



# Route 3 Arterial Preservation Plan

## Public Information Meeting

*Thursday, October 26, 2017*

*Locust Grove Middle School*

### Agenda

1. Introductions
2. Purpose of Study
3. Project Study Area
4. Study Scope
5. Existing Corridor Conditions
6. Study Schedule
7. Next Steps



# 1. Introductions

## Today's meeting includes representation from:

- Orange County
- VDOT Culpeper District
- VDOT Central Office
- Michael Baker International (consultant)

## Goal of today's meeting is to:

- Review the Purpose and Scope of the Project
- Present Results of the Existing Conditions Analysis
  - Field Visit and Geometric Deficiencies
  - Access Point Locations
  - Operational Analysis Results
  - Crash Analysis Results
- Solicit feedback to ensure findings align with travelers' experience



## 2. Purpose of Study

### VDOT Statewide Program Perspective

To preserve and enhance the capacity and safety of the Commonwealth's Arterial Preservation Network, while accommodating economic development and avoiding wide-scale road widenings

- Result in a safer arterial highway system
- Preserve and enhance corridor capacity and efficiency
- Maintain Commonwealth's mobility & thus economic competitiveness
- Lower long-term infrastructure capital and maintenance costs



## 2. Purpose of Study

### VDOT Statewide Program Perspective

State Traffic Engineer approval and District Engineer/Administrator concurrence is required for Signal Justification Reports (SJR) justifying new traffic signals on the Arterial Preservation Network.

Source: IIM-TE-387.0, July 2017



## 2. Purpose of Study

### Orange County

### Orange Co.

- Design safety into long term roadway development
- Allow Orange Co. to determine land use densities based on desired roadway network
- Maintain corridors' economic development potential
- Aid in the land development process by defining County/VDOT expectations
- Assist with the funding of roadway projects and reduce future spending by limiting the need to retrofit improvements

### Land Owners

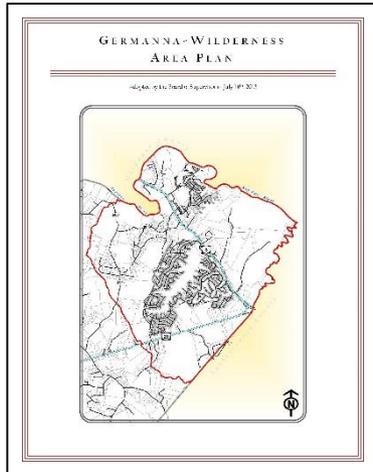
- Blueprint for developers and adherence to an adopted plan clarifies expectations which reduces potential for transportation related issues
- Maintain size of market area (based on travel time to businesses)
- Assist land owners in realizing maximum densities permitted in Comprehensive/Master Plans
- Support a corridor's economic development potential by having an adopted roadway plan



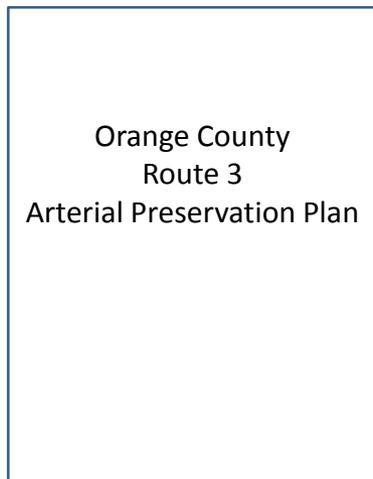


## 2. Purpose of Study

### Adoption into Comprehensive Plan



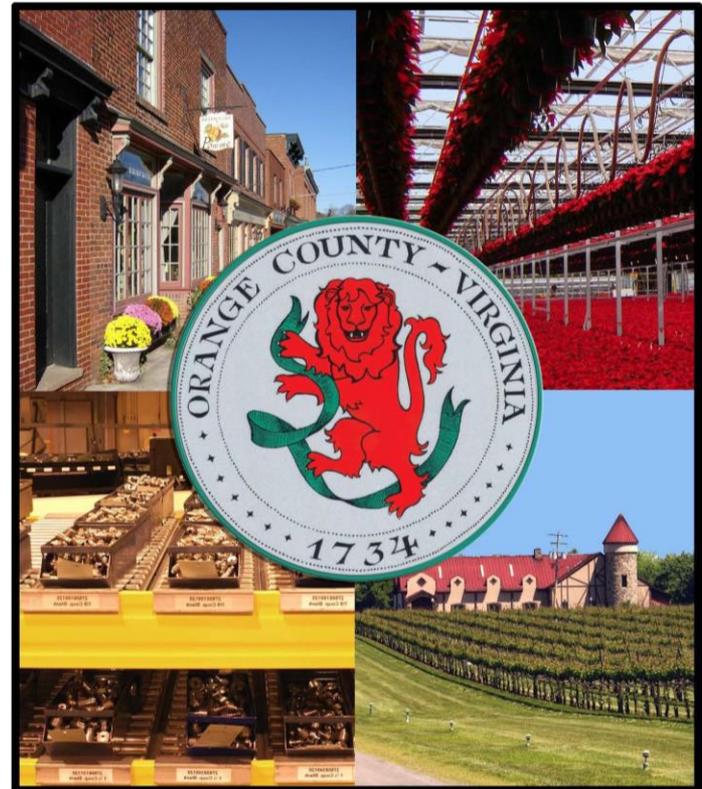
Germanna-Wilderness Area Plan  
(GWAP) adopted into  
Comprehensive Plan  
July 2015



