Martin Luther King Jr. Drive
WINSTON-SALEM, NORTH CAROLINA

STREETSCAPE MASTER PLAN AND
SCHEMATIC DESIGN
FEBRUARY 2012
INTRODUCTION

This document captures the process and outcomes of the Schematic Design effort for Winston-Salem’s Martin Luther King Jr. Drive by the design team, led by Design Workshop, from October 2011 through February 2012. The objective of this phase was to develop a Master Plan for the corridor that not only define the design for this project but also define other opportunities that the City to enhance the Corridor.

This document provides a visual and textual story of the design analysis, definition and discoveries that led to planning solutions and conclusions. It is intended for client use in presenting the project’s vision to municipal and state officials for approvals, to attract the interest of the community and stakeholders, and to serve as the foundation for the next phases of the design process from which the plan will evolve.
The project study area is on Martin Luther King Jr. Drive from the interchange with US 52 to the Cromartie Street and Winston-Salem State University.

Add more introduction text.
- Site conditions
- NCDOT project background
- University
- New Housing Authority Master plan
In 2011 the Creative Corridors Coalition created a visionary master plan for Winston-Salem’s major corridors. This project began in response to NCDOT’s plan to create improvements on specific roadways in Winston-Salem including: Business 40, US 52, Martin Luther King Jr. Dr., Broad St. and Salem Creek Connector. The planned improvements represent a sizeable financial investment and potential for disruption. They also offer an extraordinary opportunity to create a new, aesthetically pleasing transportation network and exciting visual environment that will endure for generations and will affect the way residents and visitors perceive their surroundings.

Recognizing the opportunity, a group of civic leaders determined that the citizens of Winston-Salem should have a powerful voice in the execution of these improvements to ensure that they benefit the whole City; address local concerns; and create a well-articulated, well-integrated and aesthetically pleasing presentation.

Our design of the Martin Luther King Jr. Drive project used the Creative Corridors Visionary Master Plan as a foundation and framework to begin our design process. The exhibits to the right are key maps from this document, the full Master Plan for the Creative Corridors can be found at the CCC’s website, www.creativecorridors.org.
GUIDING PRINCIPLES

Design Thesis:
With community and institutional support, the design and implementation of Martin Luther King Jr. Drive Streetscape can exemplify the city’s commitment to the CCC master plan; build community trust and unity; celebrate the City’s diversity; and create a catalyst for the enhancement of East Winston’s image, sense of place and revitalization.

Issues:
1. Above-ground power lines
2. Proximity of sidewalk to curb
3. Faded crosswalks
4. Absence of continuous vegetation
5. Ugly and under-performing fixtures

Design Principles
1. Create a safe pedestrian environment
   - Crosswalk signal timing
   - Enhanced crosswalks
   - Lighting and fencing
   - Speed limit
2. Improve visual quality of the district
   - Integration of art
   - Fencing
   - Landscape
3. Be environmentally responsible
   - Low water native plants
   - Recycled materials
   - Low energy lights
   - Locally sourced materials
4. Integrate community in the process
   - Keypad workshops
   - Design competitions
   - Visual preference
   - Arbor Day, Art day
5. Use the budget to create complete expression

Measurable goals - Art:
• > 20% of the budget is directed to artworks
• > 20% of new surfaces are considered artworks
• > 20% of artwork is funded by outside sources
• Artwork is influenced by the local community
• Artist(s) engaged in the design process
• The aesthetics lift the spirit

Measurable Goals - Environment:
• Street lighting is converted to energy-efficient fixtures
• 0% of landscape permanently irrigated
• > 50% of materials sourced locally
• > 50% increase in tree canopy
• 100% of plant materials deemed non-invasive
• Increase in bio-diversity along corridor

Measurable Goals - Economics:
• >20% matching funds from additional sources (arts council, Roots Day, CIP, NCDOT, etc.)
• Property values adjacent to Corridor increase
• Initial project budget creates tangible impact
• Land use regulations and CIP enable completion of "idealized" streetscape in the future.

