Statewide Intercity Bus Network Plan

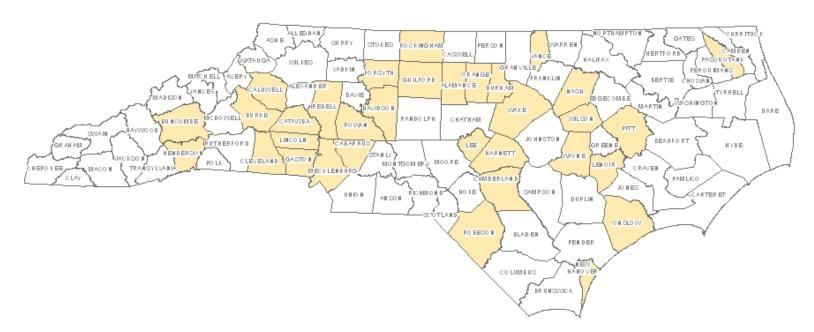
- Developed FY 2009
- Drew from Colorado, and Washington plans by KFH Group, Inc.
- Goal—develop statewide plan to guide prioritization of services to be maintained/subsidized
- Goal—use simple method to facilitate updates and use by NCDOT staff



#### Statewide Intercity Bus Network Plan

- Analysis conducted at <u>county</u> level
- 2 variables for potential need/demand:
- "Transit-dependent" population density (<16,</li>
  > 60, < poverty level, disability, without auto)</li>
- Overall population density—sufficient to support intercity bus service?

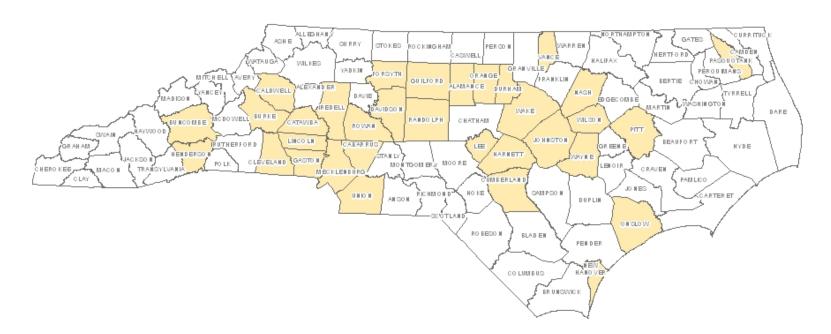
#### Top Third of Counties with Highest Density of Transit Dependent Persons