Goal is to get Route 3 AMP  
adopted into Comprehensive Plan



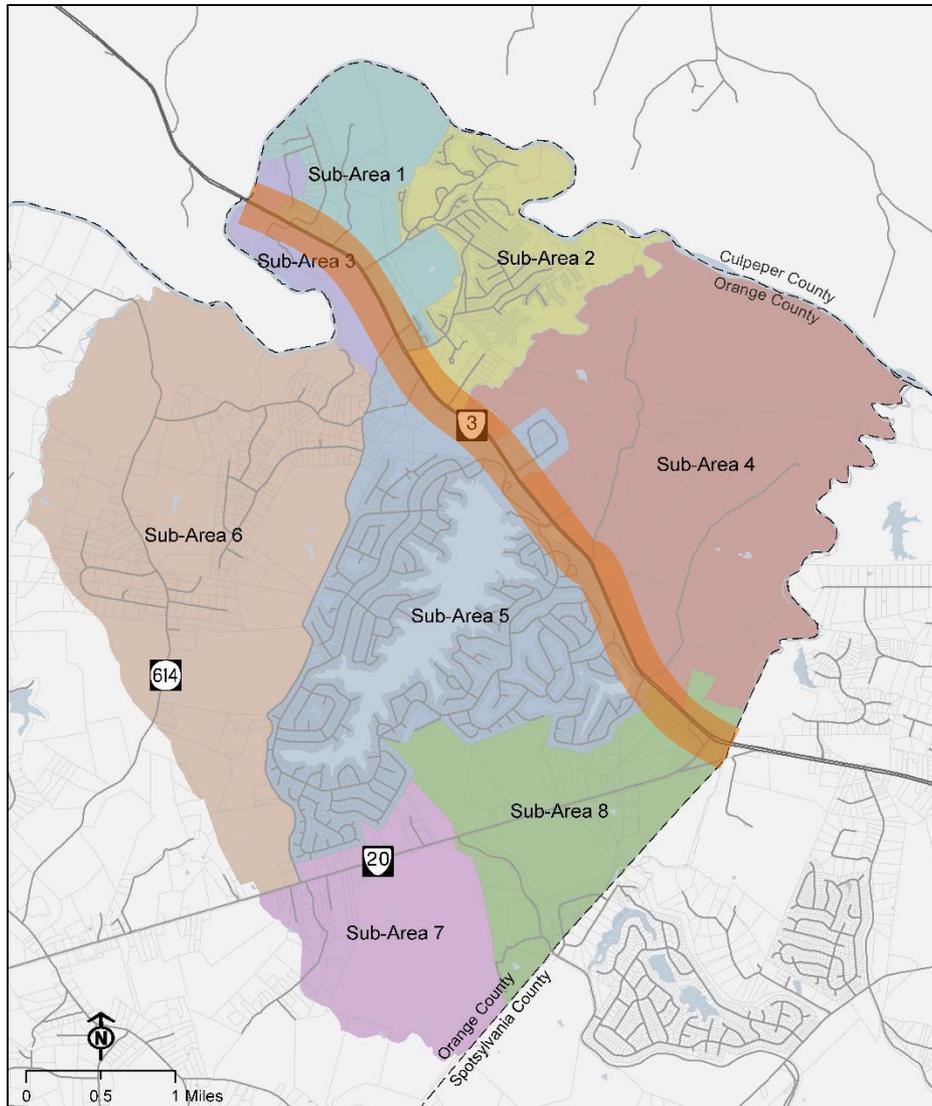
## ORANGE COUNTY, VIRGINIA 2013 COMPREHENSIVE PLAN



Approved by the Board of Supervisors on December 17<sup>th</sup>, 2013  
Amended on July 14<sup>th</sup>, 2015 and on October 27<sup>th</sup>, 2015



