













Recommendations

Legend



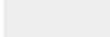
Intersection Recommendations

-  Access Management
-  Intersection Improvement
-  Intersection Realignment
-  New Intersection
-  Roundabout

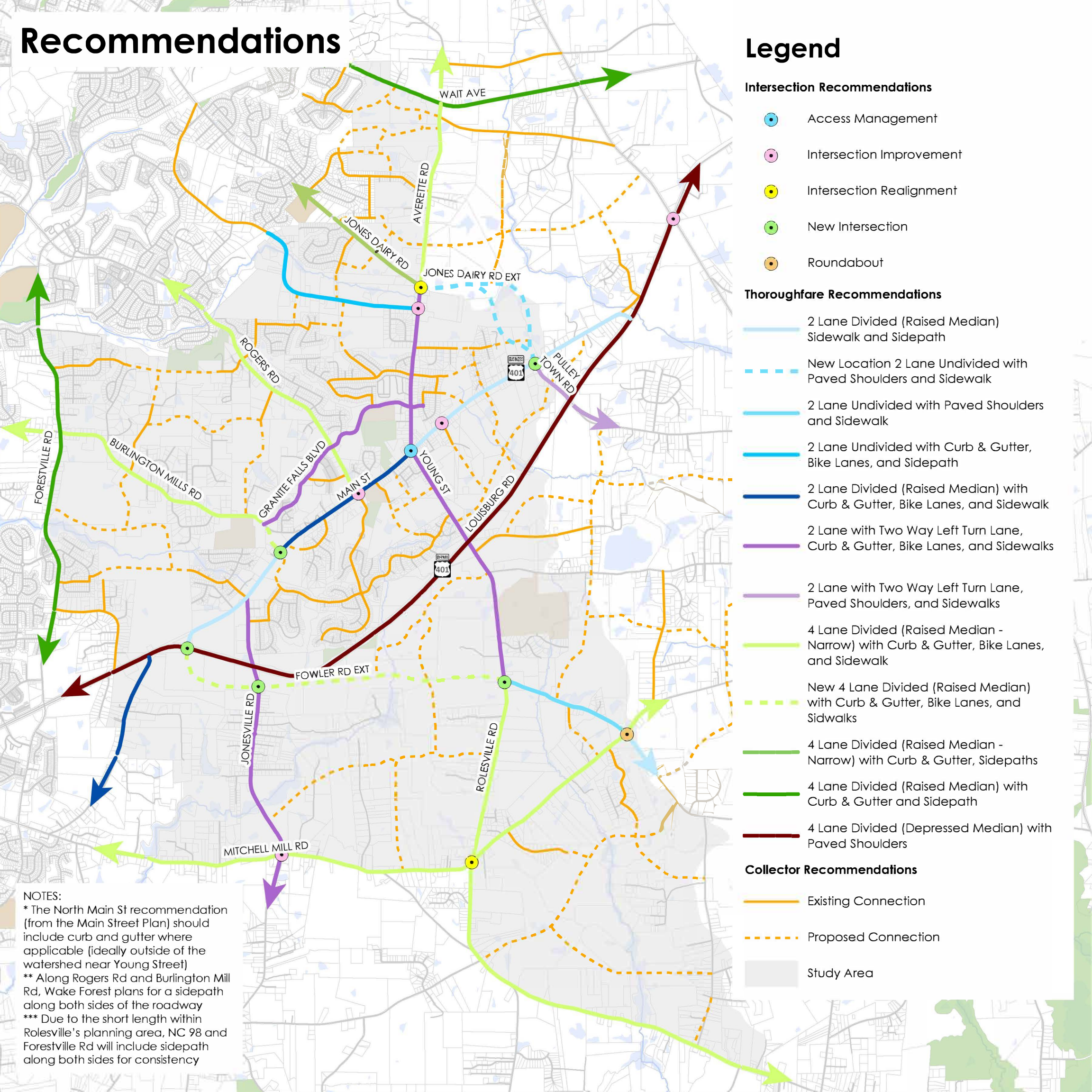
Thoroughfare Recommendations

-  2 Lane Divided (Raised Median) Sidewalk and Sidepath
-  New Location 2 Lane Undivided with Paved Shoulders and Sidewalk
-  2 Lane Undivided with Paved Shoulders and Sidewalk
-  2 Lane Undivided with Curb & Gutter, Bike Lanes, and Sidepath
-  2 Lane Divided (Raised Median) with Curb & Gutter, Bike Lanes, and Sidewalk
-  2 Lane with Two Way Left Turn Lane, Curb & Gutter, Bike Lanes, and Sidewalks
-  2 Lane with Two Way Left Turn Lane, Paved Shoulders, and Sidewalks
-  4 Lane Divided (Raised Median - Narrow) with Curb & Gutter, Bike Lanes, and Sidewalk
-  New 4 Lane Divided (Raised Median) with Curb & Gutter, Bike Lanes, and Sidewalks
-  4 Lane Divided (Raised Median - Narrow) with Curb & Gutter, Sidepaths
-  4 Lane Divided (Raised Median) with Curb & Gutter and Sidepath
-  4 Lane Divided (Depressed Median) with Paved Shoulders

