

Central Durham Gateways Plan

for the Bull City's Key Destinations
Along Portions of NC 147 and US 15-501

Adopted: August 3, 2009



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Vision of the Alston Avenue exit off NC 147 with potential monument and plantings.

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Introduction

A city's gateways are its major entrance points. Gateways provide important first impressions for visitors and newcomers and create a sense of place for residents. Attractive gateways set the stage for a positive experience, one that is broadcast by visitors to those who have not yet come to experience all that Durham has to offer.

Communities throughout the country are rediscovering the importance of having a distinctive and attractive identity. A distinguishing image is key to attracting new businesses, residents, and visitors to Durham. The goals of the *Durham Comprehensive Plan* reflect Durham's commitment to project a distinctive and inviting community character.

While the appearance of new development is a major aspect of community design and character, the on-going maintenance of Durham's existing built environment makes a greater visual impression. City and County leaders have expressed interest in improving the appearance of major entryways into the Durham community. The visual image of major thoroughfares, or the "view from the road", is a major contribution to visitors' and residents' impressions of the Durham community.

Conformance with Adopted Plans

The *Durham Comprehensive Plan* specifically recognizes the importance of enhancing key gateways and corridors in Durham through two policies:

Policy 4.4.1a. Corridor Plans. The Planning Department and the Appearance Commission shall prepare corridor plans to improve the function and appearance of major roadways into and through Durham. Corridor plans shall recommend appropriate land uses, design standards, development controls, landscaping, signage regulation, access management strategies, public facilities capital improvements, underground utilities and/or other measures.

Policy 4.4.1j. Gateway Plans. The City-County Planning Department, in conjunction with the Appearance Commission, shall identify key gateways into and within the Durham community and shall prepare plans, including design guidelines, to create focal points and enhance their appearance.



The purpose of the *Central Durham Gateways Plan* is to develop an overall identity and a “sense of place” for an area that is essentially a “corridor of gateways” into and through Central Durham. As such, it addresses the Gateway Plans policy of the *Durham Comprehensive Plan* and also addresses, in part, the Corridor Plans policy.

This plan’s emphasis is on establishing an attractive visual image along major corridors and prominent entryways, by creation of visual interest and variety while maintaining a unified roadway or streetscape image. The importance of the “view from the road” is further emphasized in Goal 4.4, *Roadway Image*, of the *Durham Comprehensive Plan*:

Goal 4.4 Roadway Image. Roadway appearance is a critical component of community character, unifying areas, acting as the foreground for developments, providing views, and even functioning as a series of outdoor rooms. Roadway image sets the scene for the community’s built environment.

The focus of this plan is to recommend improvements to the appearance of areas of Central Durham for the greatest overall visual impact. These areas are important local destinations for visitors, workers, and residents. Through this plan Durham is supporting the substantial public and private investment in the revitalization of downtown, as well as creating a renewed image to those outside the Durham community. The recommendations and implementation strategies detailed in this plan will provide the means of attaining the goals of the community as voiced in the *Durham Comprehensive Plan*.

This plan also addresses other goals of the City and County within the adopted *Downtown Durham Master Plan*, primarily through recommendations for the Mangum/Roxboro intersection of NC Highway 147. The *Downtown Durham Master Plan* emphasizes the importance of using gateway features to establish “a unique downtown identity,” of maintaining landscaping and downtown infrastructure, and of preserving or enhancing views of downtown from the Durham Freeway. This goal is addressed specifically in the improvements recommended for the focus area of Roxboro Street and Mangum Street.





US 15-510 at the Morreene Road exit

This plan identifies the elements occurring at Durham’s gateways that need to be improved. In some cases, the plan identifies desirable elements that may be missing. A number of recommendations follow the identified issues and opportunities, including general recommendations for the entire corridor as well as specific recommendations to the focus area.

The updated 2008 *Downtown Durham Master Plan* also recognizes the importance of identifying major entrances and gateways into Durham and creating a positive aesthetic impression at these locations. The focus of the *Downtown Durham Master Plan* was more specific than this corridor plan. It too recognized the importance of the intersections of Roxboro Street, Mangum Street, and Chapel Hill Street and NC 147. The *Downtown Master Plan* identifies several under-utilized parcels of land at these gateways that through future development of residential, office, and mixed-use can reinforce these areas as prominent gateways into downtown Durham. The updated *Downtown Durham Master Plan* largely addresses economic development opportunities and should be consulted in tandem with this corridor plan. This is especially important regarding adjacent development. Additional gateways are also identified in the *Downtown Durham Master Plan* that are not addressed in this corridor plan. However, these gateways are more crucial to local traffic and do not necessarily address regional and state traffic and visitors to Durham.

Professional Design Consultant Role

While this plan sets out broad design concepts for the corridor, it is not intended to produce a final detailed design. Upon approval of this plan, the City should work with a consultant who, through additional public input, will develop the detailed design documents needed to realize the vision of this plan. The consultant would be responsible for the final unified aesthetic and design theme that would be applied throughout the corridor area. This design should build on the recommendations and general themes of this plan. It should create major forms, components, and organizations in a flexible aesthetic that can be modified to reflect the unique character of the neighborhoods and commercial areas in Durham. After developing specific design for the corridor, public input should be sought so community members may advise on the specific character of their local gateway.

Inter-Departmental Cooperation

Improving the visual impression Durham's roadways leave upon visitors and residents should be addressed by all City departments. Many departments, while not directly involved with the improvement of the gateways and corridors, will nonetheless be impacted by the final outcome, and therefore should be kept apprised of the design as it progresses. All departments with active projects that might overlap with the improvements proposed in this plan should play an active role in the early stages of determining funding and installation plans. Of particular importance is connecting the current Streetscape Design for Targeted Neighborhood Commercial Areas with the proposed gateway area so that no gaps in the improvements occur. Since the General Services Department will be responsible for maintaining the landscaped areas, they should have an integral part of the process to add their knowledge and expertise on the feasibility of the final designs.

Funding Implementation

Other cities that have undertaken similar roadside improvement projects have succeeded through combining private and public funding. Possible sources available to Durham include state DOT programs, bond referenda, and private sponsorship by area businesses. Previous studies have noted that obtaining funds through private businesses, who are thereby named on a roadside sign, is a highly effective way of funding improvements. Private donations made for the beautification of Durham should provide economic benefits to businesses as the destinations become more attractive to passing motorists.



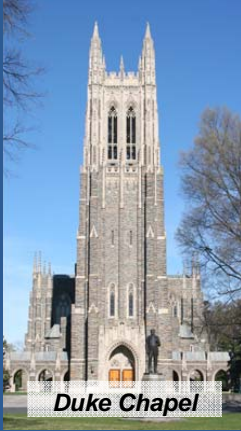
Planning Process

Background

In June of 2004, the Planning Department brought the proposed locations referenced in Policy 4.4.1j, *Gateway Plans*, of the *Durham Comprehensive Plan* to the Durham City-County Appearance Commission for prioritization. The Commission revisited the gateway location recommendations of the plan with the perspective that, for newcomers and visitors to our community, the “view from the road” presents an initial impression of the city as a whole. Creating a favorable view from this vantage point is therefore essential to forming a good first impression and sustaining a positive permanent view of the community.

The Commission determined priority gateway locations, different from those in the *Durham Comprehensive Plan*, by looking at major destinations in Durham that would draw visitors, employees, and students. A list of activity centers was generated and, upon charting the location of the destinations on the list, the Commission determined that a focus on segments of the NC 147 and US 15-501 Bypass corridors would create the most significant visual impact on the “view from the road” for the greatest number of individuals coming to or through Durham. These corridor segments were presented to the Joint City-County Planning Committee (JCCPC) in September of 2005 as the Appearance Commission’s priority gateway recommendation. The JCCPC concurred with the Commission’s recommendation and directed the Planning Department to begin work on this gateway plan.

While there was a consensus on the definition of the study corridor, it should be noted that the area covered in this plan is very extensive. This area extends for nearly six miles and provides access to a variety of Durham destinations. Since this plan addresses such an extensive area, it is essentially a “corridor of gateways.” This corridor will have a broad and consistent theme. Within that theme, specific intersections will be tailored to highlight the unique characteristics of their associated destinations. To these ends, the Plan addresses recommendations and implementation strategies at the broad scale of the corridor and also develops a prototype gateway treatment of one priority focus area to exemplify the idea of building a distinctive identity. The identification of the prototype focus area resulted from input gained during the public workshops. The recommendations for enhancements of that focus area are included in this plan with the understanding that further work must be done to achieve the necessary level of detail on the remaining portions of the gateway corridor.



Duke Chapel



American Tobacco Campus



Hayti Cultural Center

Existing Conditions

Study Area Boundaries

The study area recommended by the Appearance Commission and initiated by the JCCPC runs along NC Hwy 147 (the Durham Freeway) from US 15-501 Bypass on the west to Briggs Avenue on the east, and US 15-501 Bypass from NC 147 on the north to Erwin Road on the south. This area is shown in Figure 1. As the East End Connector is built, this new interchange to NC Hwy 147 should be assessed as an alternate terminus for the gateways corridor.

