## CHAPTER I INTRODUCTION

## A. Background

In the US 15-501 Phase I Major Investment Study (MIS), reasonable and feasible transit/highway alternative combinations and a general level of investment have been identified. The Phase II MIS focuses on a refined transit alternative analysis, including more detailed engineering studies and additional public involvement input.

## **B.** Study Area Context

US 15-501 is primary north-south highway route in North Carolina, extending from the Virginia State line south to the South Carolina State line. Within the Triangle region, US 15-501 is a four- to six-lane expressway connecting the Town of Chapel Hill and the City of Durham, with major interchanges at NC 54 and Franklin Street in Chapel Hill; and at I-40, US 15-501 Business, NC 147 (Durham Freeway), and I-85 in Durham. The Phase II MIS Study Area has been refined to include areas adjacent to Corridor "A" from the Phase I Study. Exhibit ES-1 illustrates the study area for this phase of the project.

## C. Project History

In 1993-1994, the City of Durham, the Town of Chapel Hill, NCDOT, and private property owners in the US 15-501 corridor participated in the US 15-501 Corridor Study which focused on identifying areas of congestion and methods to improve mobility within the corridor. A Corridor Master Plan was developed. The study recommended the following multi-modal improvements: 1) upgrading US 15-501 to a controlled access facility (i.e., urban freeway), 2) preserve right of way for a future transit corridor, and 3) investigate TDM strategies. The Triangle Transit Authority's (TTA's) Triangle Fixed Guideway Study (February, 1995) and Draft Environmental Impact Statement (DEIS) (April, 2001) determined a need for rail or bus transit fixed guideway between Durham and Chapel Hill as part of the second phase of their regional rail system.

The US-15-501 Phase I MIS, completed in November of 1998, recommended that the following alternatives to be carried forward for future study:

- No-Build Alternative
- Travel Demand Management Strategies (TDM) such as bus preferential treatment (i.e., signal pre-emption), pricing programs to reduce fares such as employee subsidies, overall increased bus service, and employer based strategies including staggered work hours and telecommuting.
- Enhanced bus service.
- Widening US 15-501 at- grade from Franklin Street in Chapel Hill to I-40 to 8 lanes, and upgrading US 15-501 to a 6-lane freeway from I-40 to US 15-501 Business in Durham.
- Construction of "circulation roads" at the US 15-501 / I-40 interchange to provide some congestion relief on 15-501 itself by providing alternative routes for local trips.



- HOV Lanes within the US-15-501 Corridor.
- Pedestrian and bicycle facility improvements including a sidewalk and dedicated bicycle lanes along Old Durham-Chapel Hill Road from US 15-501 to University Drive.

The Policy Oversight Committee also recommended that more detailed evaluation of rail and busway technologies was necessary before a preferred alternative/investment strategy is identified and any major state or federal investment in transportation facilities is made in the corridor.