Measurable Goals - Community:
• Public participation (attendance) increases throughout life of project
• The community accepts and supports the project
• There is an improvement in pedestrian/automobile conflicts
• The community celebrates when the project is installed
• Pedestrian routes to schools and social services are elevated within the design
**CORRIDOR CONSTRAINTS**

**Easy (with commitment to maintenance):**
- Visible crosswalks and ped crossing signals timed correctly
- Something artful and meaningful in center island
- Decorative black fence along ROW (safety and aesthetics)
- Plants between curb and sidewalk
- Freestanding art installations, banners and monuments
- Attractive bus stops

**Medium (hard work, cooperation and some funding):**
- Trees in yard areas adjacent to ROW (easement)
- Yard beautification program for vacant lots
- Codify the "Idealized Streetscape"
- Phaseable design and get commitment for funding
- Purchase additional ROW for sidewalk and bike path
- Purchase vacant lots and create parks

**Hard (would require additional funding):**
- Underground power lines
- Decorative Street Lighting (due to underground power issue)
- Decorative Signal Poles (due to underground power issue)
- Idealized Streetscape fully implemented
- On-street parking, bulb-outs and other
- Rain gardens, porous paving, etc.

The above section illustrates the existing condition through the Corridor. In a majority of the Corridor the right-of-way is at or close to the back of sidewalk. Additionally there are several major sections that have overhead power lines. The cost to place these lines underground is beyond the scope of this project, but keeping the power lines overhead will affect the placement of future street trees within the Corridor.

Looking north towards 4th Street

Looking south towards Third Street

Looking west at Business 40 and Martin Luther King Jr. Drive interchange
The above section illustrates the possible future condition of the Corridor working within the constraints of the right-of-way through most of the Corridor. There is an opportunity in key places to purchase additional right-of-way to create linear parks for the community. These parks would ideally be coordinated to align with future bus stop locations.
Street Tree Planting Program

Trees are a vital part of any streetscape. They provide many positive attributes to a street including:

- Provides shade
- Add Aesthetic value
- Carbon sequestration
- Reduction of pollutants
- Increase air quality
- Extend life of paved surfaces
- Increase traffic safety
- Increase perception of neighborhood
- Increase real estate values

On the Martin Luther King Jr. Drive corridor, developing a street tree program will be challenging due to the narrow right-of-way and overhead power lines. Creating a successful street tree program will hinge upon choosing the appropriate tree species to fit each location and on cooperation from all the property owners along the Corridor. Because there is not room within the right-of-way, we will need permission to plant the trees on adjacent property owners’ property along Martin Luther King Jr. Drive. To the right is a draft letter that incorporates informative sections to use to gain permission from local residents.

Dear East Winston Residents,

As you may know, the City of Winston-Salem is creating plans to beautify Martin Luther King Jr. Drive following completion of the construction that NCDOT is currently involved with. Our plans for beautification are currently being created, and include planting trees, planting hedges, dressing up the center median, dressing up the sidewalk areas, making attractive pedestrian crosswalks, providing consistent fence treatments along the roadway and providing public art. It will be a very attractive corridor once we are finished.

Since there is not enough space between the sidewalk and the curb, we would like to discuss the possibility of planting trees (or a tree?) in your yard next to Martin Luther King Jr. Drive as well as possibly locating some decorative fencing between your yard and the sidewalk. Once these trees are planted, they will be yours to enjoy.

Providing trees, fences and hedges will create a more attractive street, as well as provide you with potentially more privacy from Martin Luther King Jr. Drive. Should you be interested in being part of this idea, the City will fund the cost of the trees, hedges and fences and handle the installation.

We will follow up with you in the next few weeks to determine your interest, thank you.
Interchanges are important landscapes within the Creative Corridors Master Plan. The interchanges within our project site are no exception. The Business 40 interchange and the US 52 interchange mark important entrances to Winston-Salem, East Winston and Winston Salem State University. Within these landscapes large canopy trees line on- and off-ramps, with a grove of flowering trees in the center. Large meadow spaces are left for future opportunities for land sculpting or other large-scale art installations. Each interchange will have a large monument that will be visible from the highway and the main approach of the off-ramp.

