EXECUTIVE SUMMARY

WHAT IS THE PURPOSE AND NEED FOR THE STUDY?
The City of Winston-Salem commissioned this study to find cost-effective transportation solutions for the growing traffic volumes and congestion along Burke Mill Road. Local citizens have expressed concerns about the rising traffic volumes, difficulties exiting from local streets onto Burke Mill Road, as well as safety and sight distance issues. This Corridor Study seeks to identify cost-effective solutions for the entire 2.7-mile length of Burke Mill Road / Bolton Street from Stratford Road to Hawthorne Road.

WHAT IS THE STUDY YEAR AND PROJECTED TRAFFIC VOLUME FOR BURKE MILL ROAD?
In addition to existing year 2019 conditions, this study considered a future year of 2040. Currently, the average annual daily traffic (AADT) volume varies between approximately 14,000 and 15,000 vehicles per day, depending on the location. The volume is projected to increase to approximately 18,000 vehicles in year 2040.

DID THE STUDY INCLUDE SOME TRAFFIC FROM TRULIANT HEADQUARTERS EXPANSION?
Yes, this study accounted for some traffic from the planned expansion of Truliant Federal Credit Union’s headquarters. This includes a new driveway on Burke Mill Road, which will be a secondary access that is gated to allow entry only by employees. This driveway will be located across from Stonewood Drive, and a traffic signal will be installed at the intersection.

GRIFFITH ROAD AT BURKE MILL ROAD: WHAT IMPROVEMENTS ARE RECOMMENDED?
A protected / permitted left turn phase with left turn arrow signal heads is currently lacking on Griffith Road. This modification is recommended, along with extension of left turn lanes which currently have insufficient length. The northbound left turn lane on Griffith Road should be extended from 100 feet to 300 feet of storage, the southbound left turn from 75 feet to 300 feet, and the westbound left turn lane on Burke Mill Road should be extended from 100 feet to 250 feet of storage. These will improve the ease of left turn movements and avoid unsafe spillback of left turn queues into the through lanes.

Existing (Left) and Recommended (Right) Lane Geometry at Intersection of Burke Mill Road and Griffith Road
FRONTIS PLAZA BOULEVARD AT BURKE MILL ROAD: WHAT IMPROVEMENTS ARE RECOMMENDED?

An eastbound left turn lane is needed on Burke Mill Road to handle left turns separately without impeding through traffic on Burke Mill Road. Six (6) feet of widening is needed to provide an overall pavement width of 33 feet (11-foot lanes). The recommended eastbound left turn lane will reduce queuing and delays on Burke Mill Road and improve overall traffic flow and safety. It is envisioned that widening would occur on the north side of Burke Mill Road.

AMESBURY ROAD AT BURKE MILL ROAD: WHAT IMPROVEMENTS ARE RECOMMENDED?

This intersection has an excessive number of conflict points due to its configuration which allows two-way travel on both sides of a small, triangular concrete island. The intersection has a history of angle, left turn, and sideswipe crashes. Two alternatives are presented to improve safety through enhanced pavement markings and signage. In Alternative 1, the existing planted median is eliminated, and in Alternative 2 the planted median is preserved.
WOODINGTON DRIVE / KIMEL FOREST DRIVE AT BURKE MILL ROAD: WHAT IMPROVEMENTS ARE RECOMMENDED?

Currently, Kimel Forest Drive is limited to right in / right out access. As a result, some traffic from the Kimel Forest office park exits right and then cuts through Woodington Drive in order to proceed east or north on Burke Mill Road. This trend was cited specifically by many local citizens in the public meetings for this project.

Based on the capacity analysis, it is recommended to reconfigure Kimel Forest Drive for full movement and to install a traffic signal. This will address the cut-through traffic pattern on Woodington Drive, and will provide additional capacity to relieve the signalized intersection to the west at Kimel Park Drive, which experiences congestion and queuing issues during peak periods. It will also provide a more direct route for left-turn exit traffic, which will help to reduce vehicle-miles traveled on Burke Mill Road. Finally, this new signal will have a platooning effect on Burke Mill Road, which will create more gaps to allow local side-street traffic to more easily make left turns.

