

# **3.0 TECHNICAL SPECIFICATIONS and SCOPE OF WORK**

## **3.0 CONSULTANT SCOPE OF SERVICES**

### **PROJECT BACKGROUND**

US 1 is a four-lane, regionally significant corridor that traverses through the City of Raleigh; and extends northward through the states of Virginia and Maryland. It is one of the north-south highways serving a rapidly growing area within the Raleigh – Durham Metropolitan Region. The corridor area includes both highway and rail facilities beginning at I-540 in Raleigh, and extends northward to US 1A in Franklin County. Much of US 1 corridor currently passes through areas of rapid metropolitan growth that is occurring at interchanges and intersections with major radial routes leading to Raleigh. Continued rapid development along the entire corridor is anticipated especially as a result of utility consolidation between the City of Raleigh and Town of Wake Forest.

No systematic access management program exists along the corridor, nor do any coordinated or systematic plans for making land use decisions...decisions that will ultimately impact traffic volumes and the roadway's overall efficiency. Accordingly, local governments, with the support of the Capital Area Metropolitan Planning Organization and the Triangle Transit Authority are proposing to partner with the NCDOT to perform a comprehensive land use/transportation study for US 1 suitable for implementation at the local and state level. Fortunately, this partnership is proposed before the roadway's performance has deteriorated beyond control.

### **PROJECT OBJECTIVE**

To prepare a coordinated land use, urban design and multi-modal transportation plan, suitable for implementation by the local governments, Capital Area MPO, TTA and NCDOT, that integrates existing and projected land use patterns with strategic regional transportation needs for the US 1 corridor between I-540 in Raleigh and US 1A in Franklin County. This plan will reflect and support the development objectives of the corridor's individual communities.

## DESIRED END-PRODUCT

The plan will represent an overall vision for mobility and development along the corridor, and will include implementation strategies and performance criteria that support the vision. Specifically, the end product of this study, as developed by the consultant, will include the following:

- A clear vision of the role(s) the corridor will serve in the study area and functional design requirements. .
- An inventory of existing land use patterns, practices and regulations along the corridor.
- Projected future land use patterns and development plans along the corridor.
- Projected automobile, transit, and freight traffic volumes, and the provision for alternative transportation modeling scenarios
- 5. An access management plan for the entire corridor that is directly related to proposed land development.
- 6. Roadway standards, including, but not limited to:
  - ITS deployment and operations
  - Access spacing
  - Intersection levels of service for a designated future year
  - Design and location of auxiliary lanes
- 7. Projected cross-section needs to accommodate multi-modal uses and proposed land development patterns, with accompanying projections of needed right-of-way to accommodate multi-modal facilities. All such cross-sections will be depicted and mapped as part of the final plan.
- 8. Corridor improvement priorities that correspond with projected land development and growth patterns and associated traffic needs.
- 9. Recommendations on how and where modes of travel, other than the automobile, will be planned for and accommodated along the corridor.
- 10. A detailed toolkit that addresses how local governments will implement and use the adopted Plan on a day-to-day basis including coordination with land use plans and ordinances and the plan review process.
- 11. Develop a methodology for use by the Capital Area MPO that addresses use of the Corridor Plan in considering TIP requests. It is the intent of this project to develop a consensus among local governments, the Capital Area MPO, TTA, and NCDOT to both

improvements along the Corridor and their priority for consideration in the TIP.

## **PROJECT LOCATION**

The project will run along the US 1 Corridor area between I-540 in the City of Raleigh, through Wake County and into Franklin County, to its intersection with US 1A, a distance of approximately 12 miles. US 1 varies tremendously in character along this route. It contains both urbanized areas and areas that have maintained a rural character, yet are quite likely to develop in the future.

## **PARTICIPATING AND SUPPORTING JURISDICTIONS/AGENCIES**

City of Raleigh  
Town of Wake Forest  
North Carolina Capital Area MPO  
NCDOT  
Triangle Transit Authority

## **PROJECT TIME-FRAME**

The project is expected to be awarded in February 2005 and completed by June 30, 2006.

## **PROJECT SCOPE**

The project will contain seven major components:

### **1. Create a Technical Team**

A technical team (i.e., Steering Committee) will be created to provide guidance and oversight to the study. Team members will include representatives from the Capital Area MPO, City of Raleigh, Town of Wake Forest, TTA, and additional planners, representatives from local chambers of commerce, staff from each of the participating jurisdictions, and NCDOT staff. The technical team will review the consultant's work, give direction and input, and monitor the project study as it takes place. The consultant may be asked to attend one or more of these meetings.