Crossings are a vital interface between pedestrians and motorists. Safety is the number one concern at the intersections. Bold markings will delineate the crosswalks and clearly signify where pedestrians are likely to be present. Walk signals will be timed to provide ample time for pedestrians to cross and will have countdown timers to inform pedestrians of the time they have remaining to cross.
Edges create the space between road and sidewalk and between sidewalk and private property. Creating consistent edges along the corridor will tie the districts together, create space and increase safety within the pedestrian zone. As seen throughout Winston-Salem, black fencing will be installed along the Corridor. In some areas it will be installed on the back of the sidewalk and in other areas it will be installed between the sidewalk and curb to discourage pedestrians from crossing mid-block. Street trees and plantings in the strip between the curb and sidewalk will reinforce the edges along the road way and better define the pedestrian space.

Medians

The median is an element on Martin Luther King Jr. Drive that will stay consistent through the Corridor’s evolution. The DOT is installing new sections of median that are 6 inches tall and 4 feet wide. There is an opportunity to make this space meaningful by investing in center monuments that honor Dr. King and his amazing life. This can also be an opportunity to identify the districts that occur along this Corridor. Additionally there is a concept that integrates graphic art commissioned by an artist into the center median that derives its pattern from inspirations of the community.
Integration of Art

From the beginning the design team and steering committee were very interested in integrating art into this process and identifying where possible art installations could happen along the corridor. One opportunity that was identified early in the process was the new median that was being installed by the DOT. The design team saw this as a blank canvas. Inspired by the patterns of quilts and the community process to sew quilts our team presented a concept that a graphic design be applied to the median as a symbol of stitching the community together.
**MONUMENTATION**

**Monuments**
- **Monument:** Tall and visible from Business 40; this monument announces your arrival to Winston-Salem and is your first glimpse of the Creative Corridors from the East.

**District**
- **District:** Tall placed at key places in the corridor announcing the edges between districts.

**Community Pillar**
- **Community Pillar:** Illuminated from the interior; these pillars have the opportunity to tell different themed pictorial stories.

**Community Story**
- **Community Story:** At the pedestrian scale and placed at the intersections; these sign panels have the opportunity to tell a more in-depth story about the chosen theme.

**Streetscape Zones**
### Plant Palette

#### Street Trees

<table>
<thead>
<tr>
<th>Species</th>
<th>Common name</th>
<th>Abr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quercus phellos</td>
<td>Willow Oak</td>
<td>Qp</td>
</tr>
<tr>
<td>Quercus coccinea</td>
<td>Scarlet Oak</td>
<td>Qc</td>
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</table>

#### Median Plants

<table>
<thead>
<tr>
<th>Species</th>
<th>Common name</th>
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<tbody>
<tr>
<td>Acer Platnoides</td>
<td>Columnar Maple</td>
<td>Sa</td>
</tr>
<tr>
<td>Spirea X.</td>
<td>Columnar Maple</td>
<td>Sa</td>
</tr>
<tr>
<td>&quot;Anthony waterer&quot;</td>
<td>(red fear)</td>
<td>Ae</td>
</tr>
</tbody>
</table>

#### Interchange Trees

<table>
<thead>
<tr>
<th>Species</th>
<th>Common name</th>
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<tbody>
<tr>
<td>Quercus phellos</td>
<td>Willow Oak</td>
<td>Qp</td>
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<tr>
<td>Crategus phaenopyrum</td>
<td>Washington Hawthorn</td>
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### Edge Plants