Due to the short spacing (140 feet) from Kimel Forest Drive, there will be the need for access management at Woodington Drive, to avoid unsafe conflicts with queued vehicles. Further coordination will be needed between the City and residents to identify the best access management strategy.
HOSPICE LANE AT BURKE MILL ROAD: WHAT IMPROVEMENTS ARE RECOMMENDED?

Sight distance is limited exiting from Hospice Lane, which creates safety issues at this intersection. The line of sight is obstructed by an earth mound and vegetation, which should be removed. A retaining wall will likely be required due to the sloping terrain.

[Image: Hospice Lane at Burke Mill Road]

LONDON LANE / BRADENTON DRIVE AT BURKE MILL ROAD: WHAT IMPROVEMENTS ARE RECOMMENDED?

The difficulty of making left turns from Burke Mill Road onto London Lane, especially during peak periods, causes the southbound left turn queue to back up. It often takes several signal cycles for vehicles to make it through the intersection. This causes drivers to resort to cut-through traffic movement on Woodworth Drive, or to use Bradenton Drive to make u-turns, in order to bypass the left turn queue.

The recommendations at this intersection include installing protected / permitted left turn signal phasing on Burke Mill Road, and restriping pavement to extend the southbound left turn lane on Burke Mill Road. This signal modification is currently in progress. Additionally, a separate westbound right turn lane is recommended on London Lane.

[Image: Burke Mill Road at London Lane / Bradenton Drive: Existing (Left) and Recommended (Right)]
**WHAT ARE THE RECOMMENDATIONS TO MINIMIZE CUT-THROUGH TRAFFIC ON LONDON LANE?**

The City has implemented additional traffic calming measures to discourage cut-through traffic and speeding along London Lane. The intersection of London Lane and New Castle Drive has been upgraded to include a raised table at the center of this intersection and enhanced, high-visibility crosswalks.

**SILAS CREEK PARKWAY NORTHBOUND RAMPS AT BOLTON STREET: WHAT IMPROVEMENTS ARE RECOMMENDED?**

At the Silas Creek Parkway / Bolton Street interchange, a traffic signal is in place at the Southbound Ramps intersection but the Northbound Ramps intersection is stop-controlled. This intersection should be re-evaluated for signal warrants after Business 40 is reopened and traffic normalizes. Also, vegetation on the southwest corner obscures sight distance. This vegetation should be cut back to improve visibility and safety.
BOLTON STREET NORTH OF SILAS CREEK PARKWAY: WHAT IMPROVEMENTS ARE RECOMMENDED?

Bolton Street currently lacks a center left turn lane, which means that left turns must be made from the through lane, causing interruptions to through traffic and the potential for rear-end collisions. However, there is sufficient pavement width (approximately 36 feet) to accommodate a center two way left turn lane on Bolton Street. This reconfiguration is recommended on Bolton Street between the Silas Creek Parkway Northbound Ramps and Hawthorne Road.

WHAT IS THE ESTIMATED COST AND THE CONSTRUCTION SCHEDULE FOR THESE IMPROVEMENTS?

The cost estimates are summarized by location below. The improvements have been prioritized by the City, and will be done in phases, as future funds become available for capital projects. Exhibits A through C in the following pages present the conceptual drawings of the recommendations of this study.

<table>
<thead>
<tr>
<th>Location</th>
<th>Priority</th>
<th>Estimated Cost</th>
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<tbody>
<tr>
<td>Burke Mill Road at London Lane / Bradenton Drive</td>
<td>1</td>
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<tr>
<td>Burke Mill Road at Stonewood Drive / Truliant Gated Employee-Only Access (To be built by others)</td>
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<td>Burke Mill Road at Griffith Road</td>
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<td><strong>Total Cost</strong></td>
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Exhibit B: Burke Mill Road Recommended Improvements (Middle Section)
Exhibit C: Burke Mill Road / Bolton Street Recommended Improvements (North Section)