Collector Recommendations

-  Existing Connection
-  Proposed Connection
-  Study Area



NOTES:
 * The North Main St recommendation (from the Main Street Plan) should include curb and gutter where applicable (ideally outside of the watershed near Young Street)
 ** Along Rogers Rd and Burlington Mill Rd, Wake Forest plans for a sidepath along both sides of the roadway
 *** Due to the short length within Rolesville's planning area, NC 98 and Forestville Rd will include sidepath along both sides for consistency



NEW Location Facilities

Legend

Thoroughfare Recommendations

-  New Location 2 Lane Undivided with Paved Shoulders and Sidewalk
-  New 4 Lane Divided (Raised Median) with Curb & Gutter, Bike Lanes, and Sidewalks

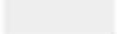
Collector Recommendations

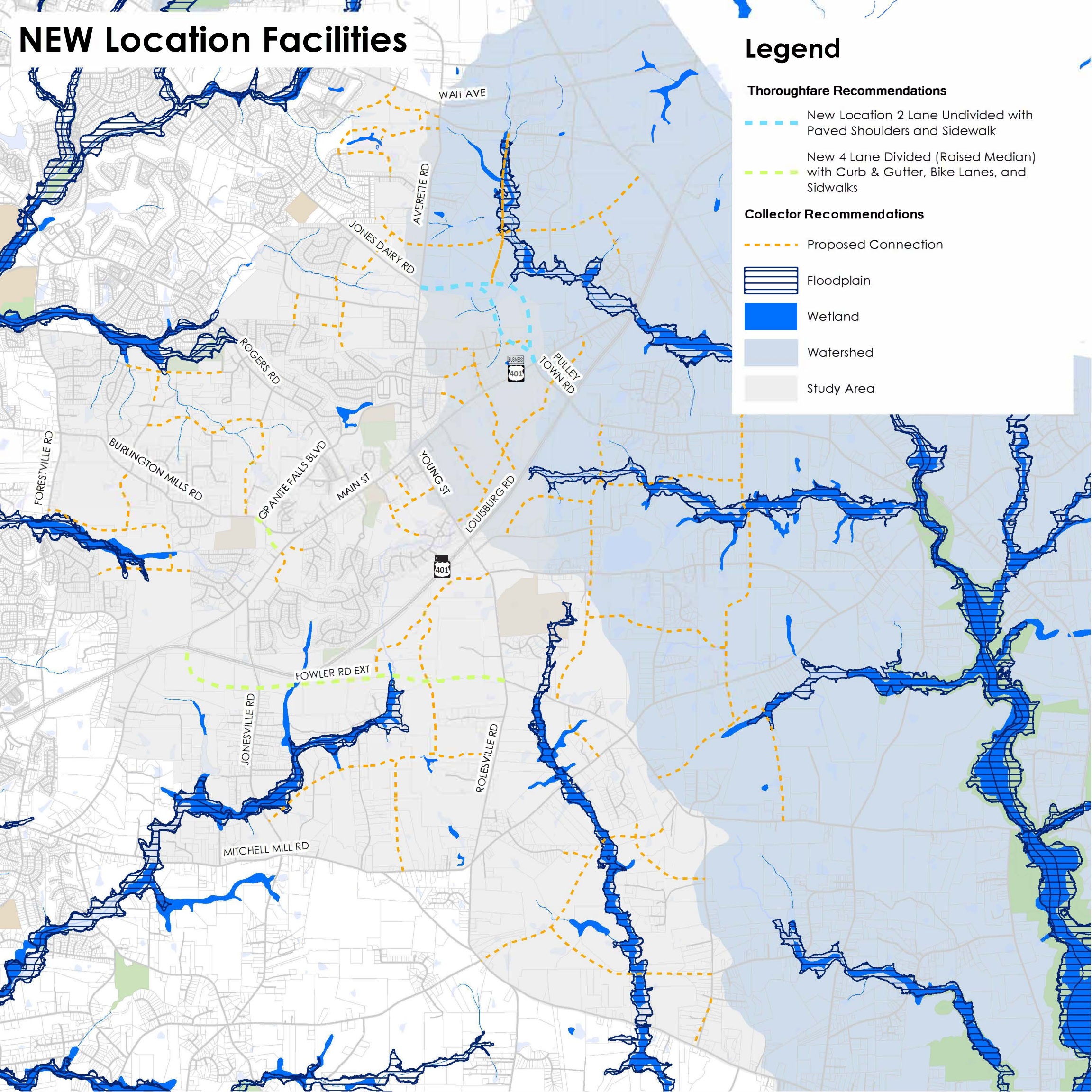
-  Proposed Connection

 Floodplain

 Wetland

 Watershed

 Study Area



Thoroughfare Recommendations

Facility Name	Extents	Status	Cross-Section Description
Averette Rd	Jones Dairy Rd to NC 98 (Wait Ave)	Existing Facility	4-Lane Divided (Raised Median - Narrow) with Curb & Gutter, Bike Lanes, and Sidewalks
Burlington Mills Rd	Burlington Mills Rd Realignment to Forestville Rd	Existing Facility	4-Lane Divided (Raised Median - Narrow) with Curb & Gutter, Bike Lanes, and Sidewalks
Burlington Mills Rd Realignment	Burlington Mills Rd Rd to US 401 BUS (S Main St)	New Location	4-Lane Divided (Raised Median) with Curb & Gutter, Bike Lanes, and Sidewalks
Chalk Road	Averette Rd to Western Study Area	Existing Facility	2-Lane Undivided with Curb & Gutter, Bike Lanes, Sidewalks
Fowler Rd Ext	US 401 Bypass/US 401 BUS (Main St) to Rolesville Rd	New Location	4-Lane Divided (Raised Median) with Curb & Gutter, Bike Lanes, and Sidewalks
Fowler Rd	Rolesville Rd to Mitchell Mill Rd	Existing Facility	2-Lane Undivided with Paved Shoulders and Sidewalks
Forestville Rd	Foxwild Ln to Lillies Liles Rd	Existing Facility	4-Lane Divided (Raised Median) with Curb & Gutter, Sidepaths
Existing Granite Falls Blvd	Terrell Dr to Grand Rock Way	Existing Facility	2-Lane with Two Way Left Turn, Curb & Gutter, and Sidewalks
Granite Falls Blvd	Grand Rock Way to Burlington Mills Realignment	New Location	2-Lane with Two Way Left Turn, Curb & Gutter, and Sidewalks
Jones Dairy Rd	Averette Rd to Northwestern Study Area Limits	Existing Facility	4-Lane Divided (Raised Median - Narrow) with Curb & Gutter and Sidewalks