<table>
<thead>
<tr>
<th>Species</th>
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<tr>
<td>&quot;Anthony waterer spirea&quot;</td>
<td>Spirea</td>
<td>Sa</td>
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<tr>
<td>Abelia &quot;edward goucher&quot;</td>
<td>Abelia</td>
<td>Ae</td>
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<tr>
<td>Rhus Aromatic</td>
<td>Fragrant Sumac</td>
<td>Ra</td>
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<tr>
<td>Ilex vomitoria</td>
<td>Yaupon Holly</td>
<td>Iv</td>
</tr>
<tr>
<td>Nandina</td>
<td>Dwarf Nandina</td>
<td>Nd</td>
</tr>
<tr>
<td>Ilex glabra</td>
<td>Ink Berry</td>
<td>Ig</td>
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<tr>
<td>Redoiser dogwood</td>
<td>Dogwood</td>
<td>Od</td>
</tr>
<tr>
<td>Spiraea</td>
<td>Purple Cone Flower</td>
<td>Ep</td>
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<tr>
<td>Rubecia hirta</td>
<td>Black Eyed Susan</td>
<td>Rh</td>
</tr>
<tr>
<td>Mahlembertia capillaris</td>
<td>Pink Muhly Grass</td>
<td>Mc</td>
</tr>
<tr>
<td>Pennisetum alopecuroides</td>
<td>Hamilt</td>
<td>Pa</td>
</tr>
<tr>
<td>Nandina</td>
<td>Dwarf Nandina</td>
<td>Nd</td>
</tr>
<tr>
<td>Ilex glabra</td>
<td>Ink Berry</td>
<td>Ig</td>
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<tr>
<td>Redoiser dogwood</td>
<td>Dogwood</td>
<td>Od</td>
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<tr>
<td>Echinacea purpurea</td>
<td>Purple Cone Flower</td>
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<tr>
<td>Rubeckia hirta</td>
<td>Black Eyed Susan</td>
<td>Rh</td>
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<tr>
<td>Mahlembertia capillaris</td>
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<td>Dogwood</td>
<td>Od</td>
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</table>
Public Process

A keystone element to this design process is testing alternatives with the public and asking the public which elements should be the most important. Using the public process to determine the course of the design process is an important element to these street improvements. The public process is also helping us determine which elements will be implemented in the first phase of work. The Opinion of cost to the right illustrates the ranking that was interpreted from the public process. The items in white will be part of the first phase and the elements in beige will need to be implemented at a later date.

In general, the most important thing to consider in the design is (rank 1-6):

- 12% 1. Crosswalks and sidewalks
- 20% 4. Consistent fencing materials
- 13% 2. Consistent Street Trees and Landscape
- 26% 6. Decorative center median
- 23% 5. Art and monuments
- 14% 3. 6. Pedestrian Lighting

If the concrete median is enhanced, the choice I like best:

- 38% 1. The quilt idea or something artistic like that
- 38% 2. Making them look like brick
- 18% 3. Coloring the concrete a light grey or beige that is clean and nice
- 7% 4. Other (please write other ideas on note cards)

If we did color the crosswalks, the color that I think would be best is:

- 40% 1. Brick red like in Downtown
- 0% 2. Blue
- 11% 3. Grey
- 2% 4. Grey/Beige or light earth tone
- 36% 5. Red – like WSSU red
- 8% 6. Patterns of different colors
- 4% 7. Other – please use note cards

Opinion of Cost

Martin Luther King Streetscape
Winston-Salem, North Carolina

<table>
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<tr>
<th>Item</th>
<th>QTY</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Estimate</th>
<th>Running Total</th>
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<tr>
<td>Design Fee</td>
<td>$150,000.00</td>
<td>$150,000.00</td>
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<tr>
<td>Colored and Stamped Asphalt Crossing</td>
<td>24,886 SF</td>
<td>$10.00</td>
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<td>Sidewalk - 5' brushed concrete</td>
<td>9,600 SF</td>
<td>$6.00</td>
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<td>Shrub 2' road edge planting area</td>
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<td>$6.00</td>
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<td>Black Fencing - 30&quot; in curb space</td>
<td>170 LF</td>
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<td>Black Fencing - 3' front yard</td>
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<td>Edge Deciduous Street Tree</td>
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<td>Bollard Lighting (edges)</td>
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<td>Freestanding Monument Pole Artwork</td>
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<td>Artwork - &quot;Quilt&quot; Painted / Stained</td>
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<td>$15.00</td>
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<td>Bus Shelters</td>
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<td>Subtotal</td>
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Note: This ranking is based on our interpretation of the communities preferences.
PUBLIC MEETING ALTERNATIVES
PROJECT BOUNDARIES
PROJECT BOUNDARIES