

CAPITAL BOULEVARD



CORRIDOR STUDY

Scope of Work:

Laying the Foundation for a Vibrant Capital Boulevard

OVERVIEW

Introduction

Capital Boulevard is perhaps the most visible and important transportation corridor in Raleigh. Not only is it the primary gateway to the City's heart, but it offers some of the best opportunities for redevelopment, open space creation, and mobility enhancement. Connecting downtown with and expanding "midtown" growth center, the successful reconfiguration and redevelopment of Capital Boulevard could create millions in new development and associated tax revenue, create jobs, offer a variety of housing options accessible by transit, and create unique destinations for the City and region. Capital Boulevard is perhaps the premier location within the City to advance City's Comprehensive Plan and to transform the corridor into a vibrant mixed-used area that reflects the direction of a 21st Century City.

However, there are significant obstacles to realizing this opportunity. Current physical conditions both within the right of way and adjoining private and publicly-owned property are not conducive to realizing the latent value that resides within the corridor. A major rethink of both the public infrastructure and private development patterns is needed. This study will serve as important first step. Given the scope of the undertaking, the size of the study area, and available resources, the study will by necessity be conceptual. Even still, the identification of realistic, actionable recommendations is an intended outcome of the undertaking.

Current Conditions

Of the four major gateway corridors into downtown Raleigh, Capital Boulevard is both the most heavily travelled, and the most complex in terms of its design and function. Traffic counts throughout the study area range from 39,000 to over 60,000 vehicles per day. The Boulevard is flanked by two active rail corridors—the Norfolk Southern Secondary and CSX S-Line—complicating access and cross-town connectivity. Existing land use patterns and bridge configurations provide significant barriers to right-of-way expansion. Many interchanges are sub-standard in terms of function, safety, and condition.

The roadway function ranges from a grade-separated freeway from downtown to Fairview Road; to a signalized at-grade urban arterial north of Atlantic Avenue. The roadway has several unusual design features, including a single-sided local access way between Fairview and Atlantic, and a split design between Atlantic and Crabtree Boulevard where commercial development is located in the median, as well as along the sides of the roadway. In the reverse of typical urban highway design, access becomes more limited and controlled as the Boulevard approaches downtown, with the prevalence of at-grade intersections and driveway access points increasing further north and away from downtown. Traffic volumes also increase with proximity to downtown, as Capital Boulevard is fed from interchanges with major thoroughfares such as Wake Forest Road and Wade Avenue.

Public transportation along Capital Boulevard is available in the form of the Route 1 bus that plies the corridor north of Atlantic Avenue. While this route is second in ridership in the CAT system, the supportive facilities—shelters, benches, and sidewalks—are either non-existent or substandard throughout much of the study area. The CSX S-line is proposed to one day be part of a Regional Rail transit system, and portions of both the CSX and Norfolk Southern corridor are under study for Southeast High Speed Rail.

Land use patterns along Capital Boulevard are a muddle. Despite the high traffic volumes, poor access to adjacent land uses and a substandard image have kept away the type of retail, service, office, and multi-family developments that are typically attracted to high-volume arterial roadways. What is found along Capital Boulevard is a mix of industrial and distribution uses (a legacy of the parallel freight rail corridors); aging and low-rent retail; auto repair and new and used auto sales; and a smattering of sexually-oriented businesses including adult bookstores, a “gentleman’s club,” and several motels not notable for their family-friendly ambience.

North of Atlantic Avenue, a significant amount of land along Capital Boulevard is located within the 100-year floodplain. This includes all the property located in the wide median north of Atlantic Avenue, as well as property located in the vicinity of Crabtree Creek. Flooding has been an issue in both areas in the

recent past, and is likely exacerbated by the large amount of impervious surface in the study area and lack of modern stormwater control devices. FEMA money has been made available in the wake of flooding events to purchase ~~flood-prone~~flood-prone properties and relocate businesses, but there has been little interest~~have been no takers~~. Further development in the floodplain should be discouraged as a matter of policy, and efforts need to be taken to restore the natural functions of the floodplain over time to as to minimize the threat to property.

