



Route 3 Arterial Management Plan



January 13, 2016

Study Work Group Members

- Spotsylvania County
- Virginia Department of Transportation
- National Park Service
- Michael Baker International
- YOU!

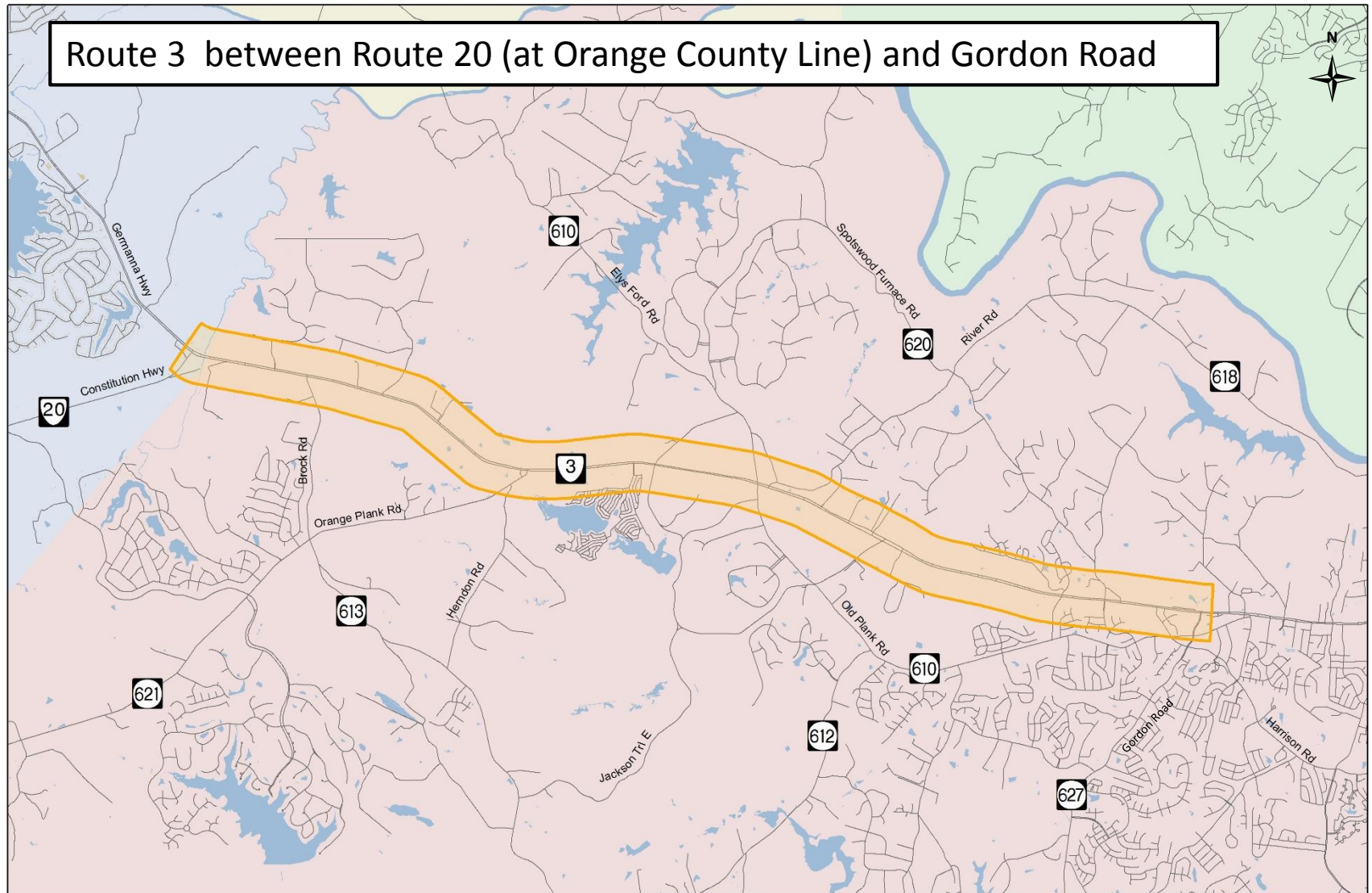


Meeting Agenda

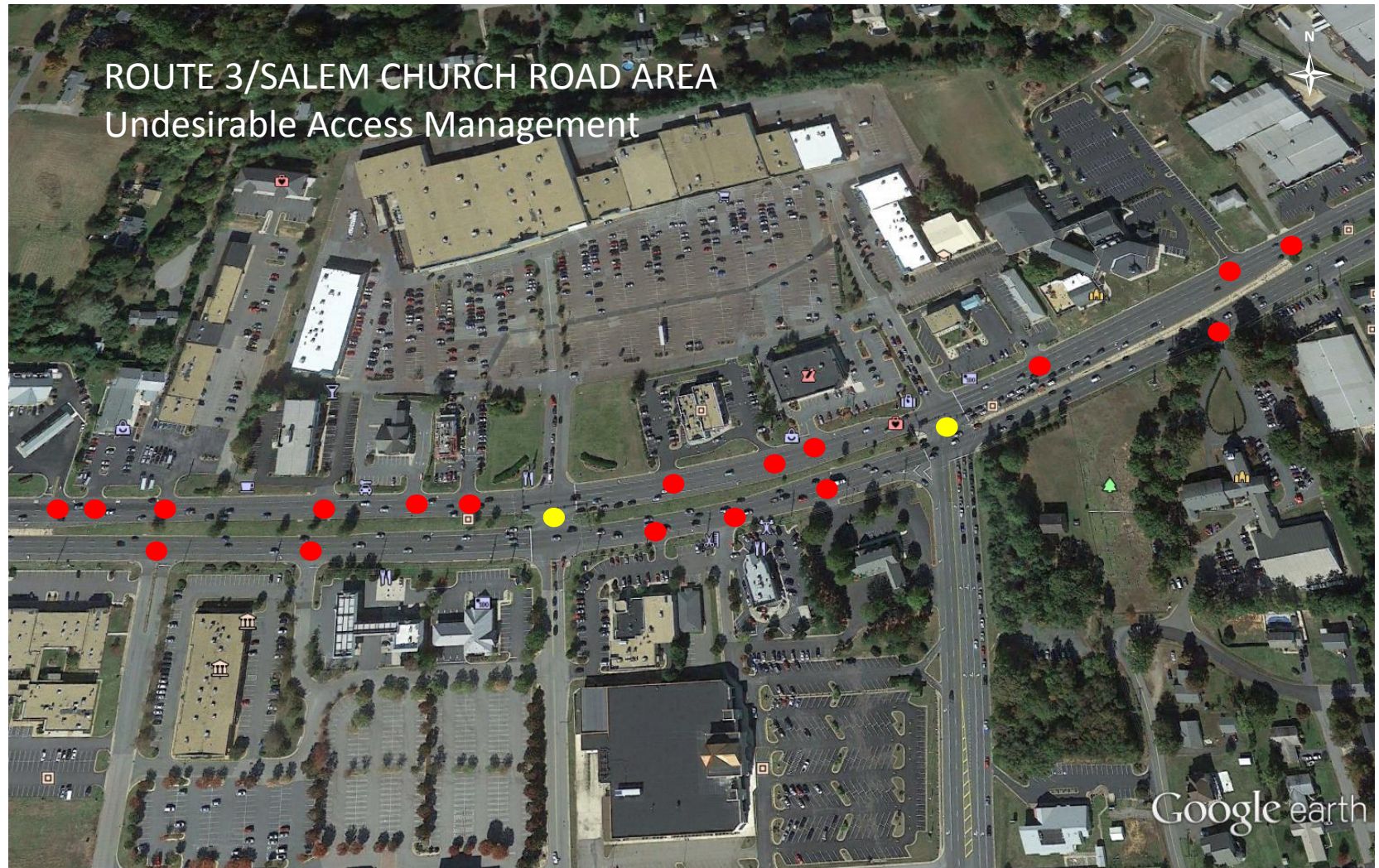
- Purpose of Study
- Brief Review of Previous Public Meeting
- Future Conditions
- Recommendations
- Providing Your Input
- Next Steps



Study Corridor



Arterial Management Plans



Arterial Management Plans



Purpose of Arterial Management Plan Pilot Study

Purpose:

To ensure the safety and preserve the capacity of the Commonwealth's arterial highway network without wide scale road widenings while accommodating economic development and being sensitive to historic resources.