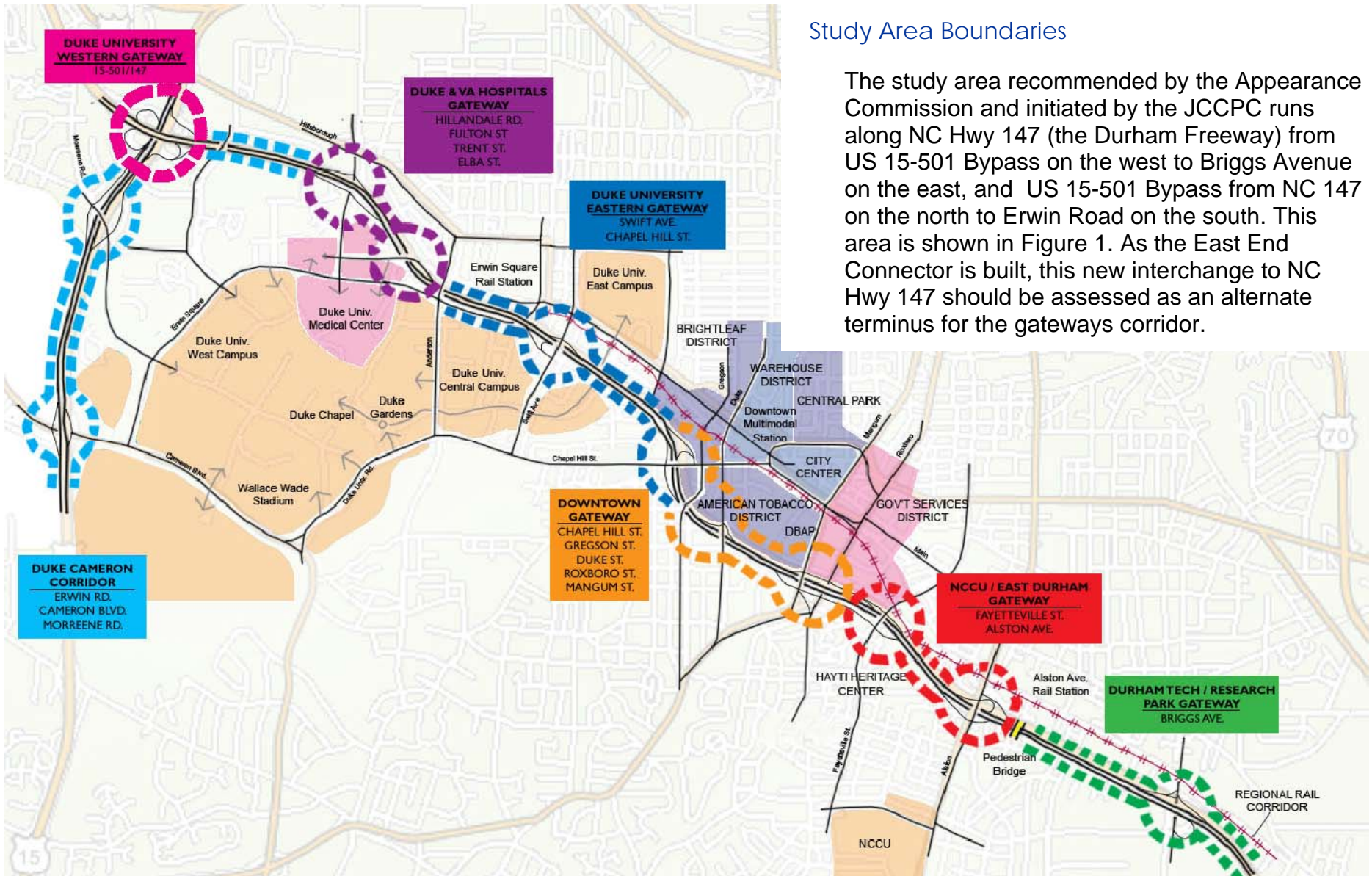


Figure 1: Study Area Boundaries

Visits To and Journeys Through the Study Area

The portions of NC 147 and US 15-501 Bypass included in the study corridor are limited access, four lane divided highways and carry between 37,000 and 67,000 vehicles per day. The specific traffic counts for points along each road included in the study area are depicted in *Figure 2*. In addition, there are several destinations that draw significant visitors which can be accessed through this “corridor of gateways.” *Figure 2* shows average annual visitor counts¹ for venues near the selected gateways, and overnight trips by visitors to the Duke Medical Center/V.A. Hospital. Besides the significant numbers of visitors to these locations, a great number of employees and students are associated with these businesses and institutions. Additional destinations, including Brightleaf Square, the American Tobacco Campus, and Durham Community Technical College, are not shown in *Figure 2* but provide additional visitors, employees, and/or students to these locations.

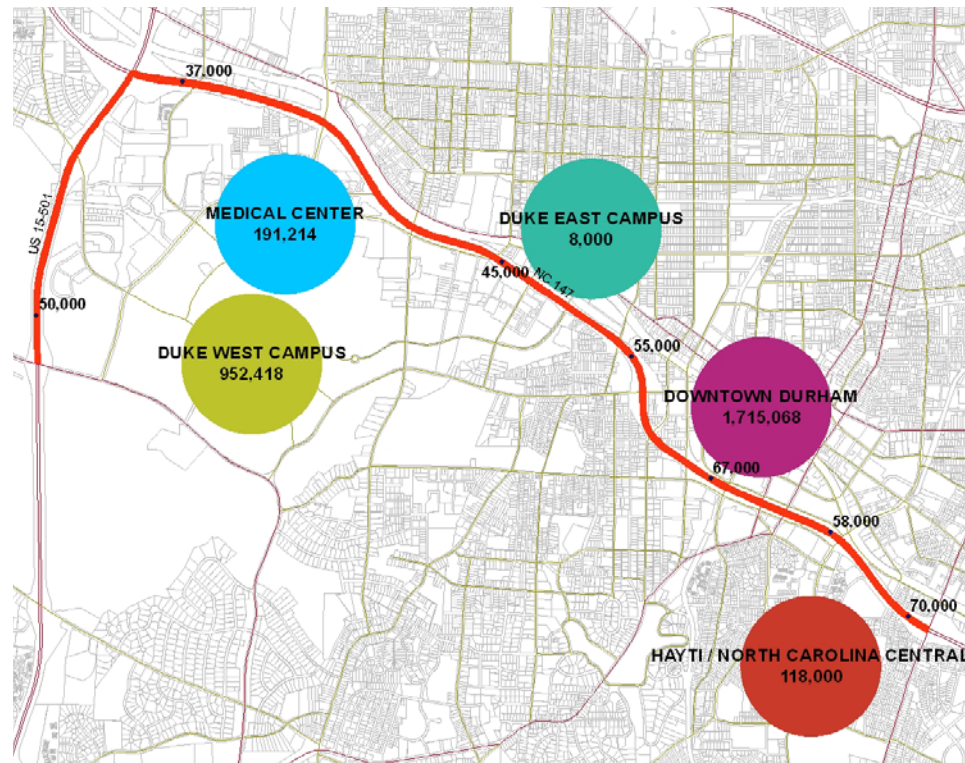


Figure 2:
Traffic and
Visitor Counts

¹Source: Durham Visitors and Convention Bureau, 2005

The View From the Road

Portions of the Durham Freeway are now more than forty years old and its infrastructure and landscaping is showing signs of age. The study area also lacks visual interest and unified design. As the “view from the road” is considered, several aspects of the area’s uninviting appearance can be documented. The existing conditions along the gateway corridor are detailed in the following images and can be classified into categories regarding:

- Physical and structural conditions;
- Landscaping conditions; and
- Wayfinding conditions.

Bridge beams and support piers are in need of cleaning and/ or repainting.



Physical and Structural Conditions



Retaining walls along the highway and access ramps are blank and unappealing.



Support structures for highway signage are rusted and unsightly when viewed from opposite traffic lanes and overpasses.

Fencing materials are aged and in poor condition.



Fencing is installed in some undesirable locations.





6

Streetscape elements and materials are inconsistent and worn out in appearance.



7

Underpass areas lack adequate lighting.

Pedestrian walkways overpasses are unwelcoming and desolate and do not provide any buffer between pedestrians and vehicles.



Traffic islands lack visual interest or distinction from the adjacent roadway.



Landscaping Conditions



10

Areas along streets are overgrown with low understory vegetation blocking potential views to destinations.



11

Many sections of the area lack street tree plantings.

Vegetated areas appear unkempt and in need of maintenance.



Invasive species and undesirable vegetation are overwhelming existing native plants.



Wayfinding Conditions



Banks along interchanges lack deliberate planting.