Jones Dairy Rd Ext	Jones Dairy Rd/Averette Rd to US 401 BUS (Main St)/Pulley Town Rd	New Location	2-Lane Undivided with Paved Shoulders and Sidewalks
Jonesville Rd	US 401 BUS (Main St) to Mitchell Mill Rd	Existing Facility	2-Lane with Two Way Left Turn, Curb & Gutter, and Sidewalks
Louisburg Rd	US 401 Bypass (Louisburg Rd) to Southern Study Area Limits	Existing Facility	2-Lane Divided with Curb & Gutter, Bike Lanes, and Sidewalks
S Main St (US 401 BUS)	US 401 Bypass (Louisburg Rd) to Burlington Mills Rd Realignment)	Existing Facility	2-Lane Divided with Curb & Gutter, Sidewalk, and Sidepath
S Main St	Burlington Mills Rd Realignment to Young St	Existing Facility	2-Lane Divided (Raised Median) with Curb & Gutter, Bike Lanes, and Sidewalks
N Main St	Young St to US 401 (Louisburg Rd)	Existing Facility	2-Lane Divided (Raised Median) with Curb & Gutter (when applicable), Sidewalk, and Sidepath
Mitchell Mill Rd	Fowler Rd to Rolesville Rd	Existing Facility	4-Lane Divided (Raised Median - Narrow) with Curb & Gutter, Bike Lanes, and Sidewalks
Mitchell Mill Rd	Rolesville Rd to Eastern Study Area Limits	Existing Facility	4-Lane Divided (Raised Median - Narrow) with Curb & Gutter, Bike Lanes, and Sidewalks



Facility Name	Extents	Status	Cross-Section Description
NC 98 (Wait Ave)	Western Study Area Limits to NC 96 (Zebulon Rd)	Existing Facility	4-Lane Divided (Raised Median) with Curb & Gutter, Sidepaths
Pulley Town Rd	US 401 Bypass (Louisburg Rd) to US 401 BUS (N Main St)	Existing Facility	2-Lane with Two Way Left Turn, Paved Shoulders, and Sidewalks
Rogers Rd	US 401 BUS (Main St) to Granite Falls Blvd	Existing Facility	4-Lane Divided (Raised Median - Narrow) with Curb & Gutter, Bike Lanes, and Sidewalks
Rogers Rd	Granite Falls Blvd to Western Study Area Limits	Existing Facility	4-Lane Divided (Raised Median - Narrow) with Curb & Gutter, Bike Lanes, and Sidewalks
Rolesville Rd	Fowler Rd to Mitchell Mill Rd	Existing Facility	4-Lane Divided (Raised Median - Narrow) with Curb & Gutter, Bike Lanes, and Sidewalks
Rolesville Rd/Riley Hill Rd	Mitchell Mill Rd to Riley Hill School Rd	Existing Facility	4-Lane Divided (Raised Median - Narrow) with Curb & Gutter, Bike Lanes, and Sidewalks
US 401 Bypass (Louisburg Rd)	NC 96 (Zebulon Rd) to Northern Study Area Limits	Existing Facility	4-Lane Divided (Depressed Median) with Paved Shoulders
Averette Rd/Young St/Rolesville Rd	Jones Dairy Rd to Fowler Rd	Existing Facility	2-Lane with Two Way Left Turn, Curb & Gutter, and Sidewalks