Project Vision



Develop a joint state and local strategy to guide development and transportation decisions along Route 3 between Gordon Road and the Orange County line.

Project Goals

- Develop a streamlined and repeatable Arterial Management Plan (AMP) process.
- Address differing needs of local and visitor traffic, while enhancing safety and cultural values of the historic properties in and around the battlefields.

Review of Existing Conditions



 6 crashes per year at signalized intersections
 4 crashes per year at unsignalized intersections

Crash Rate for RURAL Route 3 (west of Andora Dr.)
85

National Average
77

Crash Rate for URBAN Route 3 (east of Andora Dr.)
183

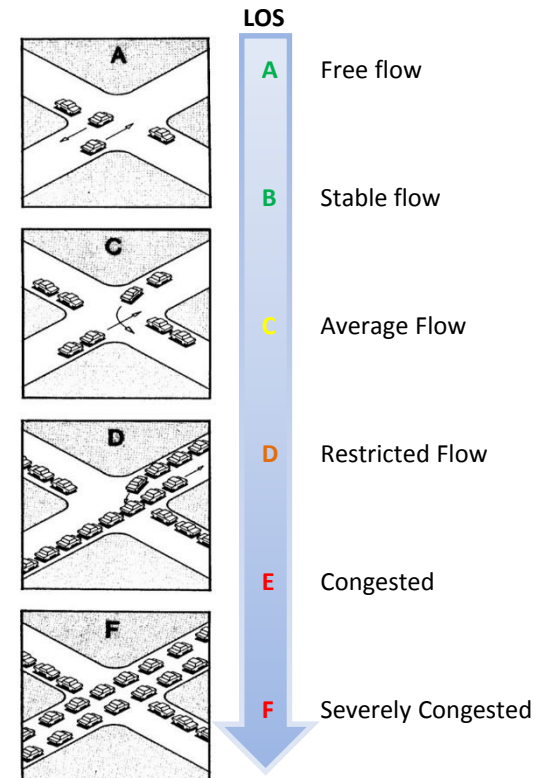
National Average
120

Crash Rates are per 100 million vehicle miles traveled
Distance from Andora Drive to Gordon Road is approx. 1.3 miles



Roadway	Number of Access Points	Access Points Per Mile	Per VDOT Spacing Guidelines	
			Compliant	Non-Compliant
Route 3	222	25	111	111

INTERSECTION		Peak Hour LOS	
Number	Name	AM	PM
1	Constitution Hwy / Route 3	C	D
2	Fox Gate Drive / Route 3	A	A
3	Brock Road / Route 3	B	B
4	Black Meadow Rd / Route 3	A	A
5	Orange Plank Rd / Route 3	C	A
6	Wilderness Road / Route 3	A	A
7	Stuart Rd / Bullock Rd / Route 3	A	A
8	Elys Ford Rd / Route 3	E	E
9	River Road / Route 3	A	A
10	Nine Mile Run Dr / Route 3	A	A
11	McLaws Dr / Route 3	A	A
12	Andora / Corter Avenue/ Route 3	D	C
13	Big Ben /Spotswood Furnace / Route 3	E	D
14	Harrison Rd / Route 3	C	D
15	Gordon Rd / Route 3	C	C



- AM peak hour = 7:00-8:00 AM
- PM peak hour = 4:45-5:45 PM
- Average speeds generally exceed speed limit slightly throughout the corridor except between Harrison Road and Gordon Road

- Adjacent land uses generate approx. 100,000 trips per day
- Average Daily Traffic – 23,000 to 41,000 vehicles per day
- Truck % varies from 2% to 8%