Parking lots and industrial buildings detract from the roadside appearance.

Concrete bridges need maintenance and are uninviting to pedestrians.



Existing signage does not indicate the destinations or districts along the corridor.





Intersections lack pedestrian crosswalks.



Some positive and some negative views of buildings and landmarks are visible from the road.

Plan Development

Once the Appearance Commission determined the extent of the corridor, two public workshops were held. The first solicited input on the priority of specific gateways and different visions of gateway enhancements to be undertaken. The second workshop established an overarching theme for enhancements along the corridor.

Gateways Workshop #1: Visioning

A public workshop was hosted by the Planning Department in October 2005 and included participation by individuals from the Appearance Commission as well as the City of Durham's General Services Department. The goals of the workshop were to prioritize key gateways and corridors within the study area for intervention of gateway improvements, and to create a vision for the overall corridor of gateways.

Participants present were given two lists to rank. The first list involved the ranking of elements most highly associated with gateway improvements. The elements listed were architectural standards, land use, landscaping, lighting, litter control, maintenance, public art and signage. Participants ranked litter control, maintenance, and landscaping highest. The other ranking exercise involved setting priorities for gateway improvements at specific intersections. Participants indicated a preference to enhance the intersections of Roxboro and Mangum Streets at NC 147 first.

The second task for workshop participants was to establish a broad overall vision for the corridor and the gateways along its length. Input was summarized into the following vision goals:

- Each specific gateway should have a unique identifying feature;
- Gateways, while unique, should form a unified landscape along the corridor;
- Consistent maintenance and litter control should be the baseline rather than something to aspire to through the gateway plans process;
- Private property along the gateway or corridor should also be considered part of the plan, land use and architectural standards should define the built environment outside the right-of-way; and
- Landscaping should be designed with consideration of seasonal changes, day versus night appeal, and speed appropriate levels of scale and detail.



A group at the first gateways workshop



Envisioning gateway improvements



Discussion at the gateways workshop

Gateways Workshop #2: Setting a Theme

The goal of the second public workshop in January of 2006 was to establish the overall theme for gateway improvements along the corridor. The concept that participants favored was the creation of a unified corridor along NC 147 with simple, big, bold landscaping. At each interchange the design would become more detailed and refined to reflect the specific character of that area. In addition, several specific suggestions were made, including:

- Incorporate the water towers visible along NC 147 as part of the gateway experience;
- Build on the existing theme of warehouses;
- Use brick towers similar to those of the proposed pedestrian bridge throughout the corridor and incorporate small variations to reflect changes in area character, but make them generally consistent;
- Use metalwork as a physical design element;
- Incorporate lighting along NC 147 to signal entry into an urban area; and
- Create gateway markers at specific interchanges.

Focus Area Field Workshop

The second workshop also determined that the NC 147 interchange at Roxboro and Mangum Streets was the highest priority for future improvements. Based on this recommendation, the Appearance Commission's Landscape Committee pursued further study of this interchange for determination of possible enhancements. In February of 2006, the Landscape Committee devoted time to walking the corridor, making observations, and noting opportunities for improvements. The focus area recommendations in this plan build upon the suggestions from the two public workshops and this site analysis.



Issues & Opportunities

Several concerns emerged in the plan process pertaining to roadway image and gateway enhancement viability and sustainability. These are grouped into the following categories (in no order):

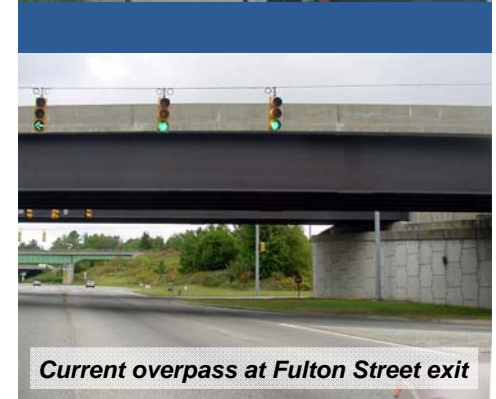
- Maintenance
- Overpass and Bridge Treatment
- Stormwater
- Landscape Design and Plant Selection
- Viewsheds
- Landmarks
- Signage and Wayfinding
- Bicycle and Pedestrian Environments
- Public Art
- Streetscape Design
- Adjacent Development

Maintenance

Maintenance includes upkeep of the appearance and condition of the corridor and is vital to the success of the corridor improvements. Maintenance must be considered on several levels. Bridges, streets, and sidewalks must be maintained in an inviting condition. Vegetation must be pruned, mowed or otherwise kept up and appropriately watered. Recommendations for plantings, bridge treatments and infrastructure improvements must emphasize low-maintenance solutions whenever possible. In order for the recommended enhancements to have the desired visual impact, a strategy for the maintenance of such improvements must be an integrated part of Plan implementation.

Overpass and Bridge Treatment

Improvements to overpasses and bridges should be undertaken as both short and long term objectives. Cleaning and repainting bridge girders and improving bicycle and pedestrian environments along overpasses will suffice in the short-term. However, long term objectives should address eventual major repair or replacement with structures that contribute positively to the gateway enhancements in the corridor.



Stormwater

Rainwater run-off carries with it pollutants left behind by vehicles. While a portion of this stormwater is collected by the city's sewer system, some of it filters back into the groundwater. It is the intent of recommendations contained in the gateways plan to cleanse this rainwater prior to its arrival at either destination through the following techniques:

- Enhancing existing grass areas with trees and/or shrubs to slow runoff and increase soil absorption, if such improvements demonstrate better performance;
- Using small dry detention areas or rain gardens in combination with existing NCDOT-designed grass swales;
- Minimizing slope erosion through planting;
- Decreasing impervious surfaces and lawn areas where feasible; and
- Work in conjunction with NCDOT's existing Stormwater Program.



Soundwall and detention pond along a Minnesota road

<http://projects.dot.state.mn.us/gcinc/494/documents.html>



Stormwater detention pond along I-5 in WA

<http://www.fhwa.dot.gov/environment/ecosystems/wa.htm>

Landscape Design and Plant Selection

The plants installed within the Gateway areas should meet as many of the following criteria as is feasible:

- Drought-tolerant;
- Native species;
- Non-invasive;
- Visually interesting;
- Durable;
- Low-maintenance;
- Non-competitive with existing mature native species; and
- Meet NCDOT safety standards.

Vegetation within highway right-of-ways must be extremely tough in order to endure vehicle pollution and infrequent maintenance. NCDOT has developed a list of plants best suited to these extreme conditions which should be used during the implementation phase of this Plan. In response to Durham's water conservation efforts, this list of plants should be cross-referenced with a list of plants that tolerate drought conditions. By limiting the plant palette to these tough species, the aesthetics along Durham's gateways will not be detrimentally affected by lack of rain or maintenance. Where feasible, it is recommended that lawn areas be replaced with shrubs or trees, as turf requires more regular maintenance to keep a tidy appearance. When shrubs or trees are not appropriate, natural grasses that require less maintenance should be used.

A general approach to planting appropriate along the corridor would be to select and plant trees, shrubs, and other plant material to direct views away from undesirable sights and focus the eye on signage, destinations and landmarks, as well as approaching vehicles. Species that have a greater visual impact at increased speeds, as well as a higher degree of durability should be used directly along the highway corridor.

Low ground cover is necessary in some areas to ensure visibility for motorists. Turf should be limited to these areas. Larger plants, in addition to requiring less maintenance, also provide more benefits to air and water quality and erosion control. Invasive species should be cleared from existing vegetation.

1 Perennials and groundcover meet NCDOT height restrictions and require less maintenance than annuals and lawn.

2 Emphasize geometries created by roads with plantings and provide eye-catching signage at exits.

3 In less urban areas, add understory plants with flowers or colorful foliage to existing wooded areas and use locally produced mulch or groundcover to reduce mowing and maintenance.

4 Plant in rows and grids to reflect the urban character of the central gateways, and mass plants for visual impact at highway speeds.