Opportunity

Past efforts at improving Capital Boulevard have focused on initiatives of modest cost—street trees and landscaping, public art, and the regulatory control of signage. There has not been a significant rethink of the overall design of Capital Boulevard to address its numerous deficiencies in terms of traffic safety and function, flooding, and land use. With the easy actions already largely in place, bolder and more ambitious plans are required for Capital Boulevard to realize its full potential. Such plans are appropriate for consideration, for a number of reasons:

- There is significant untapped real estate value along the corridor, leveraging the access and visibility provided by the Boulevard, proximity to downtown, and the possibility of fixed-guideway transit in the vicinity. Several large-scale property assemblages present the opportunity for significant redevelopment, including a City-owned site at Devereux Meadows.
- The expansive flooding issues place a significant amount of property at risk for future flood damage. The economic and environmental consequences of existing floodplain argue strongly for actions which help restore and enhance the natural function of the floodplain and protect upland property from potential damage from oversized storm events.
- The proposed greenway link from downtown to the Crabtree Creek has the potential to be a transformative open space investment. However, a feasible means of accomplishing this link has never been worked out, and it remains a vague line on the map.
- Capital Boulevard is also one of the most important transit corridors in the City. It hosts the CAT route with the second highest ridership in the system, and it parallels the major rail corridors proposed to host high-speed and rail transit services.
- There are several sewer replacement projects planned for the corridor along the Pigeon House Branch. These projects should be coordinated with other capital improvements where possible.
- The Pigeon House Branch is 303rd listed as impaired waters for copper and fecal coli-form bacteria. Improving water quality in this stream is a major environmental priority.

In short, while the costs of the public investments necessary to achieve the corridor's potential are likely to be high, these costs could be funded through a combination of sources targeting the various problems in the corridor, and the returns in terms of private reinvestment also will~~will also~~ be high.

SCOPE OF WORK

The scope proposed below follows a traditional planning trajectory: inventory and analysis, public outreach and visioning, plan preparation and refinement, and adoption. However, it also includes the following modifications:

- The public and property owners are consulted up front to define the study area, identify key questions, and refine the scope.
- The process and interim work products draw an explicit link between the magnitude of the public investments contemplated, and the potential for private investment along the corridor.
- The plan contents will work backwards from implementation to ensure that the recommendations can realistically be carried forward.
- Intra- and inter-governmental coordination is built into the process given the overlapping jurisdictions along the corridor, public ownership patterns, and interrelated nature of the issues.

Phase 1: Project Scoping

Task 1.1: Internal Working Group Brainstorming

The first step will be to convene an initial meeting of the internal working group review the scope and ~~conduct~~ a brain dump of all known projects, issues, and opportunities in the study area.

Task 1.2: Government Stakeholder Roundtable

Representatives from the City, Wake County, NCDOT, DENR, CAMPO, [NC Department of Administration](#), and other parties with jurisdiction in the study area will be convened for purposes of introducing the project and preliminarily identifying known issues and concerns. This meeting ~~will also~~ also be used to ~~discern~~ get a sense of the “bottom line” for each agency.

Task 1.3: Briefing booklet

Staff will prepare a booklet of background information on the study area. This book will not include a detailed inventory, which is reserved for Phase 2, but will include base maps and general information about the corridor, its history, and the overall project.

Task 1.4: Initial public workshop

A public workshop will be scheduled, preferably for a venue in or near the proposed study area, to brainstorm ideas for the corridor study. Participants will have been invited to review the briefing book in

advance, and copies will be available at the meeting. A brief presentation will be followed by a discussion structured according to the major issues—transportation, flooding, economic development.

The outcome of the meeting workshop will be (1) a list of study priorities, and (2) acceptance of the study area. The results of the workshop also will also be compiled in a summary report.

Task 1.5: Revised scope

Based on the results of the workshop, a revised scope of work will be published andas will serve as the scope for the remainder of the project.

Meetings: Internal Working Group Brainstorming, Government Stakeholder Roundtable, Public Workshop

Deliverables: Refined scope and study area, public workshop summary report.