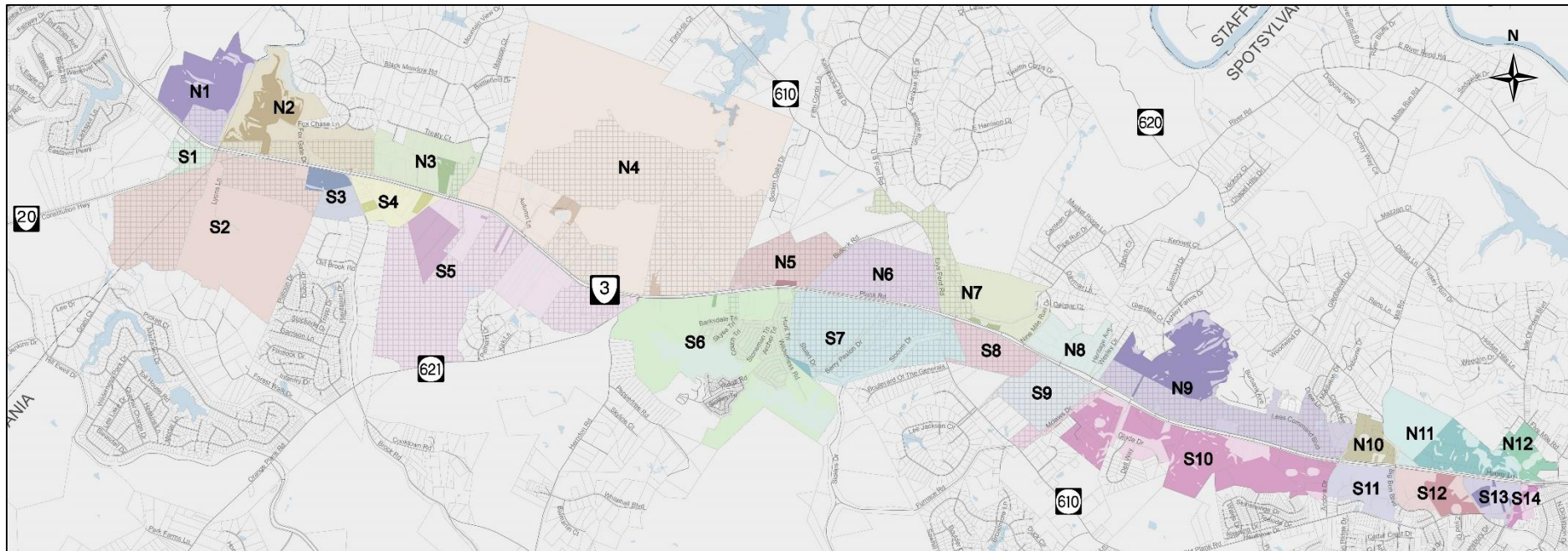
Future Conditions – Land Use

Future Land Use

- Coordination with County Staff
- Spotsylvania County Comprehensive Plan
- Planned and Approved Developments
- Zoning Maps
- Ordinances
- Historic Preservation / Connections