### 3. Project Study Area



**Recommendations for the  
Route 3 Corridor from Culpeper  
County Line to Spotsylvania  
County Line**

**Traffic Analysis will Include  
Land Development from  
GWAP for all Sub-Areas**



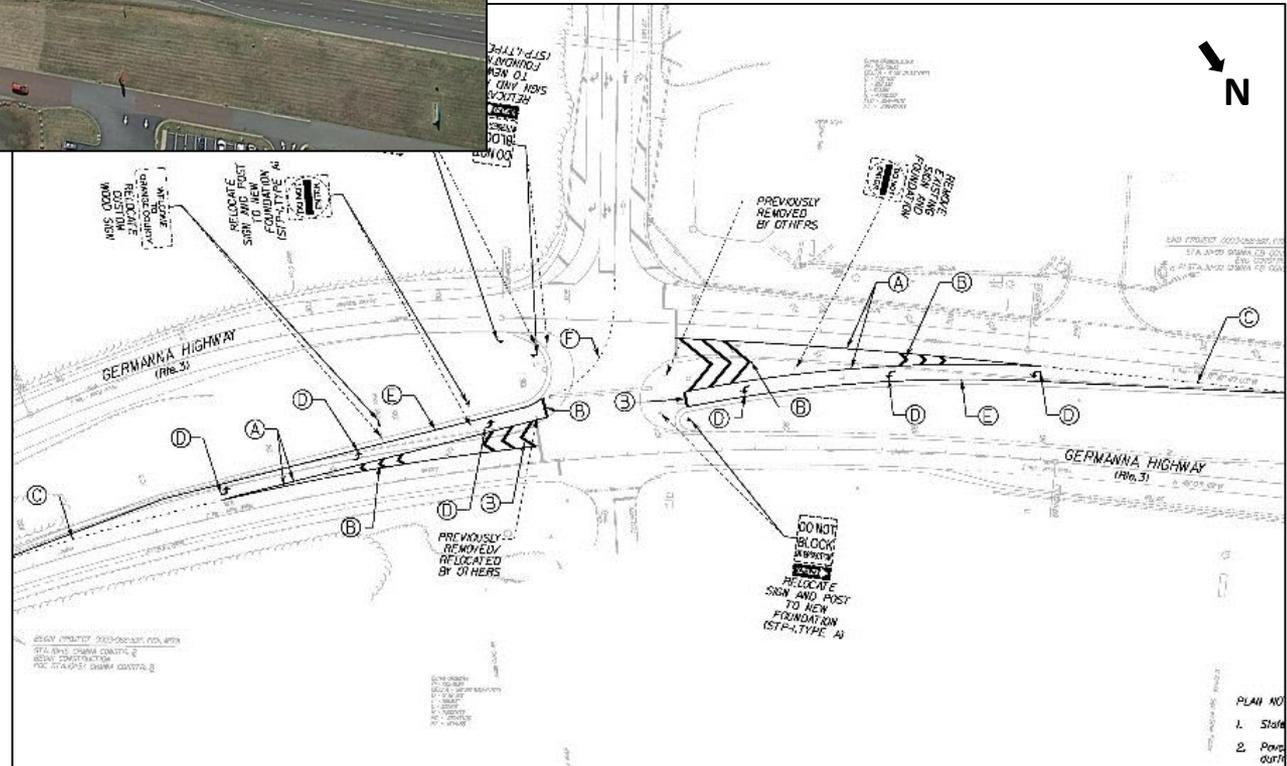
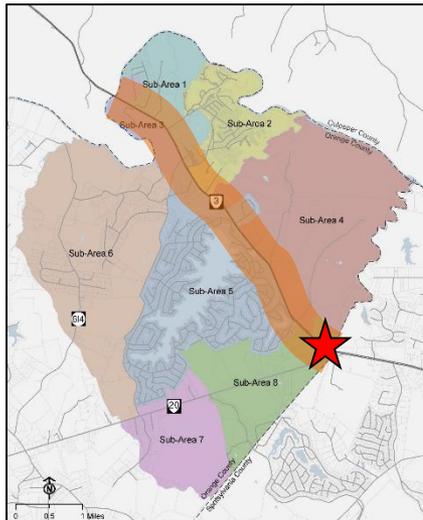
# Current Project in Study Area

## Route 3 and Route 20 Intersection



Reduces distance traveled for left turns from Route 3

- Improves Safety
- Improves Operations



Route 3 Arterial Preservation Plan



## 4. Study Scope

### Overview

#### Existing Conditions

- Review Existing Studies and Documents
- Review Existing Land Use
- Field Review of Existing Infrastructure
- Inventory Existing Access Points
- Analyze Crash History
- Analyze Current Traffic Operations

#### 2040 Future Conditions

- Determine Future Land Use in All Sub Areas
- Generate Future Traffic Volumes
- Evaluate Minimally Managed Conditions
- Document Deficiencies

#### Recommendations

- Toolbox of Recommendations
- Route 3 Corridor Recommendations
- Develop Opinion of Costs
- Conclusion and Next Steps

#### Goal of Study:

Get adopted into Orange County Long Range Plan to ensure a safe and efficient roadway network



# 5. Existing Corridor Conditions

## Field Visit and Geometric Deficiencies



### Objectives

- Review roadway and intersection configurations
- Identify deficiencies and areas of concerns
  - Sight distance or grade issues
- Identify unique roadway features
- Observe traffic operations



# 5. Existing Corridor Conditions

## Field Visit and Geometric Deficiencies

### Route 3 & Route 20 Intersection

- WB turn lane queueing into thru lane
- Lack of WB right-turn lane hinders thru traffic
- Limited queuing for EB and WB thru movements



### Route 3 from Route 20 to Lake of the Woods

- Access management challenges east of Lake of the Woods Way
- Sight distance limitations leaving Post Office



### Route 3 & Lake of the Woods Way Intersection

- Two access points in close proximity along WB Route 3
- Limited queueing for EB and WB thru
- Side street traffic clearing each cycle