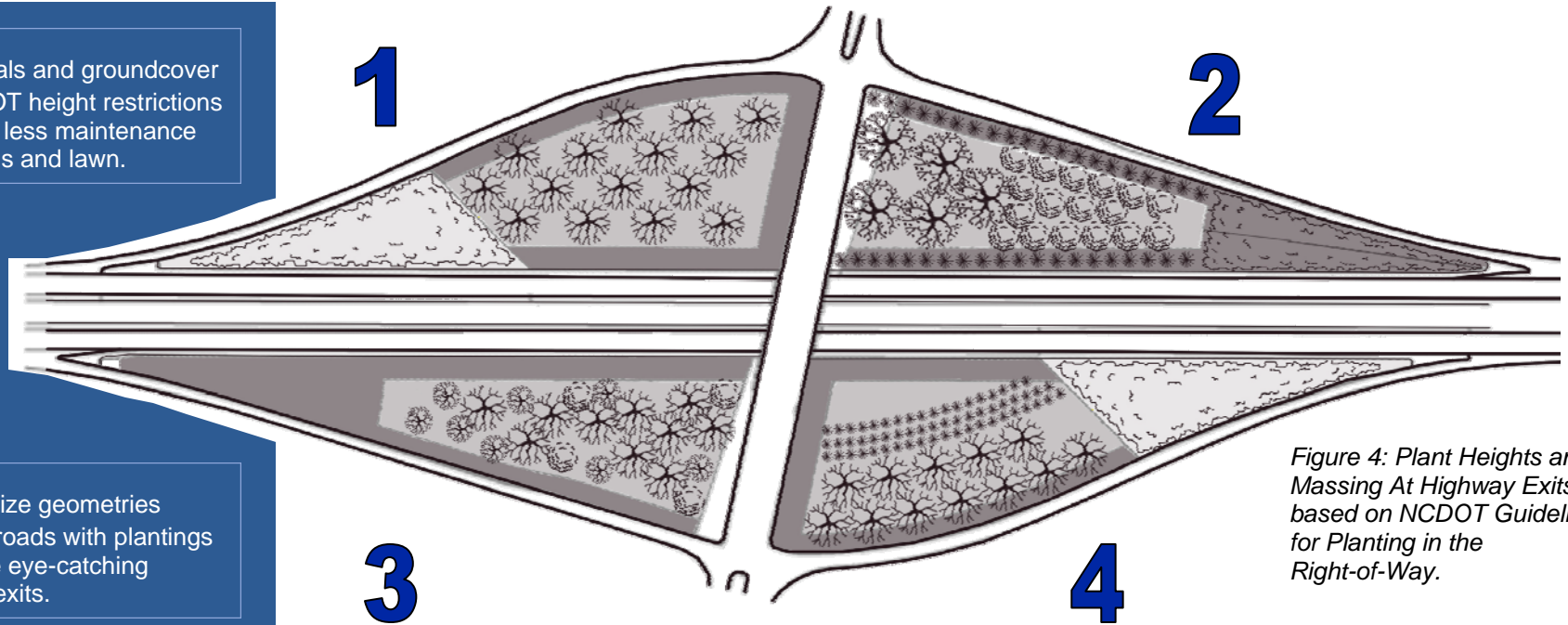


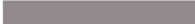

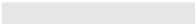




Figure 4: Plant Heights and Massing At Highway Exits based on NCDOT Guidelines for Planting in the Right-of-Way.

LEGEND

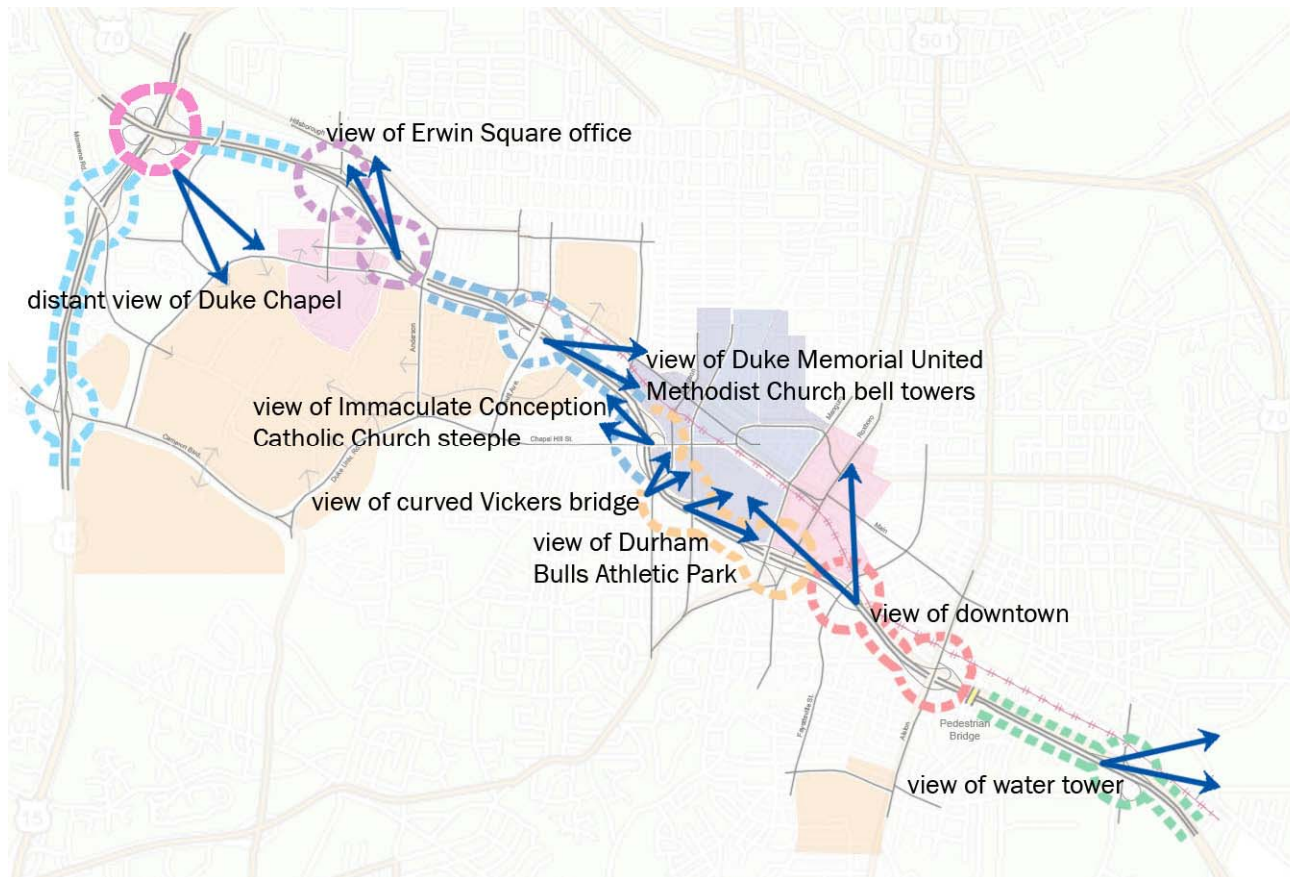
	trees and shrubs permitted		shade tree
	low shrubs permitted		evergreen tree
	low shrubs permitted, provided views of the pavement unobstructed		shrub
			perennials

The diagram above (Figure 4) illustrates possible arrangements of vegetation and is based upon NCDOT's guidelines for height limits along roadways. Low shrubs, some perennials, and groundcover planted along on and off ramps allow for maximum visibility for motorists to safely merge with traffic. Taking into consideration existing road forms, the individual characteristics of each plant, and the character of the adjacent gateway will ensure appropriate and visually interesting roadside plantings.

Viewsheds

The views from the highway to many Central Durham landmarks, including structures within Downtown Durham, are unique and should be preserved and enhanced. These views allow visitors to catch a glimpse of the city and help orient travelers along their route. In addition, many private properties hold great views of Durham that should be considered and protected in the design development.

Durham's history and character are evident in its built environment, including many warehouses and factories. These may be considered "undesirable" to some. It is important that views of these buildings not be erased from the public consciousness to create a homogeneous Durham. The only views that should be deemed "undesirable" are ones consisting of dilapidated, abandoned structures with no real aesthetic, cultural or historical value. The next few images provide examples of views from the corridor.





View of Erwin Square office building



Distant view of Duke Chapel

View of Immaculate Conception Catholic Church steeple



View of Duke Memorial United Methodist Church bell towers and North Carolina Mutual building





View from Vickers Avenue



View of Durham Bulls Athletic Park

View of downtown



View of water tower





Downtown Durham at sunset

www.city-data.com/city/durham-north-carolina.html



View on NC 147 under Fayetteville St.

Wayfinding: a series of visual cues that assist individuals in finding the way from their location to their destination and back.

Landmarks

Existing landmarks, such as water towers and historic smokestacks, that are visible from the road should be considered in the design of corridor improvements. Views of these landmarks should be emphasized where present, and created where desirable to assist in wayfinding through the corridor. The planned pedestrian bridge south of Alston Avenue on NC 147 has been designed with community input and should set an aesthetic precedent for the urban portion of the gateways corridor, using such details as blue LED lighting and brick pillars reminiscent of smokestacks. This design should be integrated into the overall design of other similar structures within the corridor. A desirable location for an additional pedestrian bridge or over-the-highway sculpture on the western side of downtown should be pinpointed in order to balance with the Alston Avenue vicinity bridge and provide a bookend to the gateways of a more urban character.



Proposed pedestrian bridge at night

Signage and Wayfinding

Distinctive signage and wayfinding elements are an integral component of any visitor's first impressions of a city. Residents and newcomers alike have a much more positive view of a city if they can easily maneuver it, whether by foot, bicycle, car, or mass transit. Wayfinding signs that are unique to Durham yet center around a common theme help make people feel more welcome and comfortable in their surroundings. Such signage could follow the existing downtown model, and be used throughout the entire county.