Total Assumed New Development

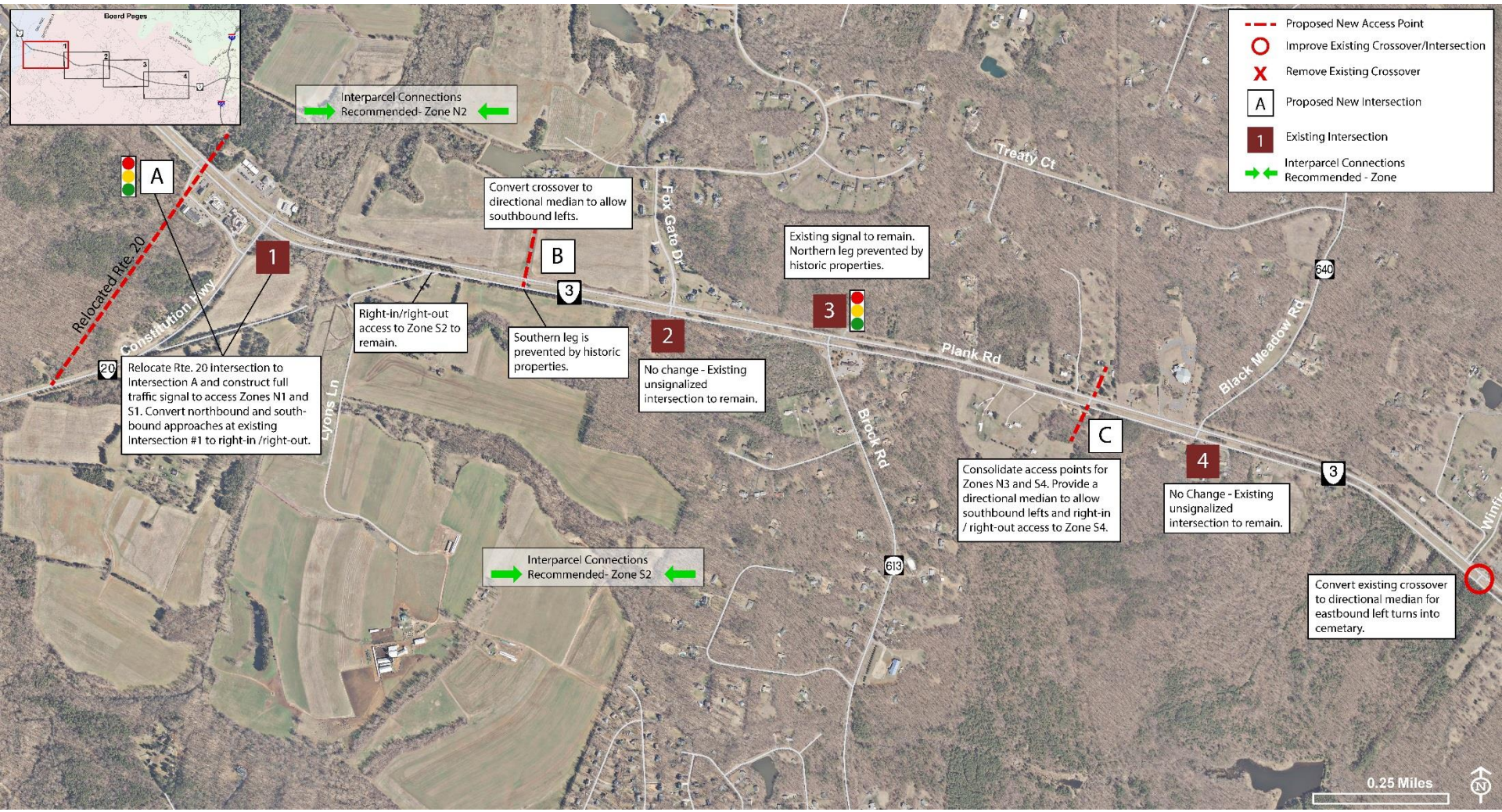
- Commercial: 376,000 sq. ft. = **29,664 Trips**
 - Industrial: 20,000 sq. ft. = **139 Trips**
 - Office: 709,000 sq. ft. = **8,067 Trips**
 - New Dwelling Units: 2,078 = **19,790 Trips**
 - Other: 265,000 sq. ft. = **2,474 Trips**
- Total Additional Trips = 60,134**



Toolbox of Recommendations

- Remove existing crossover (due to inadequate spacing/grade/etc.)
- Upgrade existing crossover to meet VDOT standard
- Convert existing crossover to directional left-turn lane
- Upgrade / modify traffic signal to handle increased traffic
- Install new traffic signal based on increase traffic from developments
- Consolidate existing access points
- Provide interparcel connections in lieu of multiple access points on Rte. 3