# 5. Existing Corridor Conditions

## Field Visit and Geometric Deficiencies

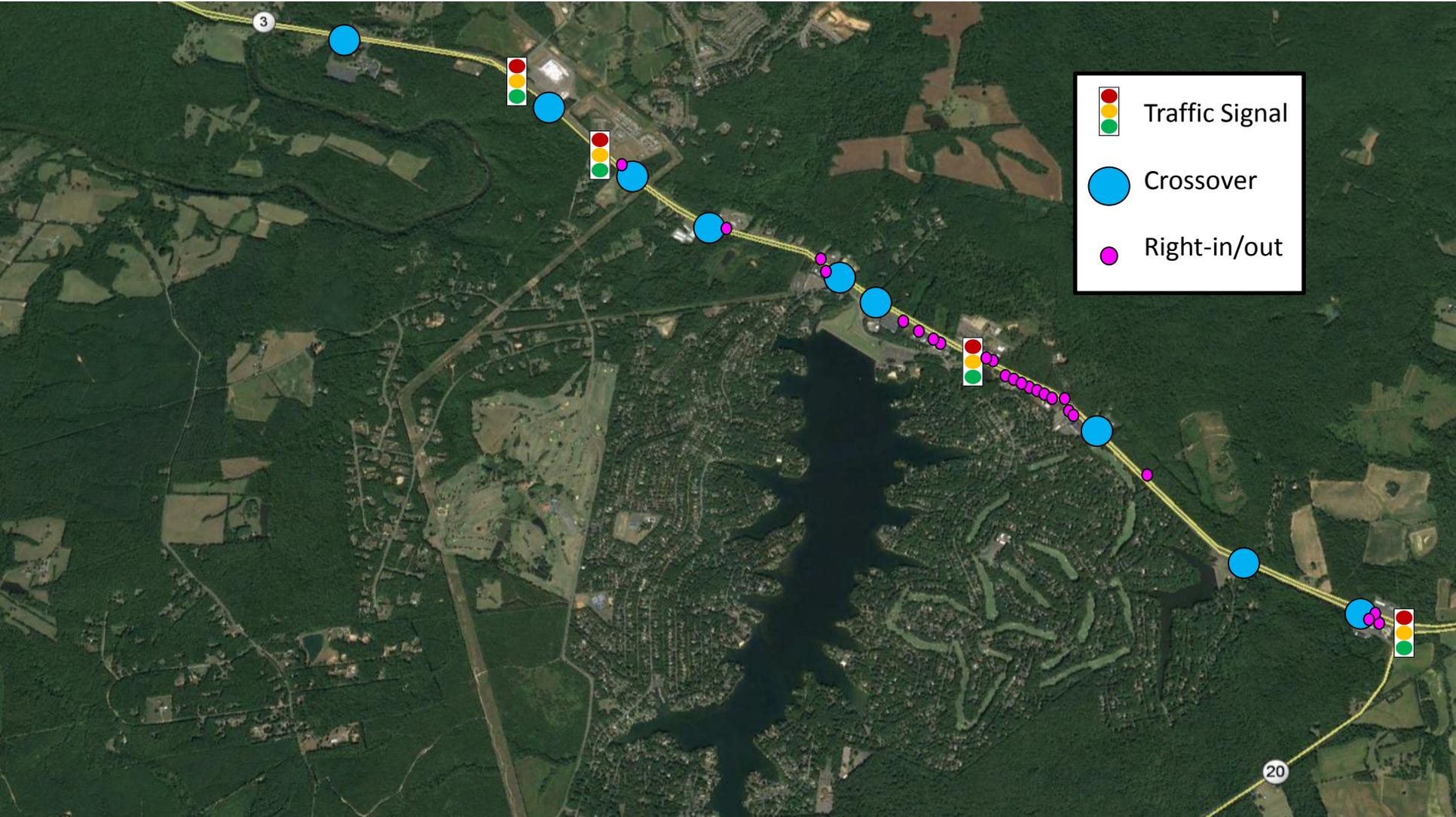
- Route 3 from Lake of the Woods Way to Flat Run Road
  - Multiple crossovers with severe grade differentials
  - Limited sight distances due to steep grades and curves
  - Some access management challenges
- Route 3 & Flat Run Drive Intersection
  - Sight distance limitations for side street approaches
  - Limited queueing on all approaches
- Route 3 & Somerest Ridge Road & Wal-Mart Intersection
  - Sight distance limitations for Somerest Ridge Rd.
  - Acceptable operations of traffic signal
  - Grade differential at east Wal-Mart entrance
- Route 3 from Somerest Ridge Road to Culpepper Co.
  - No significant concerns in this area