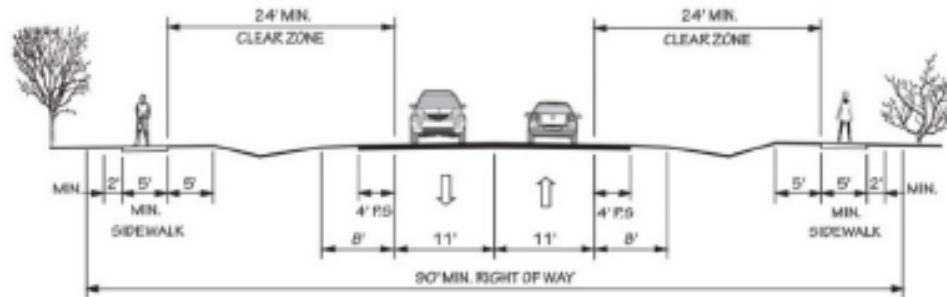
Cross-Section

2D 2 Lane Undivided with Paved Shoulders and Sidewalk

Facility Name	Extents	Status	Cross-Section Description
Fowler Rd	Rolesville Rd to Mitchell Mill Rd	Existing Facility	2-Lane Undivided with Paved Shoulders and Sidewalks
Jones Dairy Rd Ext	Jones Dairy Rd/Averette Rd to US 401 BUS (Main St)/Pulley Town Rd	New Location	2-Lane Undivided with Paved Shoulders and Sidewalks

TYPICAL SECTION No. 2D

2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEWALKS



POSTED SPEED 25-45 MPH



ROLESVILLE MOVES

Community Transportation Plan Update

2E 2 Lane Undivided with Curb & Gutter, Bike Lanes, and Sidepath

Facility Name	Extents	Status	Cross-Section Description
Chalk Road	Averette Rd to Western Study Area	Existing Facility	2-Lane Undivided with Curb & Gutter, Bike Lanes, Sidewalks

TYPICAL SECTION No. 2E

2 LANE UNDIVIDED WITH CURB & GUTTER, BIKE LANES, AND SIDEWALKS

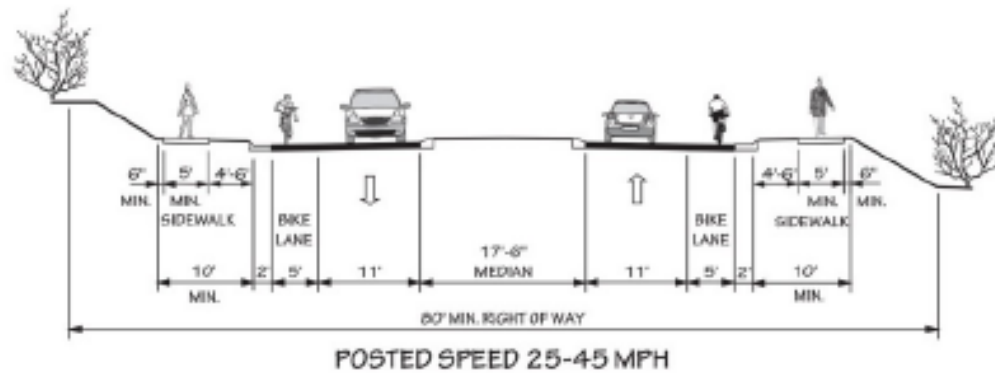


2L 2 Lane Divided (Raised Median) with Curb & Gutter, Bike Lanes, and Sidewalk

Facility Name	Extents	Status	Cross-Section Description
Louisbury Rd	US 401 Bypass (Louisburg Rd) to Southern Study Area Limits	Existing Facility	2-Lane Divided with Curb & Gutter, Bike Lanes, and Sidewalks
S Main St	Burlington Mills Rd Realignment to Young St	Existing Facility	2-Lane Divided with Curb & Gutter, Bike Lanes, and Sidewalks

TYPICAL SECTION No. 2L

2 LANE DIVIDED (17'-6" RAISED MEDIAN)
WITH CURB & GUTTER, BIKE LANES, AND SIDEWALKS



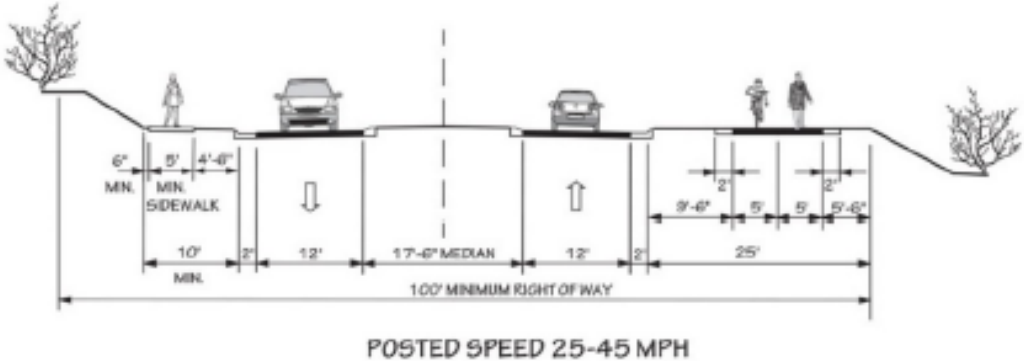
2R 2 Lane Divided (Raised Median) Sidewalk and Sidepath

Facility Name	Extents	Status	Cross-Section Description
S Main St (US 401 BUS)	US 401 Bypass (Louisburg Rd) to Burlington Mills Rd Realignment)	Existing Facility	2-Lane Divided (Raised Median) with Curb & Gutter, Sidewalk, and Sidepath
N Main St	Young St to US 401 (Louisburg Rd)	Existing Facility	2-Lane Divided (Raised Median) with Curb & Gutter*, Sidewalk, and Sidepath

