A NEW CONCEPT FOR THE SIX FORKS CORRIDOR

Agenda for the Evening:

1. Short recap describing differences with the new concept plan

2. Details and discussions provided at Topic Stations

3. Topic Stations include:
   a) Streetscape Character Concept
   b) Multi-modal and Roadway Concept
   c) General Corridor Study Questions

To help us get through this complex information and to answer all of your questions, we ask that all comments and questions about the plan be made at the topic stations, where experts are available to best address them.
Six Forks Road Corridor –
Why are we here?

• Highly congested corridor
• Increasing development pressure
• Growing pedestrian demand
• Poor bicycle accessibility
Corridor Vision – Goals (Recap)

- Improved traffic flow
- Environmental sensitivity
- Enhanced connectivity
- Multimodal transportation options
- Active pedestrian network
- Safety and accessibility
- Attractive urban thoroughfare
- Irresistible gathering place
Six Forks Road Corridor – Existing Conditions

- 2.3 miles long
- 29,000-48,000 vehicles/day
- 9 different cross sections
- 52’ to 120’+ wide ROW
- Varying speed limits
  - 35 mph south of Millbrook
  - 45 mph north of Millbrook
- Crash rate is 2.68x state average
- Inconsistent intersection and signal spacing
- Lack of access control
A NEW CONCEPT FOR THE SIX FORKS CORRIDOR

PROCESS RECAP:

• Listening to community input
• Conducting technical analysis
• Working with agencies on technical requirements
• Responding to the realities of site
• Creating acceptable compromises, while holding onto the Vision
• Maximizing the outcome to create the most benefit for all interests
• Creating alternative plans for review and acceptance

DESIGN CONCEPT #2
We conducted professional analysis for how the current system functions for cars, bikes, pedestrians and buses.
We studied the context and potential issues related to space and construction.
We accommodated all modes of travel in appropriately sized facilities that meet with demand; created safe, separated zones for bike and pedestrians; provided a landscaped and/or decorative median and created designs for the edge conditions.
Two Distinct Streetscape Characters
- Each sensitive to the context it goes through
- Design concept remains the same
Urban Boulevard Streetscape Type

The “Urbanized” portion generally remains the same as previous schemes except for variances in the median dimension and materials and the size of the planting area.
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DESIGN CONCEPT #2

Between Millbrook Road and Loft Lane
Parkway Boulevard Streetscape Type

The Parkway Concept remains the same except for variances in the median dimension and small increases in some of the edge condition dimensions.
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DESIGN WORKSHOP & STANTEC WITH THE URBAN DESIGN CENTER

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DESIGN CONCEPT #2

North Glen Drive Intersection

- Bike track meanders in landscape zone
- Median beyond
- Center median dimension varies: Majority of Parkland median has adequate space for large trees, all sections adequate for shrubs and/or small trees.
- Small trees under power line typ.

Original Parkway

- Large trees closer to the road where possible (no power lines)
- Center median dimension varies: No longer adequate space for large trees; most areas still large enough for small trees; typical median at intersections is either 4’ wide and paved or 7’ wide with small flowering shrubs.
- Power pole

Revised Parkway
Neighborhood Gateways

The gateway concepts remain the same for the streets that access neighborhoods that promote pedestrian scale, neighborhood identity and traffic calming.

Neighborhood gateways create places for artistic expression.
Transit Stops (Remain the Same)

- Consolidate existing stops (●) to new enhanced stops (●) spaced for ¼-mile walking radius (○)
- New and attractive bus shelters with signage & furniture
Connectivity

The plan for safe pedestrian and bicycle connectivity with enhanced crosswalks, pedestrian passes, and off-corridor improvements remains the same.
Environmental Sensitivity

Design Concepts that promote environment responsibility – particularly in the way that storm water is managed – remain the same in the current scheme.
Street Furnishings and Public Art

Recommendations about materials and furnishings and the inclusion of public art into the streetscape – both integrated into the design of elements and freestanding pieces remain the same in this scheme.
A NEW CONCEPT FOR THE SIX FORKS CORRIDOR