# 5. Existing Corridor Conditions

## Access Point Locations

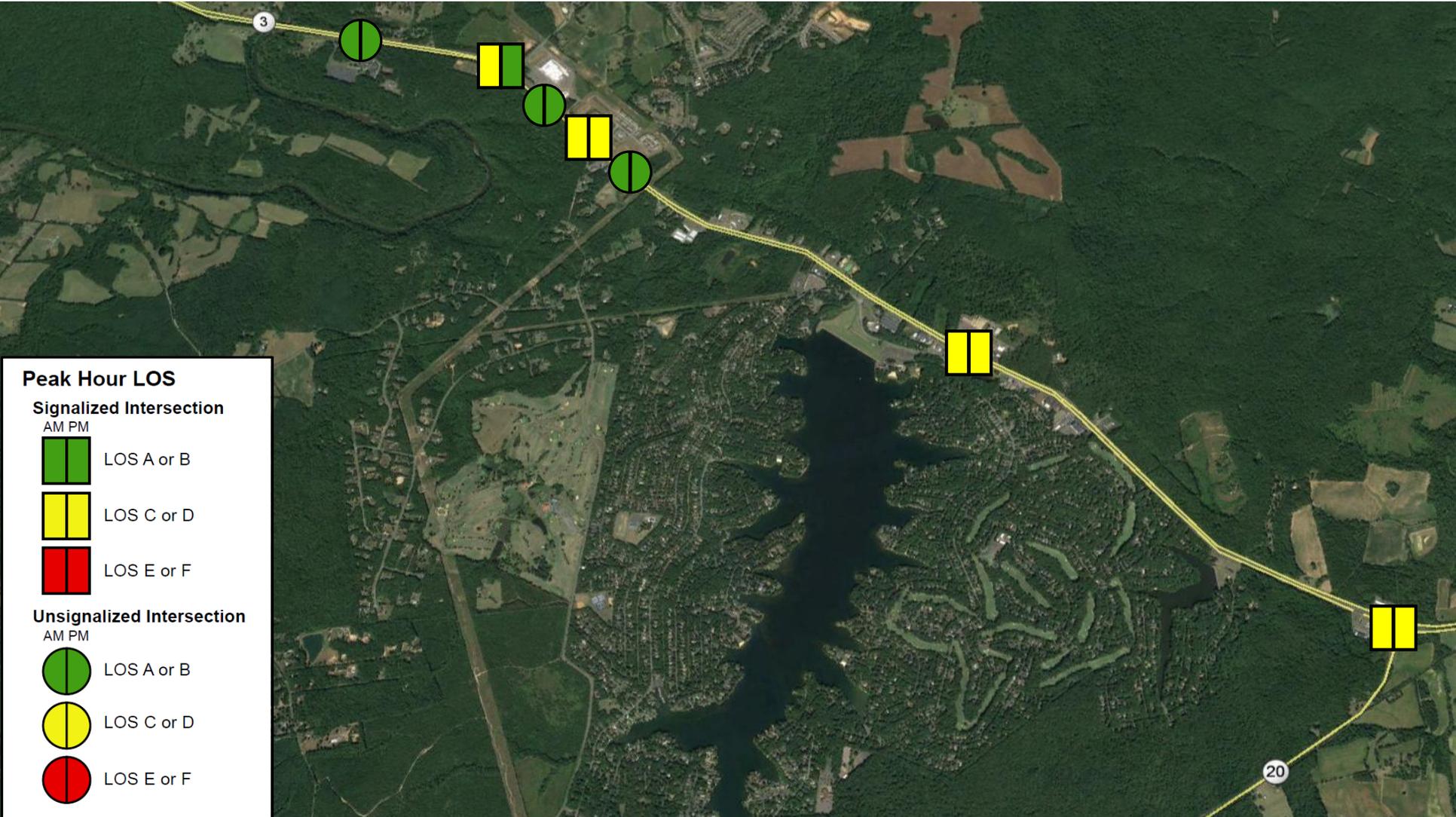


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# 5. Existing Corridor Conditions