**where appropriate*

TYPICAL SECTION No. 2R

2 LANE DIVIDED (17'-6" RAISED MEDIAN)
WITH CURB & GUTTER, SIDEWALKS AND SIDEPATH

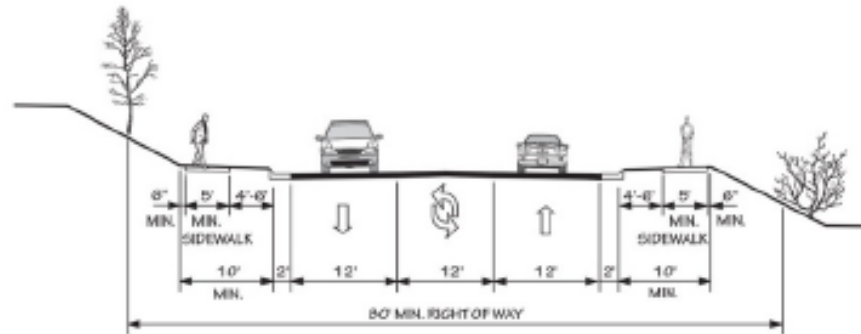


3B 2 Lane with Two Way Left Turn Lane, Curb & Gutter, Bike Lanes, and Sidewalks

Facility Name	Extents	Status	Cross-Section Description
Existing Granite Falls Blvd	Terrell Dr to Grand Rock Way	Existing Facility	2-Lane with Two Way Left Turn, Curb & Gutter, and Sidewalks
Granite Falls Blvd	Grand Rock Way to Burlington Mills Realignment	New Location	2-Lane with Two Way Left Turn, Curb & Gutter, and Sidewalks
Jonesville Rd	US 401 BUS (Main St) to Mitchell Mill Rd	Existing Facility	2-Lane with Two Way Left Turn, Curb & Gutter, and Sidewalks
Averette Rd/Young St/Rolesville Rd	Jones Dairy Rd to Fowler Rd	Existing Facility	2-Lane with Two Way Left Turn, Curb & Gutter, and Sidewalks

TYPICAL SECTION No. 3B

2 LANE WITH TWO WAY LEFT TURN LANE, CURB & GUTTER, AND SIDEWALKS



POSTED SPEED 25-45 MPH



ROLESVILLE MOVES

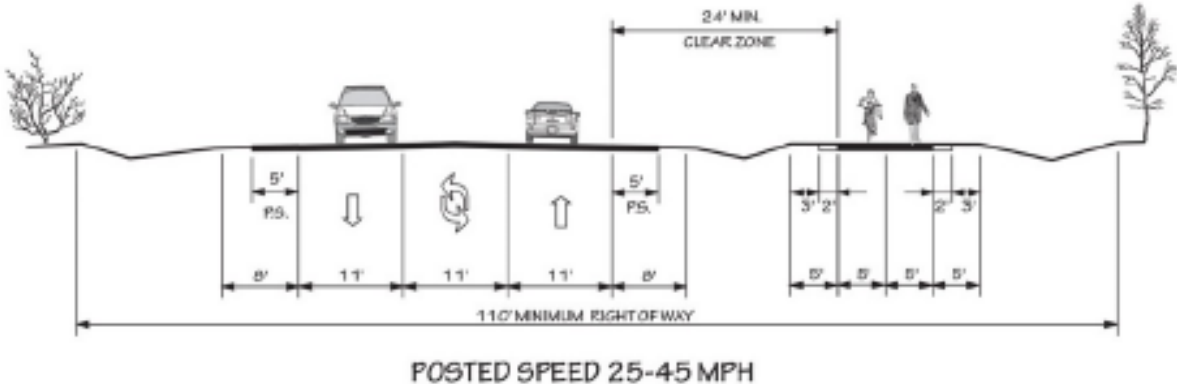
Community Transportation Plan Update

3D 2 Lane with Two Way Left Turn Lane, Paved Shoulders, and Sidepath

Facility Name	Extents	Status	Cross-Section Description
Pulley Town Rd	US 401 Bypass (Louisburg Rd) to US 401 BUS (N Main St)	Existing Facility	2-Lane with Two Way Left Turn, Paved Shoulders, and Sidewalks