Phase 2: Inventory and Analysis

The Inventory and Analysis phase is intended to provide the factual and analytical basis for the remainder of the planning effort. It is informed by the scoping process, but can be assumed to cover the major physical systems comprising the corridor. Sources for the inventory will be existing maps, plans and studies; interviews with officials at NCDOT and elsewhere; and Wake County property records.

Task 2.1: Transportation Conditions

Traffic count and accident statistics will be compiled for the corridor. The ages of existing bridges and interchanges will be obtained, along with any replacement schedules. Transit data will include ridership, the locations of all CAT stops, and board and alighting data, where available. Sidewalk conditions will be inventoried.

Task 2.2: Environmental Conditions

Environmental conditions will be summarized in narrative and map form. These will include the extent of floodplains, history of past flooding, any known or suspected contaminated sites, tree canopy, ecology and habitat, and a discussion of water quality in the Pigeon House Branch.

Task 2.3: Infrastructure

Maps of water, and sewer and stormwater infrastructure will be prepared. The narrative will discuss any known deficiencies as well as planned or needed projects.

Task 2.4: Economic and Market Analysis

A snapshot of recent and current market conditions will be prepared. These will include an analysis of 2008 property valuations, a review of recent transaction data, and summaries of recent development activity.

Task 2.5: Soft Site Analysis

Using a combination of property data and field surveys, “soft sites” within the study area will be undertaken. Soft sites are properties likely to be profitably redeveloped through private-sector initiative. They include ~~underbuilt~~ under-built sites, vacant sites, and sites occupied by vacant and/or deteriorated buildings. Soft sites may persist for considerable periods of time if market conditions are not sufficiently favorable to spur redevelopment.

Task 2.6: Urban Design Inventory

Staff at the Urban Design Center DC will produce a qualitative assessment of urban design features in the study area, including public realm inventory features, landscape typology landscaping, viewshed, transit and vistas, cultural and historic resources ^[h1] public art, cognitive mapping, and built environmental characteristics.

Task 2.7: Issues and Opportunities Report

A report summarizing the Tasks 2.1 – 2.6 will be prepared. Based on the inventory results, a set of issues, and opportunities, and constraints will be identified. This report will be the P phase 2 work product.

Task 2.8: Public Design Workshop Charrette

A design workshop, or charrettes, will be held to present the results of the detailed inventory and the issues and opportunities, and constraints report. The design workshop charrettes will begin with a summary presentation of the issues and opportunities, and constraints report. A site visit may follow, and will require transportation given the size of the study area. After reconvening, participants will be organized into a series of breakout groups to discuss potential improvements and solutions for the corridor. Base maps, aerial photos, and trace paper will be available for sketching. Groups will reconvene and present their recommendations to the other attendees.

Meetings: Two working group meetings to refine the inventory; one public charrette to brainstorm options and approaches.

Deliverables: Issues, and Opportunities, and Constraints R report

Phase 3: Options

At the conclusion of the ~~Coming-off-the-li~~ inventory and ~~A~~ analysis phase, staff will begin working on a set of conceptual solutions for the corridor. Three categories of solutions are anticipated: short-term, low-cost actions; mid-term changes; and expensive, long-term undertakings.

Task 3.1: Land Use Scenarios

Using the currently adopted Future Land Use designations as a point of departure, more detailed land use scenarios will be developed for the study area. These will include redevelopment scenarios for the soft sites identified in Task 2.5. The scenarios will address use mix, proposed building heights, and parking policy. Build-out estimates of the scenarios will be prepared, in terms of numbers of units and square feet of commercial.