## Operational Analysis Results

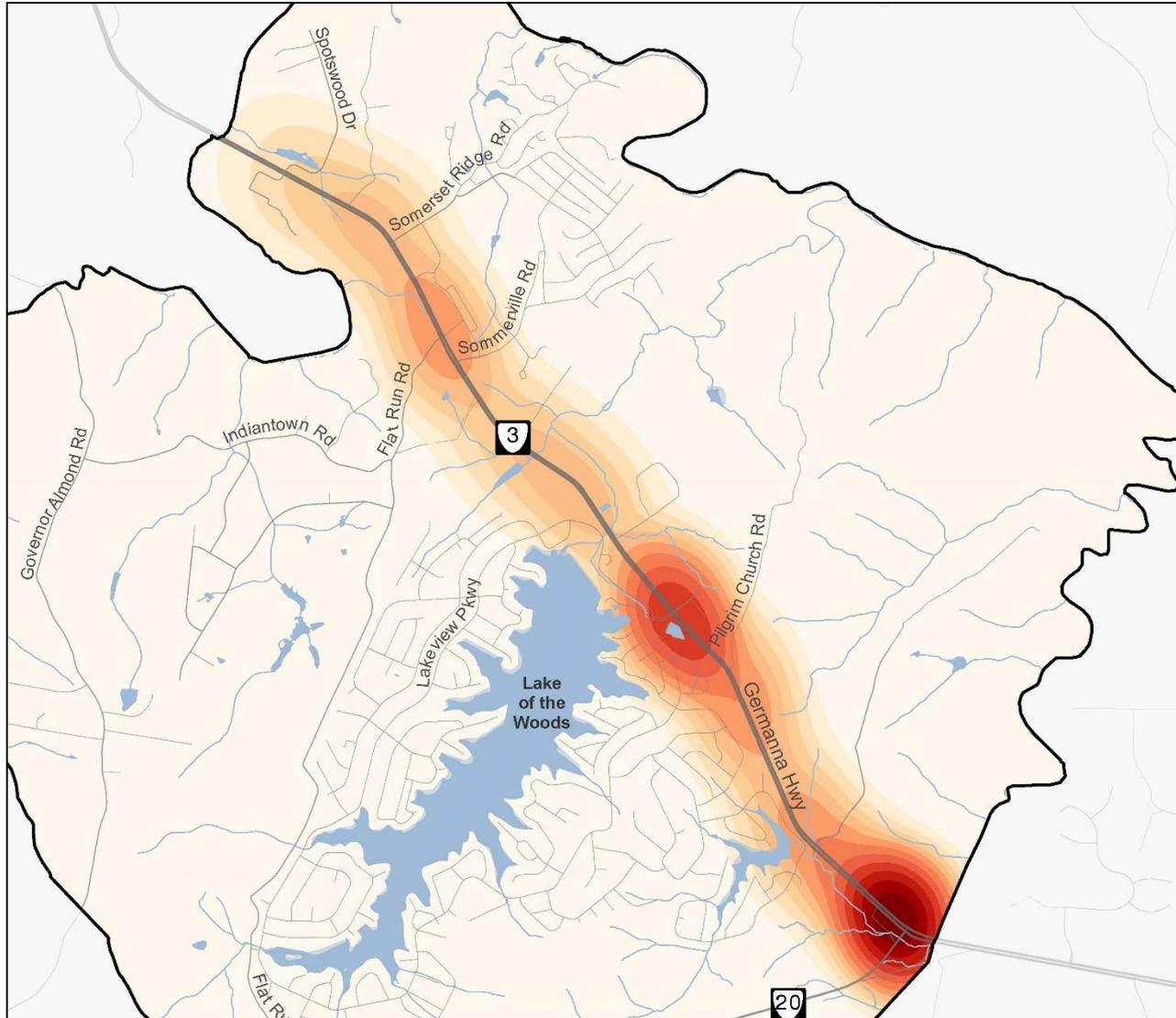


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# 5. Existing Corridor Conditions