TYPICAL SECTION No. 3D

2 LANE WITH TWO WAY LEFT TURN LANE, PAVED SHOULDERS AND SIDEPATH

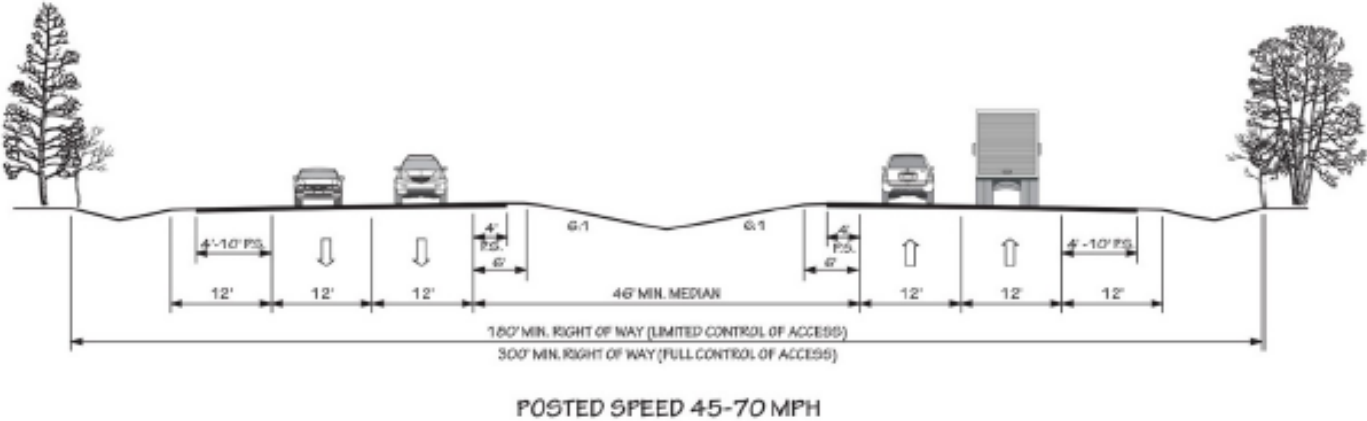


4A 4 Lane Divided (Depressed Median) with Paved Shoulders

Facility Name	Extents	Status	Cross-Section Description
US 401 Bypass (Louisburg Rd)	NC 96 (Zebulon Rd) to Northern Study Area Limits	Existing Facility	4-Lane Divided (Depressed Median) with Paved Shoulders

TYPICAL SECTION No. 4A

4 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS

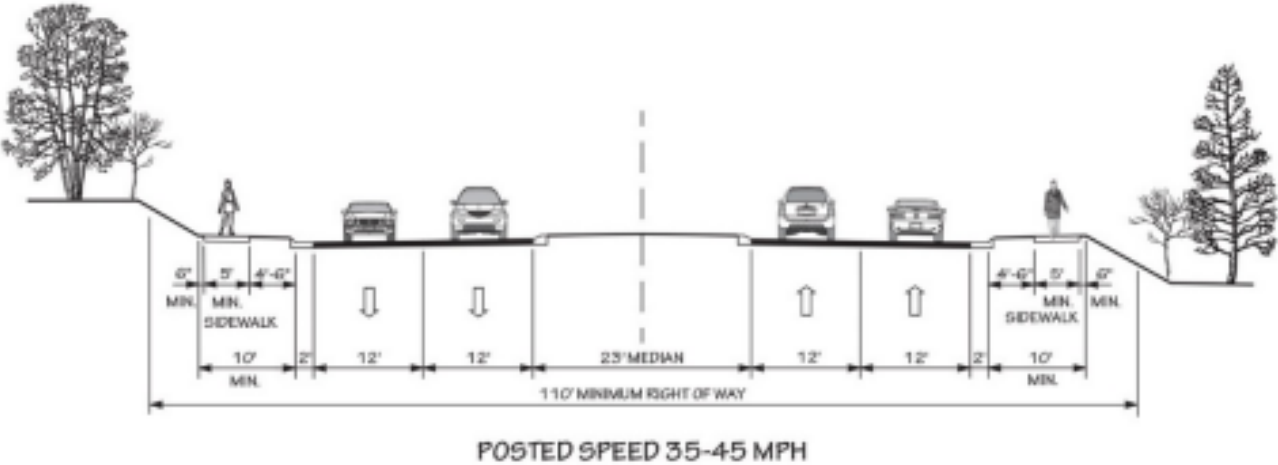


4C 4 Lane Divided (Raised Median) with Curb & Gutter and Sidewalk

Facility Name	Extents	Status	Cross-Section Description
Jones Dairy Rd	Averette Rd to Northwestern Study Area Limits	Existing Facility	4-Lane Divided (Raised Median - Narrow) with Curb & Gutter and Sidewalks

TYPICAL SECTION No. 4C

4 LANE DIVIDED (23' RAISED MEDIAN)
WITH CURB & GUTTER, AND SIDEWALKS

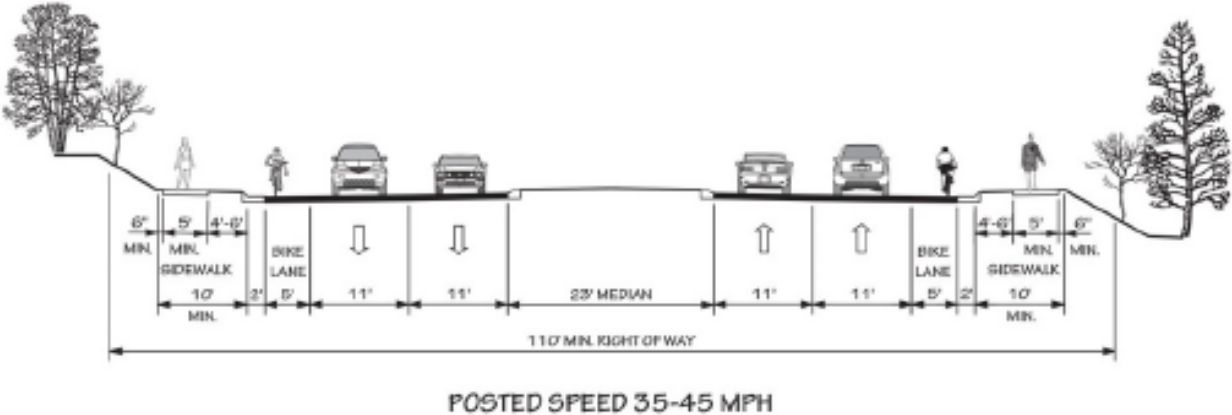


4D 4 Lane Divided (Raised Median) with Curb & Gutter, Bike Lanes, and Sidewalk

Facility Name	Extents	Status	Cross-Section Description
Fowler Rd Ext	US 401 Bypass/US 401 BUS (Main St) to Rolesville Rd	New Location	4-Lane Divided (Raised Median) with Curb & Gutter, Bike Lanes, and Sidewalks