Markers are one method of creating a themed wayfinding system for the City. For example, installing similar markers at each gateway along the designated corridor creates a uniform sequence of focal points and helps motorists navigate Durham. Markers should be placed at each intersection and located and scaled so that they are easily seen at highway speeds. These markers should tie to their corresponding destinations through the use of text, symbols, or a combination of the two. Consistent form and materials create a sense of uniformity, while variations relating to each location add aesthetic variety. Care should be taken, either through initial design or maintenance, so that the markers are unobstructed by vegetation. Any marker placed within NCDOT right-of-way will be required to have NCDOT approval.

It may be appropriate to provide an alternative treatment of the less urban portion of the corridor (i.e., Swift Avenue to US 15-501 Bypass and the US 15-501 Bypass portions of the corridor). Workshop participants noted the current character of this portion differs from the rest.

Small-scale versions and/or aspects of these markers may be placed in adjacent intersections to tie the place-making elements established along highway sight lines to the streetscape. Continuing these elements helps motorists locate the highway from the streets and creates a sense of arrival upon exiting the highway.

Some examples of possible signage and marker options are shown below.



Existing Exit



Downtown Sign Option



Metalwork/LED Option



Brick Pier Option



Wall mural at underpass in California

<http://www.ci.richmond.ca.us/images/pages/N749/BART%20Underpass%20Mural.jpg>



Pima Freeway bas relief sound wall

<http://www.tfhrc.gov/pubrds/03may/03.htm>

Bicycle and Pedestrian Environment

While the focus of this gateway study is primarily the experience of the motorist, the bicycle and pedestrian aspects are also important. Many bicyclists and pedestrians use overpasses and underpasses to traverse Durham. Improved conditions for these user groups are an important aspect of gateway improvements. Creating bicycle lanes and a pedestrian-friendly environment at each gateway will illustrate Durham’s commitment to non-motorized transportation. Providing raised crosswalks, streetlights, seating, and other human-scale elements designed to slow vehicular traffic speeds creates an environment hospitable to alternate forms of transportation.

Public Art

The potential for public art to be integrated into gateway improvements should be explored, particularly along overpass/underpass embankments. Art displays are an opportunity to showcase the talent of Durham’s artists and provide visual relief to local streetscapes. Many highways around the country have incorporated art into the sound barriers and retaining walls along the road. In addition, sites outside the highway right-of-way at intersections with local streets provide opportunities for various kinds of public art, whether sculptural markers or murals along underpasses or on bridge beams.

Streetscape Design

The streetscape design should respond to any adjacent aesthetically pleasing patterns. For example, at the Roxboro/ Mangum intersection of NC 147, the Downtown Streetscape standards should apply. In areas where the Streetscape Design for Targeted Commercial Areas are adjacent to the gateway corridor, the streetscape improvements for the two projects should be coordinated. Subtle variations in streetscape treatment can be a tool in defining the character of the individual gateways.

Adjacent Development

Highway corridor improvements alone will not adequately reinforce the unique character of each gateway along the corridor. Design guidelines for landscaping, architectural variation, and streetscape amenities along properties immediately adjacent to the corridor should be developed to further the “sense of place” created by gateway improvements. Creating a gateways overlay zoning district could ensure unified aesthetic improvements undertaken by private property owners throughout the corridor.

Recommendations

Durham's approach to improving its gateways should begin with an assessment of current and planned City and County projects within the corridor where proposed improvements may overlap. This strategy ensures that Durham will have a cohesive aesthetic along the corridor of gateways.

Once that assessment is complete, implementation of the following recommendations can begin. The funding and installation of the improvements should occur in phases which encompass the entire corridor. With this phased approach, each gateway can experience immediate improvements, and as funding permits, improvements can gradually build within the unified framework of this plan. The recommendations that follow are grouped into categories by the general type of improvement to facilitate this phased approach to implementation. The relative ease of funding and implementation of the recommendations were taken into account in the grouping. Since these recommendations are applicable to the entire corridor the selected focus area is used to highlight these typical improvements.

Corridor-Wide Recommendations

The Appearance Commission and Planning Department staff have identified the following recommendations as applicable along the entire corridor. This section contains a brief summary of plan recommendations followed by illustrations of how they could be implemented. The graphic representations serve as visual aides of ideas to be developed and designed by consultants and public input later in the process.

Initial Improvements

- Coordinate with other active City of Durham projects, such as streetscape improvements, street trees, and general maintenance;
- Open views to destinations;
- Replace chain-link fencing;
- Encourage adjacent development to beautify the property and address the view from the road;
- Allow natural succession to re-forest select portions of the corridor;



Maintenance

- Clean and paint bridge surfaces;
- Remove invasive, diseased, and dead plants;

Planting/ Landscape Improvements

- Replace existing rip-rap with bank-stabilizing plants;
- Provide a canopy and low groundcover to maintain views of destinations and motorist visibility;
- Group plants for maximum visual impact;
- Plant trees in the median where appropriate;

Streetscape Elements

- Replace wood light poles and traffic signals with metal mast-head types and bury overhead power lines where feasible;
- Add sidewalks where none currently exist and use contrasting banding along existing concrete sidewalks;
- Improve pedestrian conditions, including lighting and crosswalks;
- Install bicycle lanes where called for in the *Durham Bicycle Plan*;
- Use brick for details along the eastern portion of the NC 147 corridor, use Duke bluestone for western portions of the corridor;
- Determine appropriate locations for different types of public art;

Signage/ Wayfinding

- Include special design elements that are unique to each gateway but unified;
- Bring blue L.E.D. light from pedestrian bridge design into other bridges/ monuments along corridor;
- Use special treatments at major intersections;

Structural and Intensive Improvements

- Construct pedestrian bridge or sculpture over NC 147 near Swift Ave;
- Improve pedestrian walks and bicycle paths along overpasses and underpasses to increase safety and visual interest; and
- Conduct major repairs or replacement of bridges as needed.



Corridor-wide Recommendations:

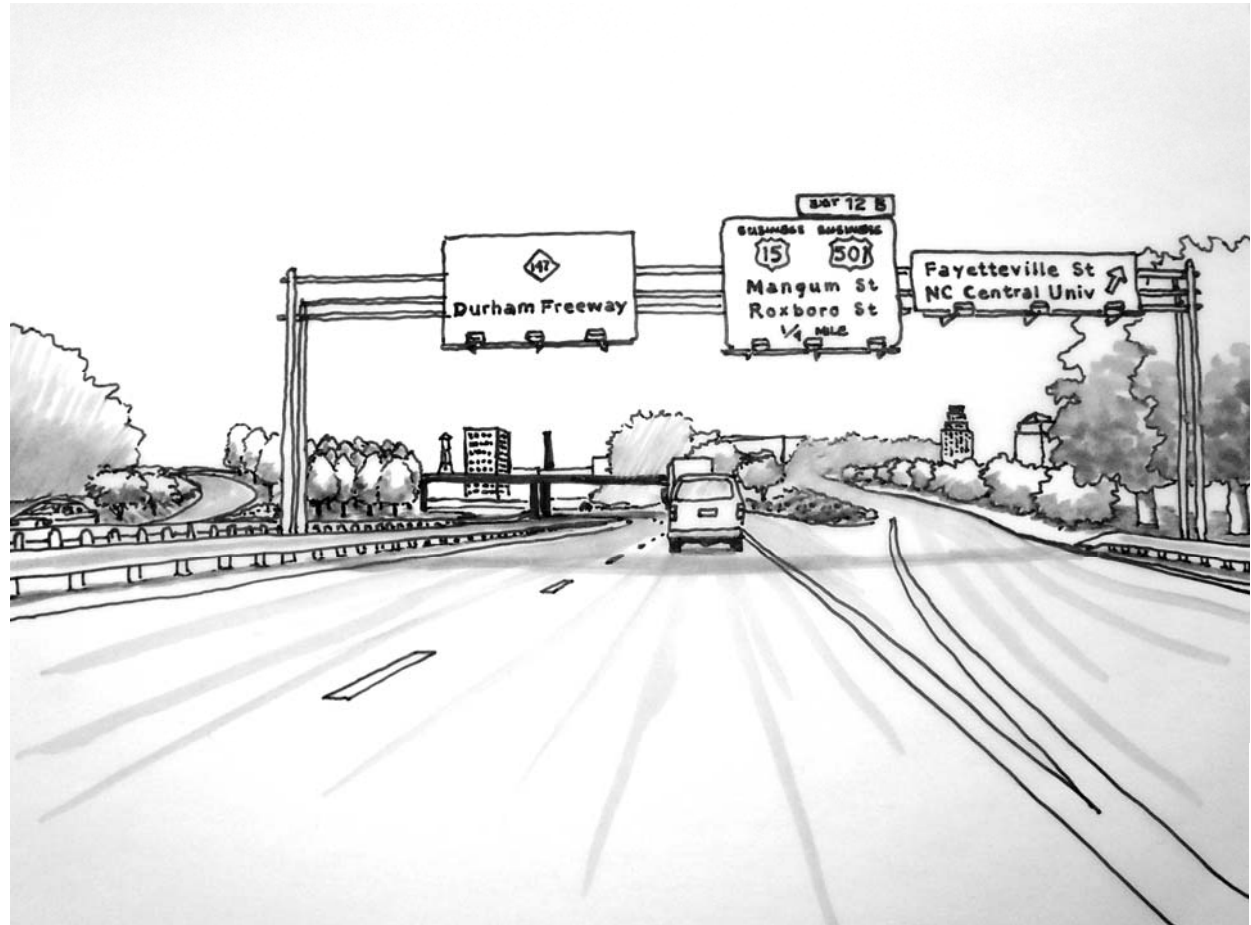
Initial Improvements:

Coordinate with other active City of Durham projects, such as streetscape improvements, street trees, general maintenance.