## Crash Analysis Results (2011-2017)

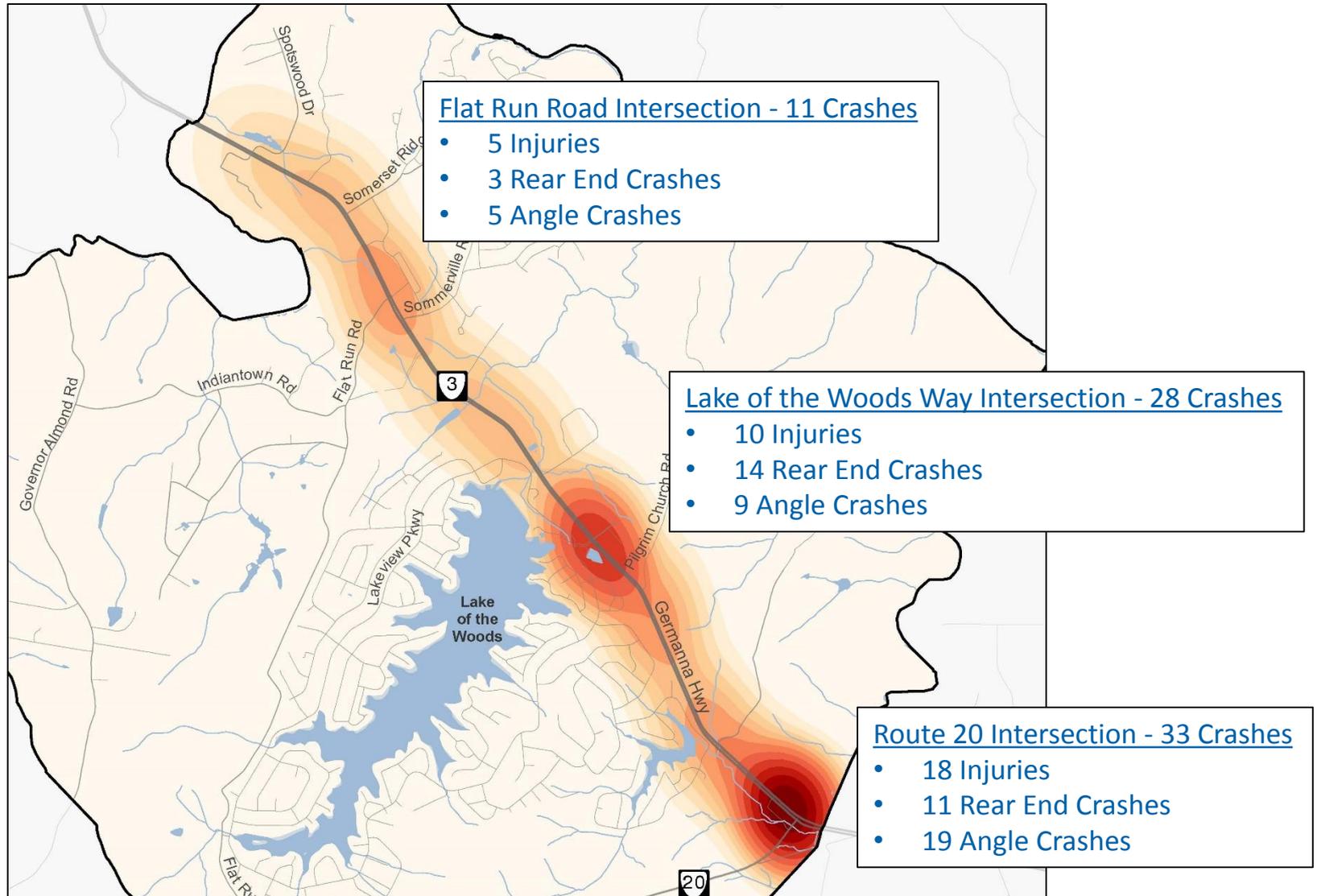


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# 5. Existing Corridor Conditions

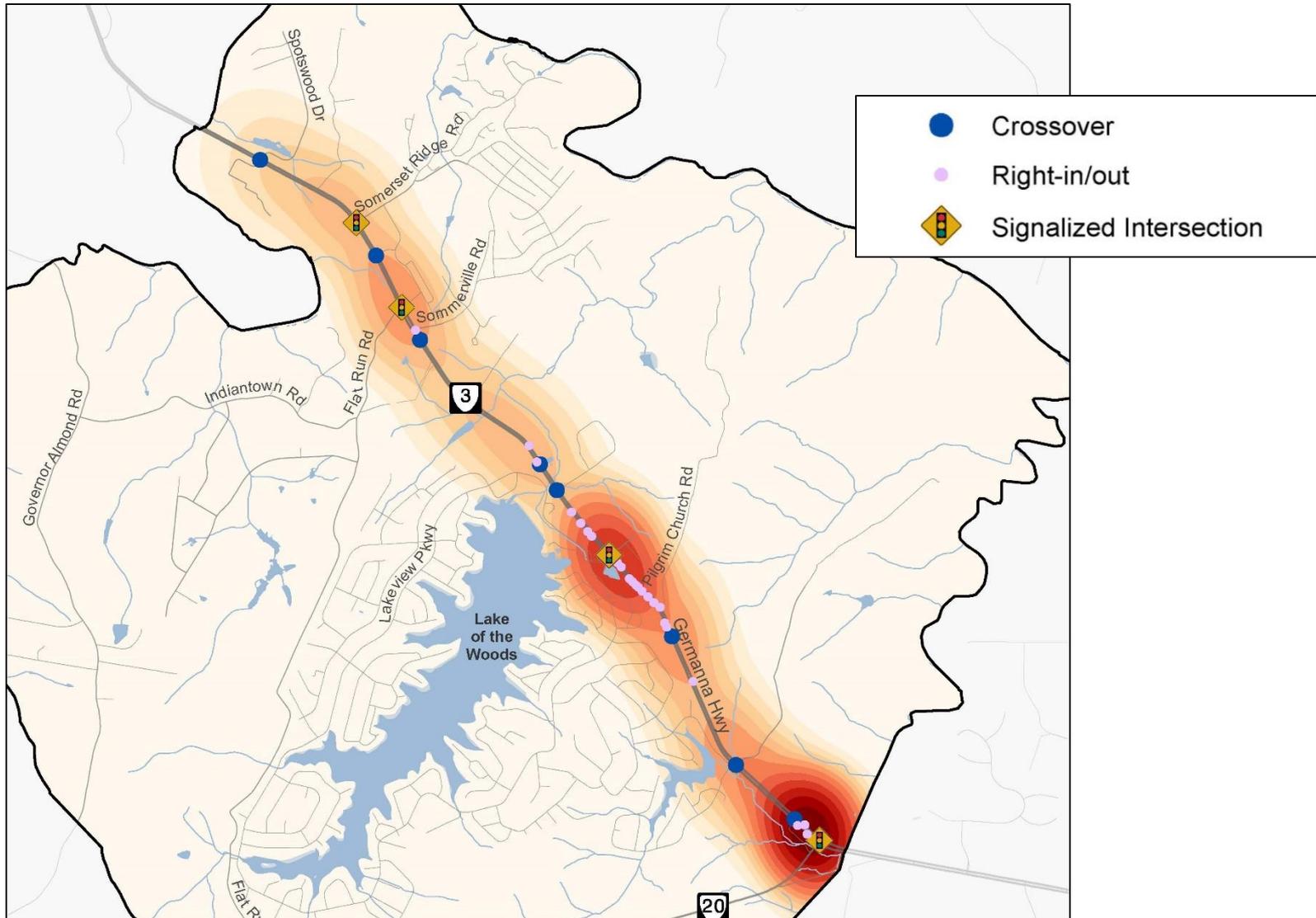
## Crash Analysis Results (2011-2017)