Highest Transit Dependent Density

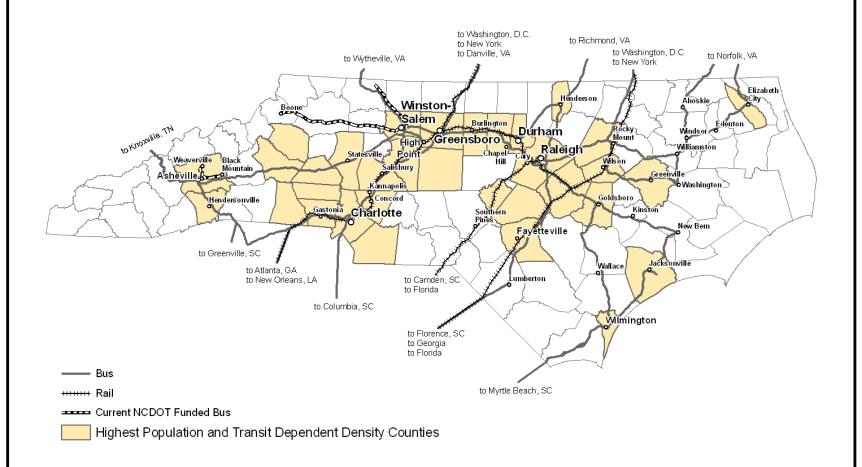


#### Top Third of Counties with Highest General Population Density



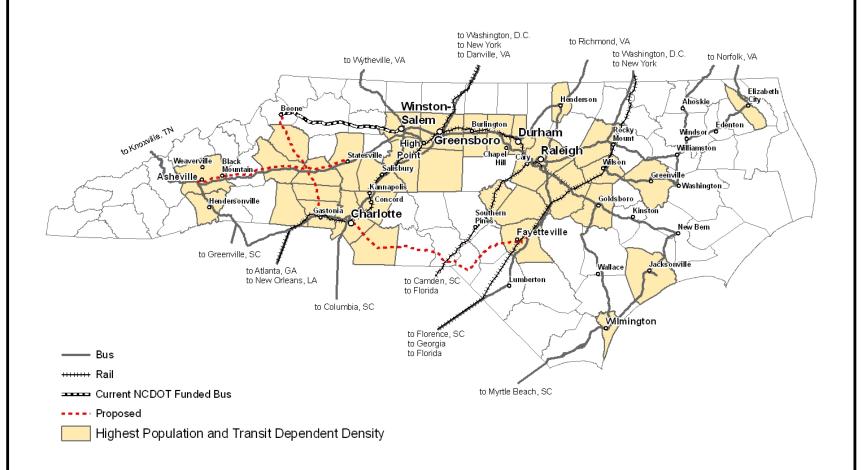
Highest General Population Density

#### Overlay of Intercity Routes with Population and Transit Dependent Density



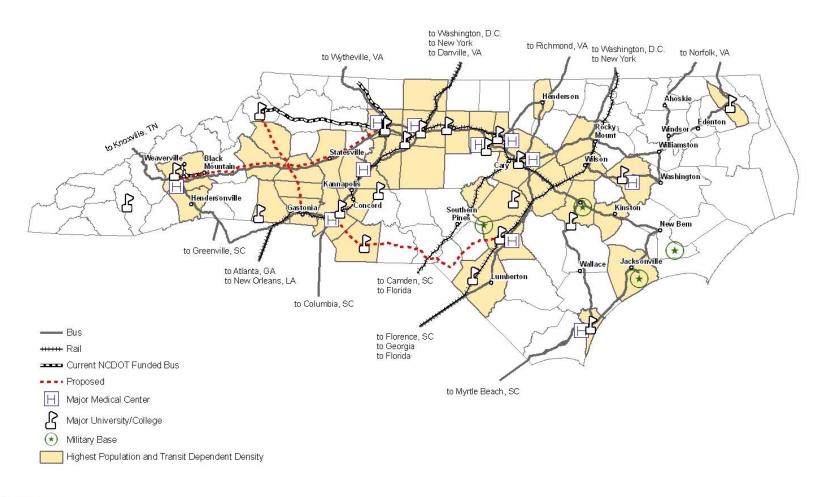


#### Overlay of Proposed Intercity Routes with Population and Transit Dependent Density





## Overlay of Intercity Routes with Population and Transit Dependent Density and Institutions







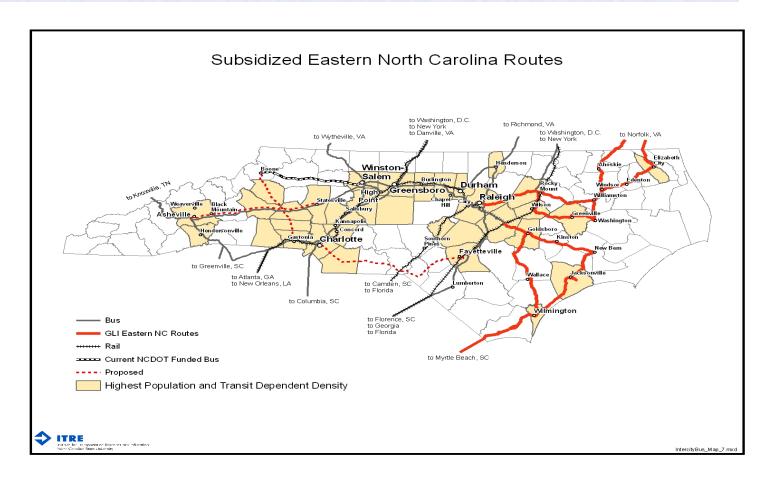
#### Statewide Intercity Bus Network Plan

### Findings:

- Intercity bus service in most counties / corridors with high population densities, and high densities of transit-dependent persons
- Most military, higher education, and major medical facilities in areas with intercity bus service
- No service in Boone—Charlotte, & Wilmington—Charlotte corridors

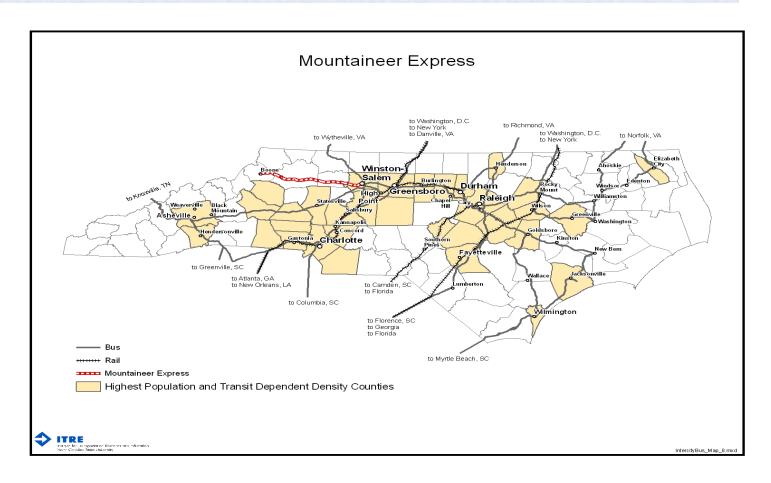


Complication #1: Greyhound notice of intent to abandon service in eastern NC





Complication #2: Grantee to cease operations of Boone—Greensboro route





#### 2010—New routes (2)

- One round trip per day
- Oriented for a.m. travel <u>to</u> Charlotte; p.m. travel <u>from</u> Charlotte
- Oriented primarily to intercity bus connections in Charlotte
- Interlined with Greyhound

### 2010—Existing routes (6)

- Maintain 5 Greyhound eastern NC routes subsidized using 5311(f) in-kind match
- Change in Boone—Greensboro grantee



#### Lesson—Section 5311(f) In-Kind Match:

- Very effective in maximizing use of federal 5311(f) funds when state funds are limited
- GLI a very cooperative, helpful partner
- The pilot should be extended/made permanent



#### Lesson—balancing competing priorities:

- New vs. existing services
- Operating vs. capital funding needs
- Fare rate vs. subsidy rate
- Scheduled connections to national network vs. intrastate travel convenience
- Multi-modal stations vs. convenience stores
- Intercity bus connections vs. passenger rail or air connections
- Signage content vs. DOT regulations



#### **Future Goals**

A state-level intercity bus program continually evolves!

- Evaluate performance of subsidized routes
- Maintain/expand service as funding allows
- Develop revenue targets for new services
- Locate stops at multi-modal facilities
- Prioritize additional service frequency
- Increase marketing
- Develop local feeder services



## Questions/Comments?