TYPICAL SECTION No. 4D

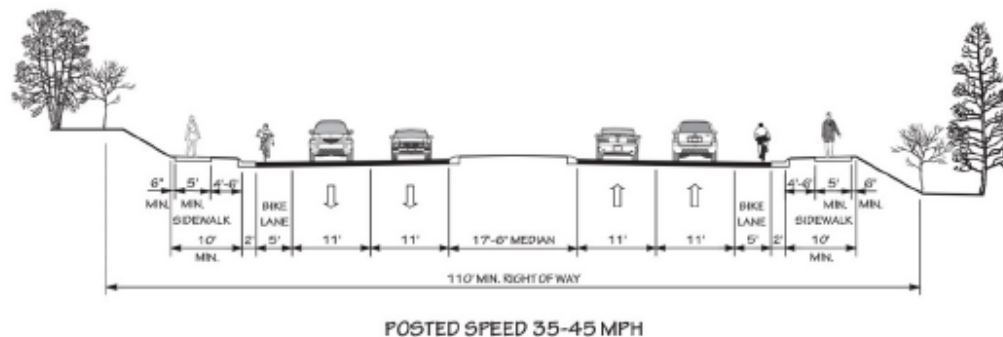
4 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER, BIKE LANES, AND SIDEWALKS



4G 4 Lane Divided (Raised Median – Narrow) with Curb & Gutter, Bike Lanes, and Sidewalk

Facility Name	Extents	Status	Cross-Section Description
Averette Rd	Jones Dairy Rd to NC 98 (Wait Ave)	Existing Facility	4-Lane Divided (Raised Median - Narrow) with Curb & Gutter, Bike Lanes, and Sidewalks
Burlington Mills Rd	Burlington Mills Rd Realignment to Forestville Rd	Existing Facility	4-Lane Divided (Raised Median - Narrow) with Curb & Gutter, Bike Lanes, and Sidewalks
Burlington Mills Rd Realignment	Burlington Mills Rd Rd to US 401 BUS (S Main St)	New Location	4-Lane Divided (Raised Median) with Curb & Gutter, Bike Lanes, and Sidewalks
Mitchell Mill Rd	Fowler Rd to Rolesville Rd	Existing Facility	4-Lane Divided (Raised Median - Narrow) with Curb & Gutter, Bike Lanes, and Sidewalks
Mitchell Mill Rd	Rolesville Rd to Eastern Study Area Limits	Existing Facility	4-Lane Divided (Raised Median - Narrow) with Curb & Gutter, Bike Lanes, and Sidewalks
Rogers Rd	US 401 BUS (Main St) to Granite Falls Blvd	Existing Facility	4-Lane Divided (Raised Median - Narrow) with Curb & Gutter, Bike Lanes, and Sidewalks
Rogers Rd	Granite Falls Blvd to Western Study Area Limits	Existing Facility	4-Lane Divided (Raised Median - Narrow) with Curb & Gutter, Bike Lanes, and Sidewalks
Rolesville Rd	Fowler Rd to Mitchell Mill Rd	Existing Facility	4-Lane Divided (Raised Median - Narrow) with Curb & Gutter, Bike Lanes, and Sidewalks
Rolesville Rd/Riley Hill Rd	Mitchell Mill Rd to Riley Hill School Rd	Existing Facility	4-Lane Divided (Raised Median - Narrow) with Curb & Gutter, Bike Lanes, and Sidewalks

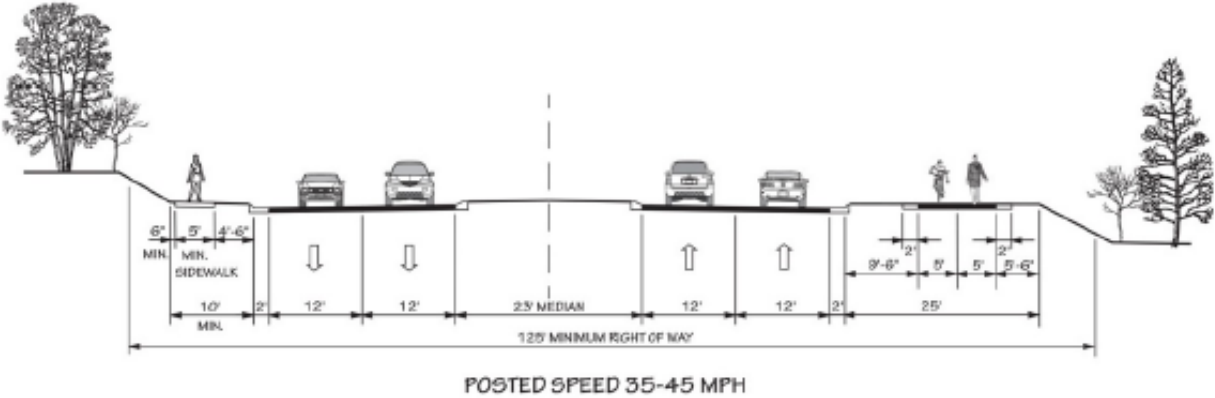
TYPICAL SECTION No. 4G
 4 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH CURB & GUTTER,
 BIKE LANES, AND SIDEWALKS