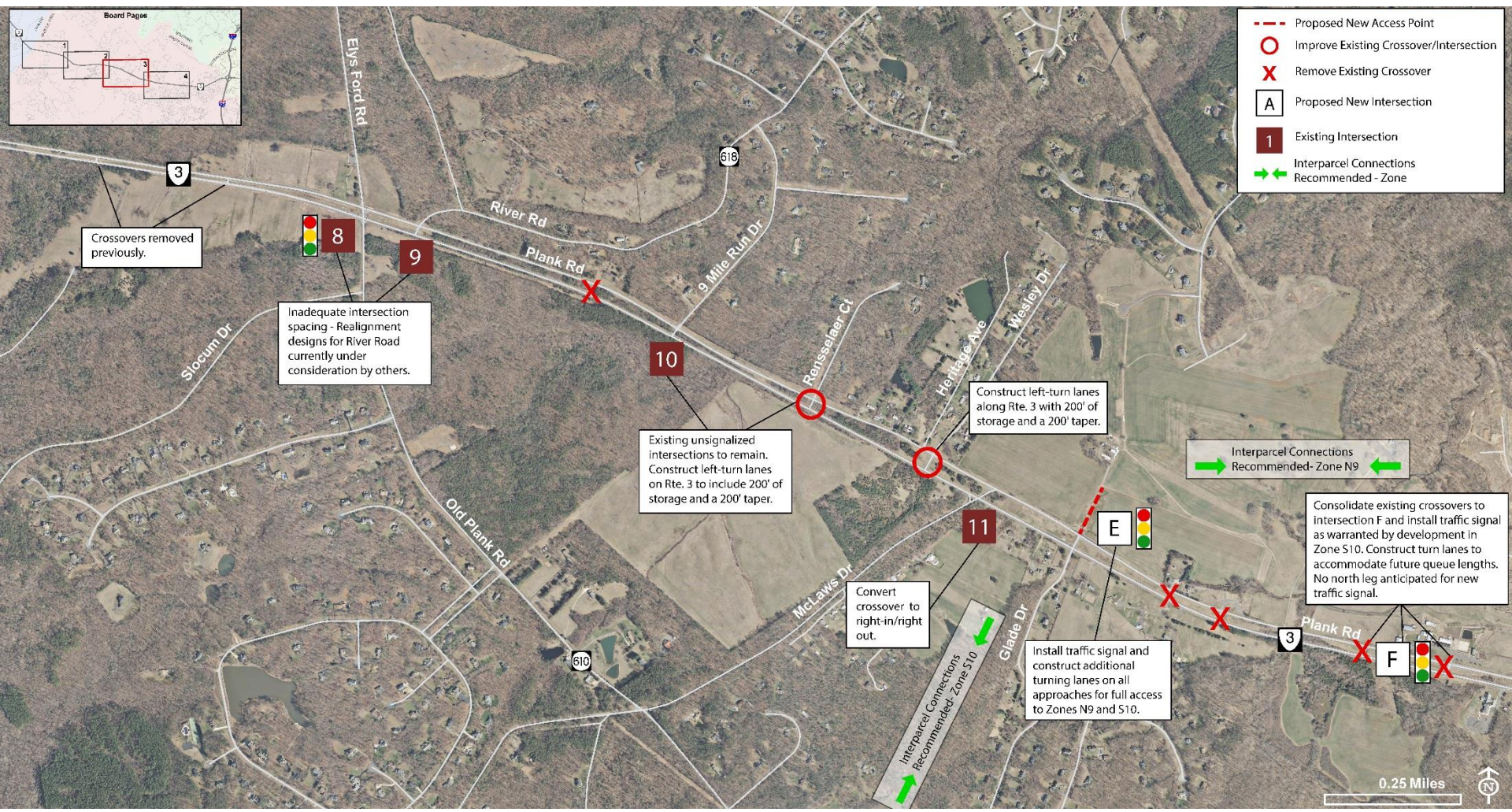
Future Conditions – Recommendations



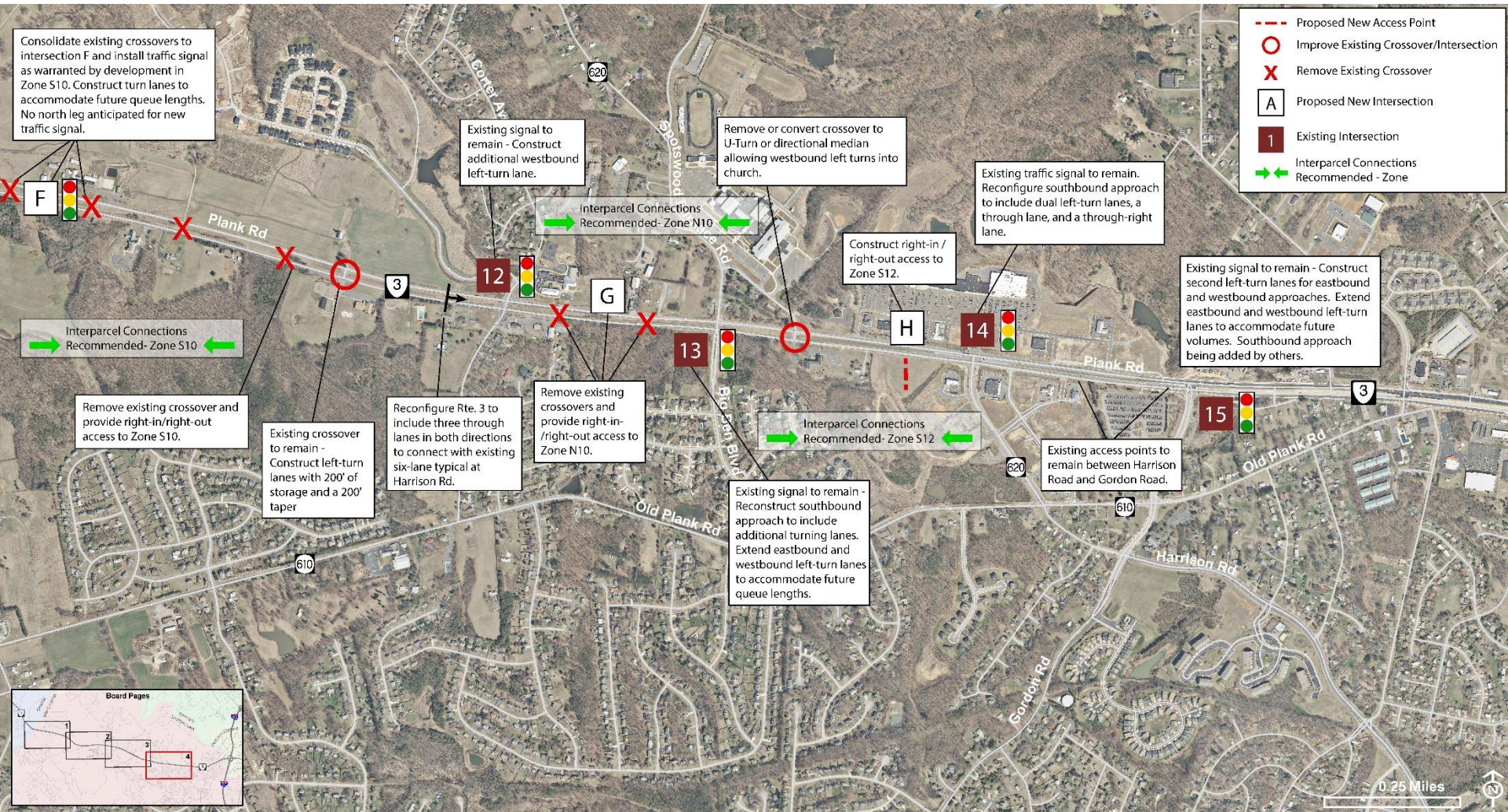
Future Conditions – Recommendations



Future Conditions – Recommendations



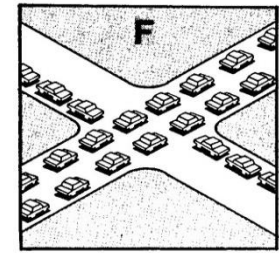
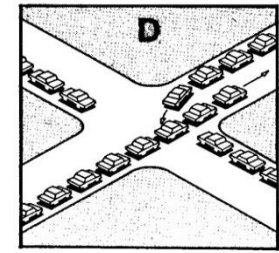
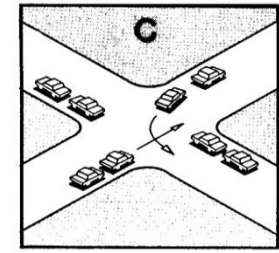
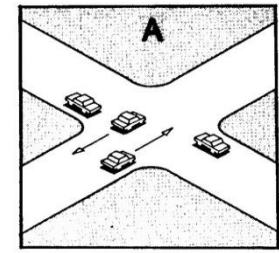
Future Conditions – Recommendations