We balanced the pros and cons of this alternative concept

<table>
<thead>
<tr>
<th>Traffic</th>
<th>Vehicular Level of Service</th>
<th>5 Lane Section (Existing Condition)</th>
<th>6 Lane Section (Current Proposal)</th>
<th>4 Lane Section (Median, bike lanes and sidewalk)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The current level of service at the Millbrook Intersection is level F</td>
<td>All intersections would function at an acceptable LOS with a 6 lane divided cross section.</td>
<td>Most intersections would not function at an acceptable LOS similar to existing condition cross section</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The typical capacity of a 4-lane urban section is 25,000 vpd. 80% of the Corridor is currently over-capacity.</td>
<td>The typical capacity of a 6-lane divided urban section is 50,000 vpd. Only 20% of the Corridor would be over-capacity by 2040.</td>
<td>The typical capacity of a 4-lane urban section is 25,000 vpd. 80% of the Corridor is currently over-capacity.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crashes along the Corridor are currently 2.8 times above the statewide average.</td>
<td>Installation of a median can reduce crashes as much as 21%</td>
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<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Multimodal</th>
<th>Bike Infrastructure</th>
<th>Currently No</th>
<th>Buffered bike lanes provide space between cyclist and traffic, larger sidewalks accommodate children</th>
<th>Buffered bike lanes provide space between cyclist and traffic, larger sidewalks accommodate children</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pedestrian Infrastructure</td>
<td>Sidewalks are narrow and close to the road, but are continuous along the entire Corridor except for one block</td>
<td>Wider sidewalks and street trees will create a more comfortable pedestrian experience</td>
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</tr>
<tr>
<td></td>
<td>Transit Infrastructure</td>
<td>Changing lane configurations make navigation for buses difficult, many stops but only a couple shelters</td>
<td>Simplified cross-section will make bus travel easier, section accommodates minimum space for future rail or BRT</td>
<td>Changing lane configurations make navigation for buses difficult, many stops but only a couple shelters</td>
</tr>
</tbody>
</table>

| Neighborhoods | Aesthetics and Character | Minimal space for improvement, existing aesthetic condition not rated very high by the public | Increased space for landscape allows for opportunity to plant street trees and roadside plantings | Increased space for landscape allows for street trees at the edges and center of median - fewer large trees in median |
|              | Edge Impact | Little to no impact | Major impact | Moderate to major impact, less ROW required to be purchased |
|              | Connectivity | Free flow connectivity makes access easy for cars but creates a chaotic environment for motorists and pedestrians | Medians and enhanced crosswalks create a predictable roadway for motorists and pedestrians | Medians and enhanced crosswalks create a predictable roadway for motorists and pedestrians |

| Economics | Real Estate Value | No investment, properties will continue to develop at the current status quo | Moderate investment, moderate to major return | Moderate investment, moderate to major return |
|           | Business Accessibility | Business access will not be impacted, perceptions of difficult right and left turns will continue | Business access will be organized allowing for businesses to be accessed by backstreet connection or at controlled intersection | Business access will be organized allowing for businesses to be accessed by backstreet connection or at controlled intersection |
|           | Cost | Minimal Cost | Moderate to Major Cost | Moderate to Major Cost - less ROW required but edge treatments are still expensive |
## Level of Service/Delay Changes – 4 Lane Option

<table>
<thead>
<tr>
<th>Location on Six Forks</th>
<th>Current AM</th>
<th>Current PM</th>
<th>New AM</th>
<th>New PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lynn Road</td>
<td>D (51.8)</td>
<td>E (68.7)</td>
<td>D (51.8)</td>
<td>E (70.9)</td>
</tr>
<tr>
<td>Sandy Forks Rd/Northclift Dr</td>
<td>D (36.8)</td>
<td>B (17.2)</td>
<td>D (39.1)</td>
<td>C (24.0)</td>
</tr>
<tr>
<td>Loft Lane*</td>
<td>C (23.9)</td>
<td>B (11.5)</td>
<td>A (4.7)</td>
<td>A (5.8)</td>
</tr>
<tr>
<td>Millbrook Road</td>
<td>F (97.1)</td>
<td>F (80.2)</td>
<td>F (94.8)</td>
<td>F (117.6)</td>
</tr>
<tr>
<td>Northbrook Drive</td>
<td>B (11.4)</td>
<td>D (40.7)</td>
<td>B (13.7)</td>
<td>E (66.7)</td>
</tr>
<tr>
<td>Rowan Street</td>
<td>A (9.3)</td>
<td>D (43.8)</td>
<td>B (10.3)</td>
<td>D (44.5)</td>
</tr>
<tr>
<td>Lassiter Mill Road</td>
<td>C (25.0)</td>
<td>D (47.6)</td>
<td>C (30.5)</td>
<td>E (63.2)</td>
</tr>
</tbody>
</table>

Delay = average seconds of delay per vehicle during peak rush hour

* Loft Lane is currently unsignalized
Conceptual Cost Comparison

Old Scheme - 6 Lane Option:
• 11.06 acres of r/w acquisition
• Total project cost - $44.5 million

New Scheme - 4 Lane Option:
• 5.85 acres of r/w acquisition
• Total project cost - $37.7 million
Measures of Success

- 3X the area for bikes, pedestrians and streetscape
- Consistent lane widths (11’) and speed limit (35mph)
- 10 new high quality bus shelters
- 52 high visibility crosswalks
- Over 4 miles of grade separated bike lanes
- Over 4 miles of new wider sidewalks
- Almost 8 million gallons per year of stormwater runoff treatment
- Three new traffic signals
- Locations for over 700 canopy and flowering trees
- Less acres of medians planted with trees and more paved medians
- Plans for 10 neighborhood gateways
- Measurable increase in LOS for buses, bikes and pedestrians, but not for cars
Next Steps

• Feedback and questions at table stations
• Please fill out comment sheets
• Accepting feedback through April 21 – www.raleighnc.gov, keyword “Six Forks Corridor Study”
• Presentation at Midtown CAC on April 24
• Target date for City Council is mid-May