4J 4 Lane Divided (Raised Median) with Curb & Gutter and Sidepath

Facility Name	Extents	Status	Cross-Section Description
Forestville Rd	Foxwild Ln to Lillies Liles Rd	Existing Facility	4-Lane Divided (Raised Median) with Curb & Gutter, Sidepaths
NC 98 (Wait Ave)	Western Study Area Limits to NC 96 (Zebulon Rd)	Existing Facility	4-Lane Divided (Raised Median) with Curb & Gutter, Sidepaths

TYPICAL SECTION No. 4J
 4 LANE DIVIDED (23' RAISED MEDIAN)
 WITH CURB & GUTTER, SIDEWALKS AND SIDEPATH



Intersection Recommendations

Congestion and safety are growing concerns along key corridors throughout the Town of Rolesville. To preserve mobility and enhance the overall efficiency of the transportation network, it is crucial to develop a collection of best practices to allow the town to respond to changing development pressures. Rather than specific project recommendations, these best practices provide the ability to remain flexible while incorporating evidence-based planning procedures to make the best planning decisions for the town's future. These best practices include intersection improvements, access management, and connectivity best practices.

Intersection Improvements

Realignments: Roadways are realigned to meet at as close to a 90-degree angle as possible. This improves visibility and turning radius.

Signalization: Some unsignalized intersections may be eligible for a traffic signal based on their traffic counts. The State DOT must perform a study to determine if an intersection is eligible.

Connectivity: Improving connectivity throughout the area providing alternative routing options to destinations and reduce some of the traffic at key intersections.

Improved Crossings: Often the danger to pedestrian and bicycles can be reduced by providing improved crossing facilities, such as painted crosswalks, median refuges, or flashing beacons.

Roundabouts: Replacing a traditional signalized intersection with a roundabout reduces the number of serious crashes while improving traffic flow.

Turn Lanes: Turn lanes allows space for vehicles waiting to turn and reduces the risk of rear-end crashes.

Driveway Consolidations: Curb cuts that are too close to an intersection are consolidated or relocated to reduce the number of turning movements or potential crashes.

Improved/Advance Signage: Providing advanced warning signs or installing reflective backplates on traffic signals can reduce crashes due to reduced visibility.

Access Management Strategies

Dotted Line Markings: These pavement markings reduce driver confusion and increase safety by guiding drivers through complex intersections.

Driveway Length: Increasing the driveway length to commercial development prevents internal site operations from affecting the adjacent street.

Driveway Consolidation or Relocation: Shared-access driveway minimize curb cuts and reduce traffic conflicts and are particularly effective near intersections.

Intersection and Driveway Curb Radii: Curb radii sized for area context and vehicular usage limits occurrences of vehicles using



opposing travel lanes or mounting the curb when turning. Less damage to infrastructure and enhanced pedestrian safety results.

Minor Street Approach Improvements: Adding left- and right-turn lanes on minor street approaches allows

Left-Turn Storage Lanes: Left-turn lanes reduce vehicle delay related to waiting for vehicles to turn and may decrease the frequency of collisions attributable to lane blockages.

Location	Crashes	Recommendations
US 401 (N Main St) and Bowling Dr	HSIP 2017	Intersection improvement
US 401 BYP (Louisburg Rd) at NC 96 (Zebulon Rd)	HSIP 2019	Intersection improvement
Mitchell Mill Rd at Rolesville Rd	Serious Injury – Lane Departure (K-A 2010 – 2019)	Intersection realignment
Mitchell Mill Rd at Fowler Rd	HSIP 2019	Roundabout
US 401 BYP (Louisburg Rd) at Fowler Rd Ext		New intersection
Fowler Rd Ext at Rolesville Rd		New intersection
Fowler Rd Ex at Jonesville Rd		New intersection
US 401 BUS (S Main St) at Burlington Mills Rd Ext		New intersection
Jones Dairy Rd/Jones Dairy Rd Ext at Averette Rd	Fatality – Lane Departure (K-A 2010 – 2019)	Intersection realignment
US 401 BUS (N Main St) at Jones Dairy Rd Ext		New intersection
Averette Rd/Young St at Chalk Rd	Fatality – Lane Departure (K-A 2010 – 2019)	Intersection improvement
Mitchell Mill Rd at Jonesville Rd	Fatality – Frontal Impact (K-A 2010 – 2019)	Intersection improvement
US 401 BUS (N/S Main St) at E Young St	Bicycle Crash – Motorist Right Turn on Red	Intersection improvement; access management
US 401 BUS (S Main St) at Rogers Rd	Pedestrian Crash – Motorist Left Turn	Intersection improvement