Task 3.2: Transportation Improvements

A package of roadway improvements and transit enhancements will be prepared based on revised travel demand estimates from the land use scenarios. The transportation options will address the following goals:

- Controlling access along the corridor
- Resolving unsafe or substandard conditions at intersections and interchanges
- Facilitating pedestrian and bicycle movement along and across the corridor
- Improving transit service and facilities
- Providing better access and connections to and from adjacent neighborhoods

Task 3.3: Environment, Open Space and the Public Realm

Capital Boulevard has a surprising amount of public space along its length in the form of medians and other left-over pieces of right-of-way. There is also a proposal for a greenway paralleling the Pigeon House Branch. How these elements are treated in the future will have a large impact on the appearance and function of the corridor, as well as the type of investment that can be attracted. This task will explore options for locating a greenway in the study area, and opportunities for public realm enhancements. It also will ~~also~~ explore the potential for environmental enhancements related to stream restoration, water quality improvement, and stormwater management.

Task 3.4: Implementation Options

In concert with the development of the land use, transportation, and public realm options, a suite of implementation tools also will ~~also~~ be explored to ensure that the proposed regulations and public investments are feasible. For example, what zoning tools will ~~are~~ likely be available to implement the

land use vision? What sources of funding might be available to offset the costs of transportation investments and public realm improvements, including value capture? (This latter question will be the subject of a separate, stand-alone white paper on potential funding sources for projects to be provided by a pro-bono consultant, HDR Inc.)

Task 3.5: Phasing Options

The projects identified for the Capital Boulevard corridor will likely require years if not decades to fully implement. Identifying which projects and actions should be undertaken first is a critical to the success of the undertaking. The phasing options should identify at least one catalytic project that will create an example of success, as well as the general priority for future improvements.

Task 3.56: Governmental Stakeholder Presentation

The interim report on options will be presented to the same group convened in Task 1.2 to gain feedback. Based on the reaction, further refinements to the options may be necessary.

Task 3.76: Public Meeting & Input

A public meeting will be held to present the various options to the community. The options will be presented as three groupings consisting of minimal, moderate, and maximal intervention. Small group discussions will be supplemented by survey forms to gather input on which of the three groupings has the most support, and whether specific elements of each grouping need modification. Based on input received at the public meeting, a preferred land use scenario and set of public improvements will be finalized for the final report.

Meetings: Two working group meetings, one to brainstorm the options, one to review the results of the public workshop; one governmental stakeholder meeting to present draft options, and one public workshop

Deliverables: Maps, drawings, PowerPoint presentation

Phase 4: Recommendations and Report

The final phase of the project will result in a detailed report summarizing all the work and findings from the prior three phases. The report will set forth a concept plan for the study area, but may also include more specific recommendations necessary to move the concept plan forward, such as the following items:

- Future transportation studies and projects-
- An open space plan-

- Identification of other important capital projects.
- Zoning recommendations.
- Renderings and sketches of proposed improvements and development scenarios.
- A list of desired regulatory changes and policy changes at the State level.
- Related Comprehensive Plan amendments, including changes to the Future Land Use Map, Arterial, Thoroughfare and Collector Streets map, Future Transit Services map, and Park Search Areas map.

The final report will be presented to the City Council for approval. The Council may refer the report to the Planning Commission for review and recommendation. As the report is not a formal policy plan, a public hearing is not anticipated. The specific Comprehensive Plan amendments and any future City-initiated rezonings, however, would go through the normal public hearing process, ~~however~~.

PROJECT STAFFING

The Department of City Planning will be the lead agency on the project. ~~As a~~ This will be a large and complex study, and will require a full complement of staff resources to complete it on schedule.

City Planning Staff

- Project lead: Ken Bowers
- Project manager: Trisha Hasch
- General support: Martin Stankus
- GIS support: Stan Wingo, Carter Pettibone
- Urban Design: Grant Meacci, Roberta Fox, Elizabeth Alley, Dhanya Sandeep, Trisha Hasch
- Public Outreach: Trisha Hasch

Interdepartmental Working Group

- Transportation: Eric Lamb, Fleming El-Amin, Mike Kennon, David Eatman
- Public Utilities: Robert Massengill
- Stormwater: Mark Senior
- Parks & Recreation: Vic Lebsack

PRO-BONO CONSULTANTS

This study is fortunate to benefit from the additional services of four pro-bono consulting firms:

1. Kimley-Horn and Associates, a full-service civil engineering and land planning firm with particular expertise in transportation.
2. Camp Dresser & McKee (CDM), offering engineering, construction, and operations services, with particular expertise in environmental services, water quality, and water utility infrastructure.
3. DHM Design, a landscape architecture, land planning and urban design firm with particular experience in public space planning and design.
4. HDR Inc., an Architecture and Engineering firm with particular expertise in transit projects. HDR will be specifically assisting with the identification of funding options.