**Corridor-wide
Recommendations:**

Initial Improvements:

Open views to destinations.





Corridor– wide Recommendations:

Initial Improvements:

Replace chain-link fencing, encourage adjacent development to address the view from the road.

**Corridor– wide
Recommendations:**

Initial Improvements:

Allow natural succession to re-forest portions of the corridor.



**Corridor– wide
Recommendations:**

Maintenance:

Clean and paint bridge
surfaces.



**Corridor– wide
Recommendations:**

Maintenance:

Remove invasive,
diseased, and dead
plants.





Corridor– wide Recommendations:

Maintenance:

Design with materials and techniques that require minimal maintenance.

**Corridor– wide
Recommendations:**

**Planting/ Landscaping
Improvements:**

Replace existing rip-rap
with bank-stabilizing
plants.





**Corridor– wide
Recommendations:**

Planting/ Landscape
Improvements:

Provide a canopy and low
groundcover to maintain
views to destinations and
motorist visibility.

**Corridor– wide
Recommendations:**

Planting/ Landscape
Improvements:

Group plants for maximum
visual impact.





Corridor– wide Recommendations:

Planting/ Landscape
Improvements:

Plant trees or other plants in
the median.



**Corridor– wide
Recommendations:**

Streetscape Elements:

Replace wood light poles and traffic signals with metal mast-head types and bury overhead power lines where feasible.





Corridor-wide Recommendations:

Streetscape Elements:

Use contrasting banding along concrete sidewalks and add sidewalks where none currently exist.



**Corridor-wide
Recommendations:**

Streetscape Elements:

Improve pedestrian conditions, including lighting and crosswalks.





Corridor-wide Recommendations:

Streetscape Elements:

Use brick for details along the eastern portion of the NC 147 corridor, use Duke bluestone for western portions of the corridor.

Corridor-wide Recommendations:

Signage/ Wayfinding:

Include special design elements that are unique to each gateway but unified.





Corridor-wide Recommendations:

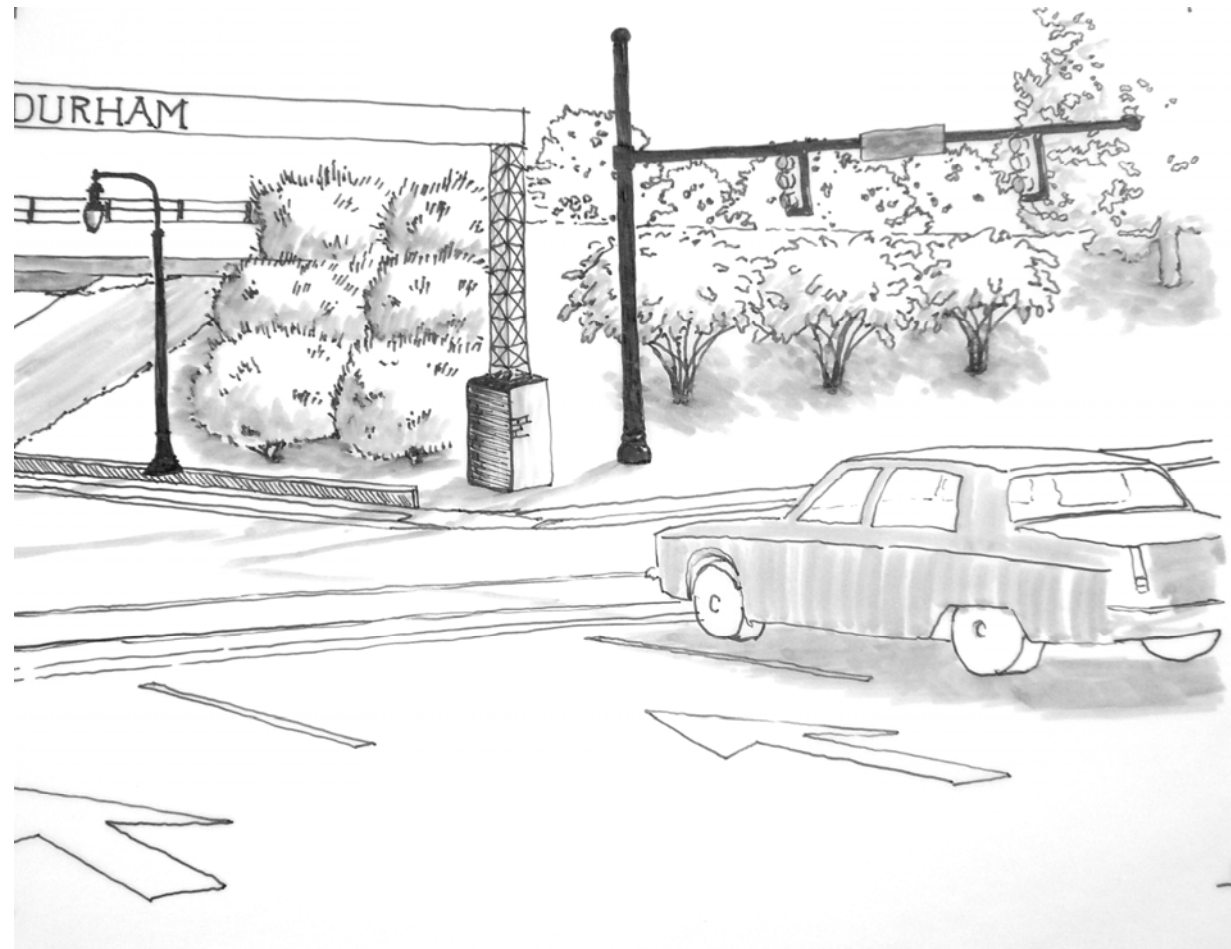
Signage/ Wayfinding:

Bring blue L.E.D. light from pedestrian bridge design into other bridges/ monuments along the corridor.

**Corridor-wide
Recommendations:**

Signage/Wayfinding:

Use special treatments at major intersections.





Corridor-wide Recommendations:

Structural Improvements:

Construct pedestrian
bridge or sculpture on NC
147 near Swift Ave.

**Corridor-wide
Recommendations:**

Structural Improvements:

Add pedestrian paths to overpasses and improve existing overpass sidewalks.



Focus Area Recommendations

Within the corridor, the public workshops identified the intersection of NC 147 and Roxboro and Mangum Streets in downtown as the highest priority gateway to be addressed. The Focus Area Recommendations look at this intersection with a finer grain of detail to recommended specific improvements. While the following recommendations are concentrated on a specific gateway, the graphic representations depicted could be extrapolated to apply to each gateway in the corridor and be installed in the previously discussed layers. These Focus Area Recommendations are broken down into three categories: Highway, Local Traffic, and Pedestrian. The Highway Recommendations impact the aesthetic as viewed at high speeds along NC 147 and US 15-501. The Local Traffic Recommendations address the views along the highway ramps and city streets. The Focus Area improvements are:

Highway

1. Clean bridge beams and support piers and repaint surfaces;
2. Use landscaping to screen uninviting views of development;
3. Open and emphasize desirable views of downtown by clearing vegetation;
4. Use groundcover to landscape on/off ramps and medians; and
5. Use gateway sign patterns/standards to identify sections and direct traffic.

Local Traffic

6. Clear underbrush from existing vegetation;
7. Replace or remove undesirable fencing;
8. Upgrade paving in vehicular areas using downtown standard;
9. Change hanging traffic signals and wood light poles to ones consistent with the downtown standard;
10. Provide street trees at regular intervals; and
11. Coordinate gateway signage with standards from downtown signage program.