Year 2040 - Traffic Operations after Recommendations

INTERSECTION		Peak Hour LOS	
Number	Name	AM	PM
A	Zone N1 / Route 20/ Route 3	C	C
1	Constitution Hwy / Route 3	A	A
B	Zone N2 / Route 3	A	A
2	Fox Gate Drive / Route 3	A	C
3	Brock Road / Route 3	B	B
C	Zone N3 / Zone N4 / Route 3	A	A
4	Black Meadow Rd / Route 3	A	A
D	Zone N4 / Zone N5 / Route 3	B	B
5	Orange Plank Rd / Route 3	C	D
6	Wilderness Road / Route 3	A	A
7	Stuart Rd / Bullock Rd / Route 3	A	A
8	Elys Ford Rd / Route 3	TBD	TBD
9	River Road / Route 3	TBD	TBD
10	Nine Mile Run Dr / Route 3	A	A
11	McLaws Dr / Route 3	A	A
E	Zone N9 / Glade Rd / Route 3	D	D
F	Zone S10 / Route 3	D	D
12	Andora / Corter Avenue / Route 3	D	D
13	Big Ben / Spotswood Furnace / Route 3	D	D
14	Harrison Rd / Route 3	D	E
15	Gordon Rd / Route 3	D	E

New intersections included in recommendations



LOS

A

Free flow

B

Stable flow

C

Average Flow

D

Restricted Flow

E

Congested

F

Severely Congested

Existing and Year 2040 w/ Recommendations

Existing Conditions

INTERSECTION		Peak Hour LOS	
Number	Name	AM	PM
		N/A	N/A
1	Constitution Hwy / Route 3	C	D
		N/A	N/A
2	Fox Gate Drive / Route 3	A	A
3	Brock Road / Route 3	B	B
		N/A	N/A
4	Black Meadow Rd / Route 3	A	A
		N/A	N/A
5	Orange Plank Rd / Route 3	C	A
6	Wilderness Road / Route 3	A	A
7	Stuart Rd / Bullock Rd / Route 3	A	A
8	Elys Ford Rd / Route 3	E	E
9	River Road / Route 3	A	A
10	Nine Mile Run Dr / Route 3	A	A
11	McLaws Dr / Route 3	A	A
		N/A	N/A
		N/A	N/A
12	Andora / Corter Avenue / Route 3	D	C
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14	Harrison Rd / Route 3	C	D
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2040 After Recommendations

INTERSECTION		Peak Hour LOS	
Number	Name	AM	PM
A	Zone N1 / Route 20/ Route 3	C	C
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F	Zone S10 / Route 3	D	D
12	Andora / Corter Avenue / Route 3	D	D
13	Big Ben / Spotswood Furnace / Route 3	D	D
14	Harrison Rd / Route 3	D	E
15	Gordon Rd / Route 3	D	E

Study Update & Next Steps

Next Steps

- Submit Final Report
- Seek Adoption of Plan by Board of Supervisors

Schedule

YOU ARE
HERE

Task	2014												2015												2016	
	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December	January	February			
Study Work Group & Public Meetings	█	█	█	●	█	█	●					●	█	█	█	▲	█	█	█	●	█	▲	█			
Data Collection		█	█																							
2014 Existing Conditions				█	█																					
2040 Future Land Use							█	█																		
Toolbox of Alternatives							█	█	█																	
2040 Traffic Volume Forecasting												█	█													
2040 Traffic Volume Analysis															█	█	█									
Transportation Plan Recommendations																		█	█	█	█					
Report & Methodology	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█			



Indicates Public Meeting

Indicates Working Meeting

Questions?



Contacts for additional questions
or to provide comments:

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