The Technical Team will keep officials of the Capital Area MPO Transportation Advisory Committee apprised of progress throughout the duration of the contract. The consultant may also be asked to attend one or more of the Transportation Advisory Committee meetings.

### **2. National Review of Similar Corridor Studies**

The consultant will conduct a study of similar corridor planning processes and present to the technical team a synopsis which includes: a summary of each study; conditions that warranted each study; implementation steps included in each study; actual levels of implementation, and lessons learned.

3. Conduct a Land Use, Environmental, and Transportation Inventory of the Corridor

**This component consists of an overview of existing conditions along the corridor so as to achieve a thorough understanding of the issues (past, present and future) that have had or will have impact on the corridor. Information to be collected and analyzed by the consultant shall include:**

- Demographic information (historic population trends, factors affecting growth)
- Existing and projected future land use patterns (as they currently exist)
- An overview of land use policies and ordinances in each of the jurisdictions in the Study Area
- Availability and projections of public water and sewer facilities
- An inventory of access points along the Corridor, both existing and proposed
- An environmental inventory including a topographic analysis, character of forested areas as well as individual tree stands, creeks and wetlands,
- Significant cultural and historic sites, prime farmland areas, water supply watersheds, wildlife habitats, etc.)
- Traffic, network and capacity data for US 1 and roads that lead into the corridor or significantly impact the corridor
- Accident data
- Impact of transit plans by TTA, Capital Area Transit, and others.
- Overview of improvement projects (funded and unfunded) on the LRTP and the various TIP's within the Study area.
- Inventory of other transportation facilities, modes or plans (such as bicycle, pedestrian, greenway, etc.) on or adjacent to US 1
- Impact of air quality standards on current and proposed development along US 1.

The consultant will create a website that will house technical information gathered and put together for the Study as well as updates, progress reports, and other relevant Study information. This website will also be linked to the website of the project manager.

#### **4. Regional Kick-off Meetings**

The consultant will conduct up to two meetings, one each in the eastern and western portions of the corridor. The purpose of these meetings is to educate the public, elected officials, and other interested parties on the corridor, corridor planning principles, and the issues involved in developing integrated transportation and land use plans. The consultant will present an overview of the corridor; present the information gathered in the inventory, discuss corridor studies in general and how they have been developed and implemented elsewhere, discuss planning and design principles, and solicit opinions from the general public regarding the corridor, both in terms of transportation needs and land development issues. Targeted audiences include area residents, elected officials, planning officials, representatives from the development community, local chambers of commerce, NCDOT and other transportation officials, etc. The desired end product of these meetings is to establish a basis of knowledge among persons whose decisions will impact the corridor and to ascertain the desires of the public that uses the corridor.

#### **5. Develop Performance Standards and Implementation Strategies**

Based on input from the regional meetings, the consultant's research, and from the Technical Team, the consultant will develop a set of performance standards for the corridor and alternative strategies for achieving those performance levels. Also to be included are and implementation steps for each strategy. The performance standards will serve as benchmarks against which requests for development and transportation improvements can be measured. The strategies will consist of a variety of techniques with suggestions for implementation along the various segments of the corridor.

#### **6. Conduct Community Design Workshops**

For the plan to be successful, it must reflect the needs and desires of the corridor's communities and residents. Accordingly, a series of community workshops will be conducted (perhaps one or two in each of the three counties) by the consultant to achieve consensus on issues related directly to roadway design. The basis of each workshop will be the transportation and land use standards and implementation strategies recommended by the consultant (and

agreed upon by the technical team) for each portion of the Corridor. The desired end result from the workshops will be:

- Consensus on an overall vision for the various portions of the corridor along with performance standards supporting that vision.
- Selection of the preferred strategy by which those performance standards should be achieved.
- Consensus on implementation strategies addressing both future land use patterns and corresponding transportation measures.

## **7. Formulate Plan**

**The consultant will then assemble the final document that contains all that is shown in the “Desired End Product” section referenced herein, the results of the sub-regional meetings, outcomes of the workshops, and a plan of action suitable for adoption by the various local governments and MPO along the corridor and for presentation to NCDOT. Included within the plan shall be the recommended implementation program by the local governments to ensure the plan’s long-term success.**

## **8. Plan Adoption and Agreement**

The Capital Area MPO and the consultant will present the plan to each participating local government and NCDOT for approval. Following approval, memoranda of understanding or any other necessary joint agreements between the communities, as called for in the Plan, will be executed to ensure that the plan’s successful implementation. NCDOT will also be requested to endorse the plan.