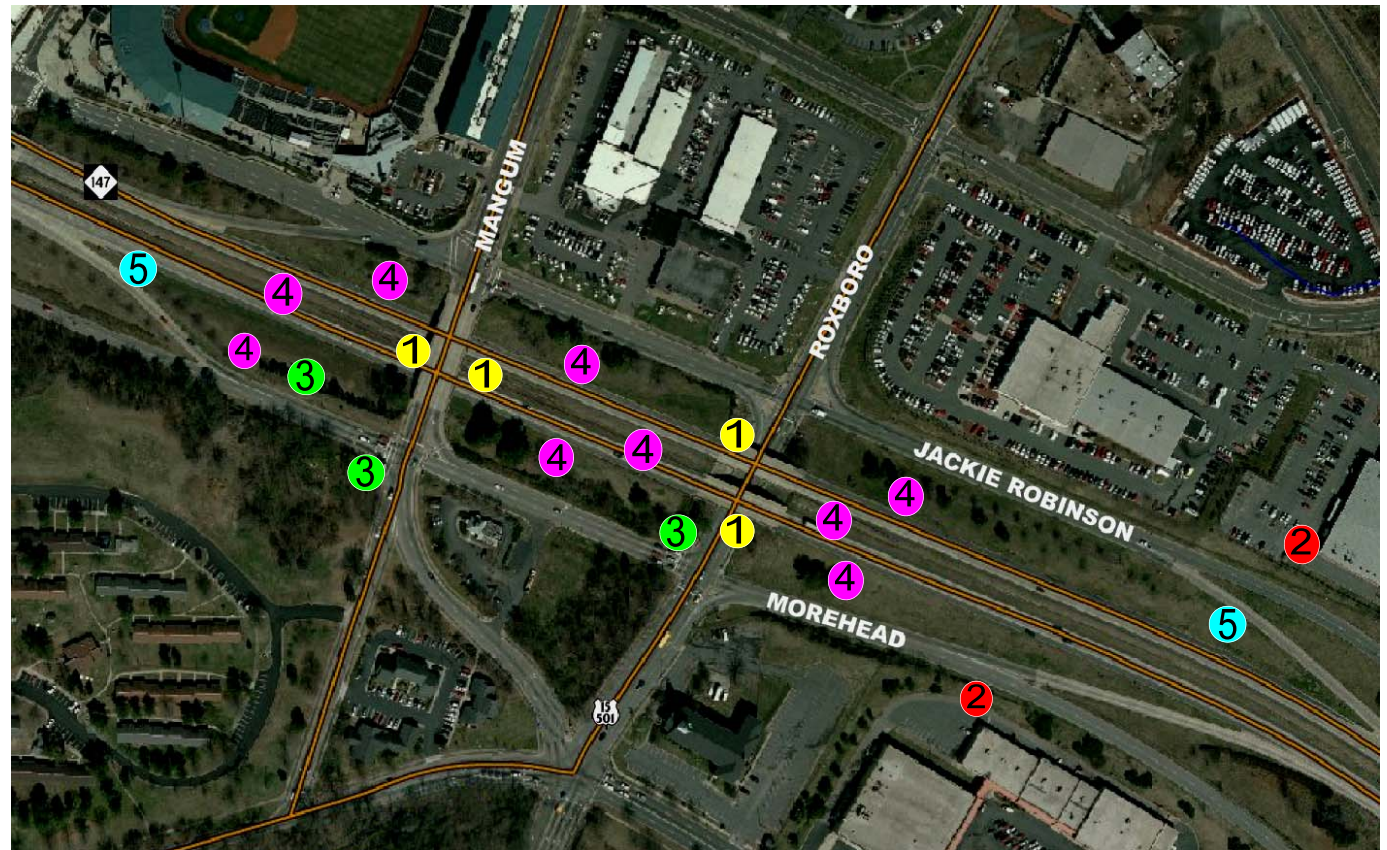
Pedestrian

12. Upgrade sidewalks using brick banded downtown standard;
13. Enhance intersection islands with plantings or other amenities;
14. Improve safety provisions, especially lighting for pedestrians at underpasses and overpasses; and
15. Provide intense landscaping for visual relief along concrete of over/underpasses.

**Focus Area
Recommendations:**

Highway

- 1 Clean bridge beams and support piers and repaint surfaces.
- 2 Use landscaping to screen uninviting views of development.
- 3 Open and emphasize desirable views of downtown by clearing vegetation if necessary.
- 4 Use groundcover and canopy in combination to landscape on/off ramps and medians, allowing views of nearby destinations.
- 5 Use gateway sign patterns/ standards to identify intersections and direct traffic to specific locations adjacent to the corridor.





1

Clean bridge beams and support piers and repaint surfaces.

2

Use landscaping to screen uninviting views of development.





3

Open and emphasize desirable views of downtown by clearing vegetation where necessary.

4

Use ground cover and canopy in combination to landscape on/off ramps and medians, allowing views of nearby destinations.





5

Use gateway sign patterns/ standards to identify intersections and direct traffic to specific locations adjacent to the corridor.

**Focus Area
Recommendations:**

Local Traffic

6 Clear underbrush from existing vegetation to provide views to destinations.

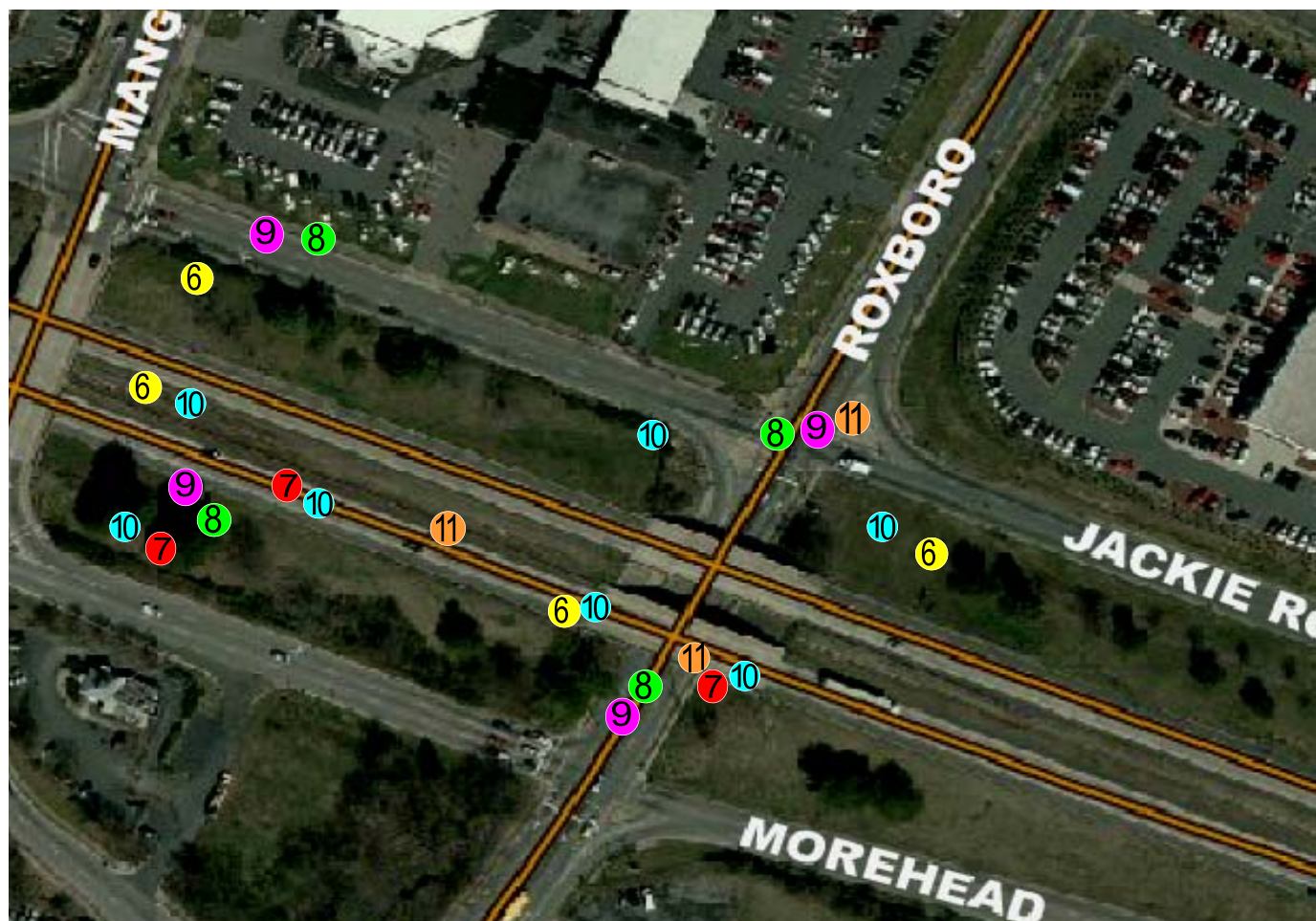
7 Replace or remove undesirable fencing.

8 Upgrade hardscape in vehicular areas using downtown standard stamped concrete in intersections or contrasting pavement for pedestrian crosswalk areas.

9 Change out hanging traffic signals and wood light poles with black semi-gloss mast arms, fixtures, and poles.

10 Provide street trees at regular intervals using both existing trees and new plantings. Remove trees that do not continue the pattern or block important views.