# 5. Existing Corridor Conditions

## Crash Analysis Results (2011-2017)



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# 6. Study Schedule

Task	May	June	July	August	September	October	November	December	January
Data Collection and Field Review	█	█	█						
Existing Conditions Analysis (operations and safety)		█	█	█					
Background Traffic Volume Forecasting				█	█				
Future Land Use and Trip Generation					█	█	█		
Future Conditions Analysis							█	█	
Develop Alternatives and Recommendations								█	█
Report Preparation							█	█	█
Submit Draft Report									█

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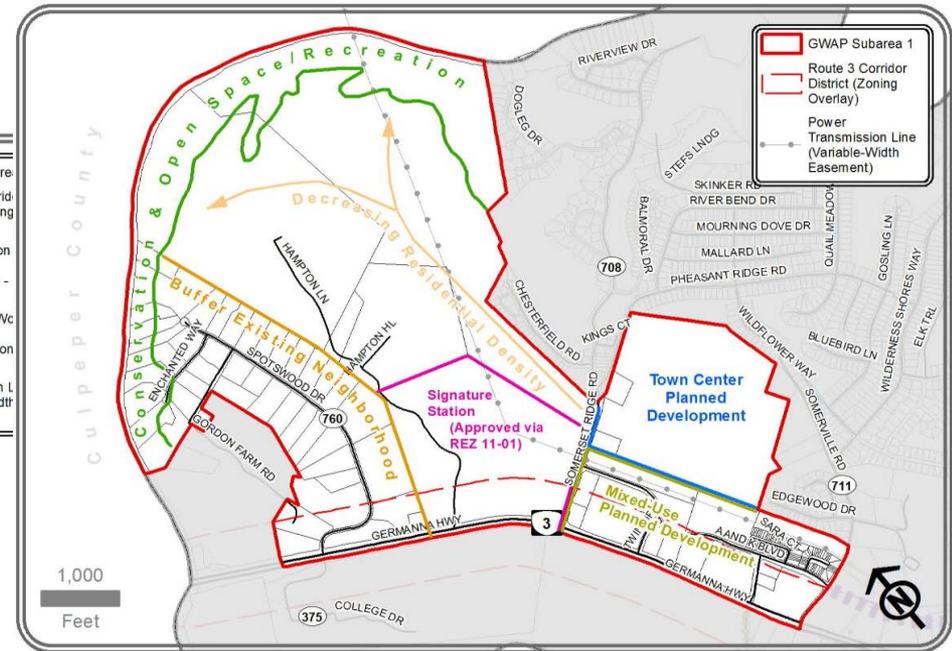
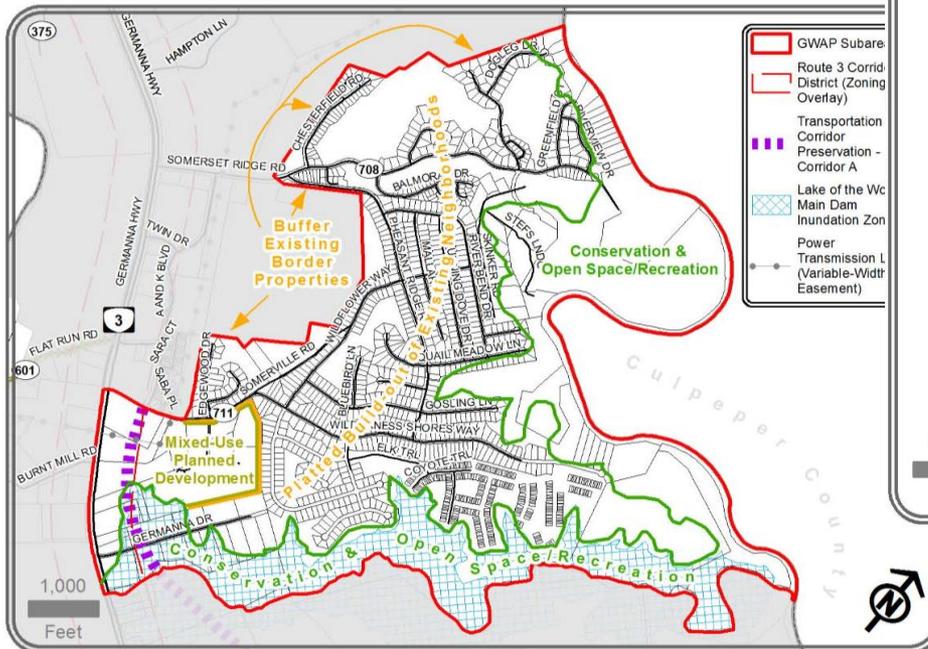


Public Information Meeting



# 7. Next Steps

- Incorporate Public Comments
- Determine Background Traffic Growth
- Refine Future Land Use from GWAP
- Develop Trip Generation



Route 3 Arterial Preservation Plan



# Contact Information



## VDOT District Contact

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## Consultant Team Contact

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