The scope for the Capital Boulevard Corridor Study was initially drafted as an entirely in-house project, relying on the expertise of planning, design, and engineering staff across several City departments and divisions. While it is still anticipated that the bulk of the work will be undertaken by City staff, the opportunity to bring in outside expertise is expected to add significant value to the project. In order to maximize this value while keeping the demand on those volunteering their time to reasonable level, the consultants are proposed to participate in the study in four ways:

1. Serving as technical resources at the intergovernmental meetings and public workshops. At the public charrettes, consultants would “float” between small group discussions and engage with participants on an ad hoc basis.
2. Participating in brainstorming with City staff to generate ideas and concepts for the study area that may later be tested through the public process.
3. Testing the practicality and feasibility of specific ideas and proposals generated as part of the process, such as determining whether a proposed roadway improvement is geometrically possible.
4. Providing supporting 2D or 3D graphics that may prove useful in illustrating the goals, objectives, or desires of the group. These will be considered on a case-by-case basis due to their time-consuming nature.

In addition, HDR will ~~be providing~~ a white paper on potential funding sources, their applicability for projects within the corridor, and any constraints on their use that would impact planning.

Given the flexible nature of the consultant role in the project, a list of anticipated consultant deliverables cannot be specified at this time. Such deliverables as may be produced for the project should be created mindful of their usefulness for the final report, and could include:

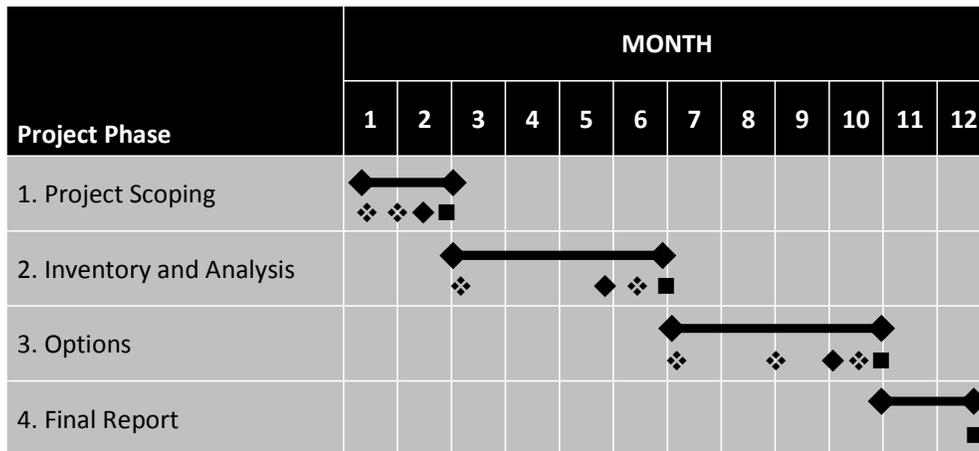
- Technical memorandums
- Engineering drawings (CAD)

- Illustrative renderings, such as 2D or 3D digital illustrations or mock-ups

PROJECT TIMELINE

A full year is proposed to complete the study, from project initiation to delivery of a draft report to the City Council and Planning Commission. In this case, time is not of the essence—the corridor is experiencing few development pressures, and in the current economy there is little money available for new large-scale capital projects. The longer time frame for this study should permit ample time for both in-reach within City departments, and outreach to the public and affected property owners.

With several other planning studies in the works, the kick-off for this effort should be timed so as to avoid meeting overload. During the month of March, public attention should properly be focused on the UDO. An internal kick-off in April and an initial public meeting in May are proposed.



- ◆ Denotes external meeting
- ❖ Denotes internal meeting
- Denotes deliverable