11 Coordinate gateway signage standards with downtown signage program.





6

Clear underbrush from existing vegetation to provide views to destinations.

7

Replace or remove undesirable fencing (use black vinyl coated chain link fence as a minimum, decorative fencing or walls at important intersections).





8

Upgrade paving in vehicular areas using downtown standard stamped concrete in intersections or contrasting pavement for pedestrian crosswalk areas.

9

Change hanging traffic signals and wood light poles for black semi-gloss mast arms, fixtures, and poles of the downtown streetscape standard.





10

Provide street trees at regular intervals using both existing trees and new plantings where necessary.

11

Coordinate gateway signage standards with the downtown signage program.





**Focus Area
Recommendations:**

Pedestrian

12 Upgrade sidewalks using brick-banded downtown standard sidewalk design.

13 Enhance intersection islands with plantings or other amenities.

14 Improve lighting conditions at underpasses and safety provisions along overpasses for pedestrians.

15 Provide intense landscaping for visual relief along concrete of overpasses and underpasses.

12

Upgrade sidewalks using brick banded downtown standard sidewalk design.



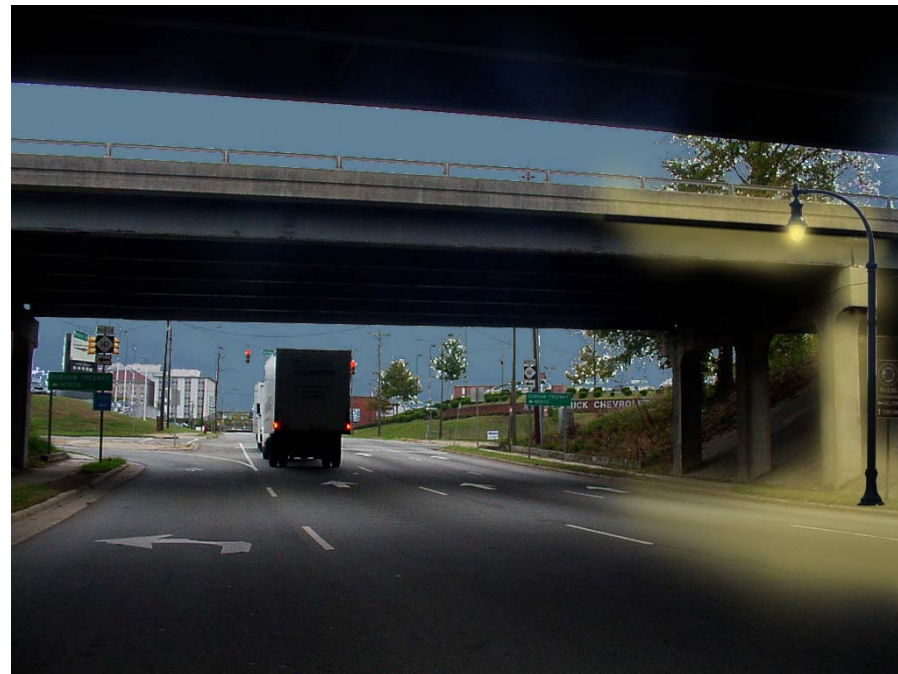


13

Enhance intersection islands with plantings or other amenities.

14

Improve safety provisions for pedestrians, especially lighting conditions at underpasses and overpasses.





15

Provide intense landscaping for visual relief along concrete of over/underpasses.

Implementation Strategies



Morreene Road exit off US 15-501

Design Development

Once this plan is adopted, the City should seek out a consultant to take the concepts developed for the plan and create specific gateway designs along this corridor. The designs would then be used to guide the improvements as funding sources are secured. The suggestions within this plan are intentionally broad and general, with the idea that specific elements will be developed later through the design process and public input.

A series of public workshops should be conducted to receive more detailed input on certain aspects of this plan. Community meetings on intersection-specific enhancements should be held to determine ways to build on the unique character of each area and surrounding destinations. Major institutional players should be included in these community meetings for nearby intersections, such as North Carolina Central University at Fayetteville Street, Duke University at Swift Avenue, and Durham Tech at Briggs Avenue. Public input is also needed regarding the creation of a “bookend” bridge or sculpture on the opposite side of the downtown area from the proposed pedestrian bridge. The output from these public workshops in conjunction with this plan should be used in the creation of a detailed design for the entire corridor of gateways.

Order of Enhancements

The order of installation of improvements should ensure the fullest participation by the stakeholders surrounding the gateways corridor. Installation at high profile locations can garner support for continued funding and momentum behind this plan. However, phasing the physical enhancements so that each gateway is treated simultaneously and incrementally prevents areas from being left untreated while others are enhanced. The plan recommendation is to pursue the gradual implementation of phased improvements across the entire corridor. This approach ensures that the items of highest importance from the first public workshop (i.e. litter, maintenance, and landscaping) will be addressed in order throughout the “corridor of gateways” before any improvements above and beyond these priorities are undertaken.

Physical Improvements

The design work for the long-term physical improvements recommended in this plan will take time to complete. The first phase of improvements can be undertaken in conjunction with existing programs established through Keep Durham Beautiful (KDB) or other volunteer organizations. Local clean up days should be organized around the gateway locations. In addition, locations where bulb plantings would be appropriate could be identified so that the community can take steps to begin implementation of the recommendations in the plan.

A second phase of improvements can be addressed utilizing existing city resources. City and County departments should work together to accomplish the intensive long-term maintenance goals set forth in this plan.

The final phases of improvements would be undertaken once the detailed design for the corridor is complete. At that point the City would request bids for construction of the more intensive aspects of the plan recommendations. It is at this phase where significant funding sources will need to be identified and appropriated.

Maintenance

An assessment of the current maintenance schedule along the corridor is necessary to determine reasonable and acceptable alternatives that meet the goals of this plan. These alternatives should include, among other items, cleaning and repainting bridge support structures and clearing vegetation where appropriate. Allocation of public funds through the budget process for increased maintenance will likely be required in order to remediate the consequences of past deferred maintenance. Proper ongoing maintenance of the corridor upgrades as called for in this plan will be paramount to successful implementation, which will require appropriate levels of programmatic funding. In order to address potential future funding gaps, private funding opportunities should be identified as a complement to public sector sources. For this plan to succeed in its goals, providing ongoing funds for maintenance is of utmost importance.



NC 147 entry ramp from Mangum St.



Adjacent Private Development

The City should create a gateway overlay district to establish design guidelines that would unify private development along the corridor. Architectural review is already required in some instances, such as the adjacent areas in the Downtown Tier. In many other areas along the corridor, this additional review would assist in creating a coordinated “view from the road” while allowing for individual developments to be unique in character. Durham’s Office of Economic and Workforce Development could liaise with the development community to garner support for the physical improvements that would benefit businesses through increased visitors to the gateways.

Finance Tools

Careful financial planning and securing of funding resources are essential steps in the implementation of this plan. Several different funding options should be pursued:

- NC DOT funding and program support for landscape, maintenance, and litter control, including: Wildflower Program, Stormwater Program, Enhancement funding, and Adopt-a-Highway Program (Durham has a greater chance of securing NCDOT funds with support from elected officials);
- Office of Economic and Workforce Development programs, including Commercial Revitalization Loans and Neighborhood Commercial/Development Projects;
- City Downtown Revitalization Fund for Downtown gateway improvements;
- Public funds through bond referenda or special tax; and
- Private funds through sponsorship opportunities by business interests and major institutions in close proximity to a specific gateway, including providing options for various sponsorship levels that include a tastefully designed standard sign with the sponsor’s name.



Lynchburg Expressway Appearance Fund (LEAF)
This program in Virginia allowed local businesses to choose a garden design and size to sponsor and in return small tastefully designed signs were placed in each garden naming the sponsor.

Summary of Implementation Strategies

Task	Responsible Parties
Design Development	Coordinated through Public Works or General Services
Physical Improvements	Coordinated through or undertaken by Public Works, General Services, and Keep Durham Beautiful
Maintenance	Coordinated through or undertaken by General Services
Adjacent Private Development	Undertaken by Planning
Finance Tools	Coordinated through General Services, Public Works, OEWD, Planning and the Appearance Commission

Conclusion

The gateway improvements described here are an opportunity for Durham to present a distinct and positive image to those who travel this “corridor of gateways” through central Durham. As such, this plan begins to realize the policies of the *Durham Comprehensive Plan*. The City’s first phases should be litter removal, increased and upgraded maintenance, and improved landscaping undertaken in accordance with the initial public input on Durham’s gateways. The phased approach recommended in this plan allows these initial improvements to be prioritized across the length of the corridor, while providing further opportunities for creating a distinctly Durham gateway. Enhancing the appearance of this corridor will provide an inviting “view from the road” coaxing passersby to linger and experience the vibrant community Durham has to offer.