

# Richland Acres Cut-Through Traffic Study

# COMMUNITY MEETING November 27, 2018





## Agenda:

- Study Background
- VDOT's Cut-Through Traffic Policy Requirements
- Cut-Through Traffic Volumes
- Speed Analysis
- Remediation Options
- Next Steps



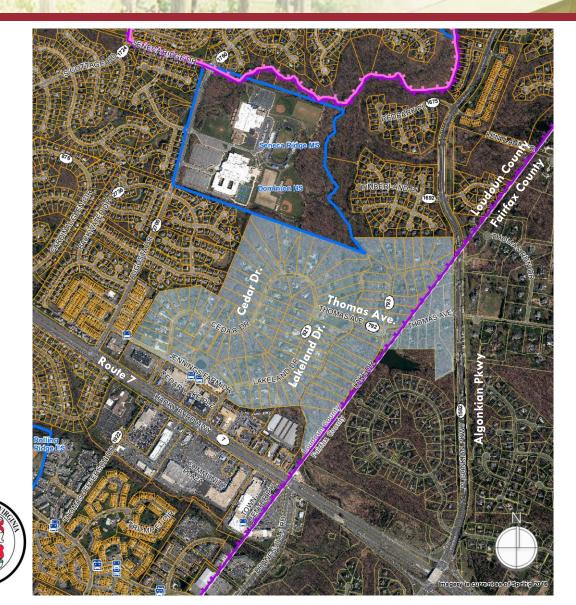


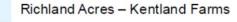
## Study Background:

- Richland Acres Community is represented by the Richland-Kentland Citizens' Association.
- This is a well-established community north of Route 7 and west of Algonkian Parkway.
- Cedar Drive, Lakeland Drive, and Thomas Avenue
  - Classified as local residential roadways
  - Maintained by VDOT
  - Posted Speed Limit 25 mph











Local bus stop

Loudoun County facility

Loudoun County parcel

Fairfax County parcel

#### 2011 Election Districts:



Algonkian

Sterling

4



# Study Background:

- Previous traffic calming measures installed by Loudoun County and Fairfax County to reduce vehicular speeds and discourage cutthrough traffic through the Richland Acres Community:
  - Speed humps
  - Additional \$200 Speeding Fine signs
  - ALL WAY STOP signs



Thomas Avenue



Cedar Drive



Lakeland Drive





### Study Background:

- FEB 2017 Supervisor Saines Office met with representatives from Loudoun County, Fairfax County, and VDOT to discuss the safety concerns raised by the community residents.
- JULY 2017Supervisor Saines brought forward a Board MemberInitiative directing County staff to identify availablefunds to complete a cut-through traffic study.
- JAN 2018 Board of Supervisors approved the funding source to complete the cut-through traffic study in Richland Acres community.





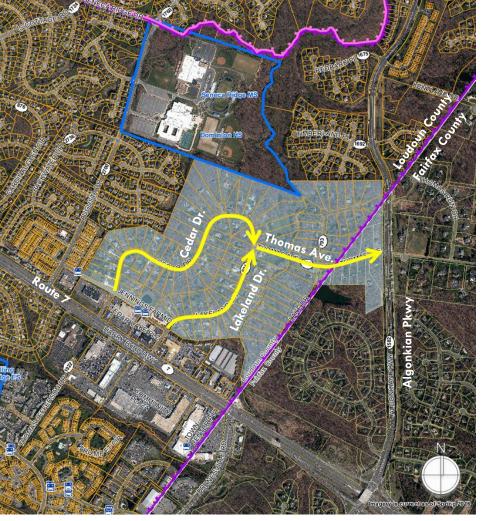
# VDOT's Cut-Through Traffic Policy Requirements:

- Functional Classification of the street(s):
  - Local residential street
- Identification of the primary use area:
  - Streets accessed by using the local residential street(s)
- Cut-through traffic:
  - Minimum of 150 cut-through trips per hour in one direction, and
  - Greater than 40% per hour, single direction
- Community Petition:
  - 75% signatures indicating support
- Alternative Routes:
  - Identify alternative route for the cut-through traffic



#### Northbound Cut-Through Route Volume:

Time	Northbound Lakeland Dr. and Cedar Dr.			
	Hourly Volumes	Cut Through	Cut Through %	
7:00 AM	22	13	59%	
8:00 AM	39	16	41%	
9:00 AM	36	16	44%	
10:00 AM	35	16	46%	
11:00 AM	41	10	24%	
12:00 PM	43	22	51%	
1:00 PM	57	28	49%	
2:00 PM	77	56	73%	
3:00 PM	40	24	60%	
4:00 PM	65	30	46%	
5:00 PM	74	45	61%	





Cut Through Volume > 150 VPH, and Cut Through % > 40%/Hr.



#### Southbound Cut-Through Route Volume:

Time	Southbound Lakeland Dr. and Cedar Dr.			
	Hourly Volumes	Cut Through	Cut Through %	
7:00 AM	80	58	73%	
8:00 AM	234	175	75%	
9:00 AM	92	51	55%	
10:00 AM	73	45	62%	
11:00 AM	44	22	50%	
12:00 PM	53	29	55%	
1:00 PM	56	31	55%	
2:00 PM	71	53	75%	
3:00 PM	100	64	64%	
4:00 PM	187	135	72%	
5:00 PM	243	178	73%	





Cut Through Volume > 150 VPH, <u>and</u> Cut Through % > 40%/Hr.



### **Speed Analysis:**

Roadway	Posted Speed (MPH)	85 <sup>th</sup> Percentile Speed (MPH)	Before
Lakeland Dr.	25	43	(2013)
Cedar Dr.	25	42	

After	Roadway	Posted Speed (MPH)	85 <sup>th</sup> Percentile Speed (MPH)
(2018)	Lakeland Dr.	25	33
(2010)	Cedar Dr.	25	30

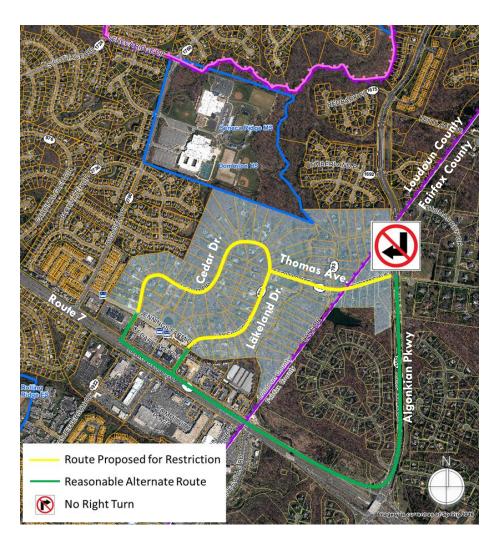




# **Remediation Options:**

#### Fairfax County Cut-Through Traffic Initiative:

- AM Turn Restrictions
- Thomas Avenue Cut-through Traffic Ballot Results:
  - "YES" (93% of ballots received)
- VDOT and Fairfax County Public Hearing - January 16, 2019

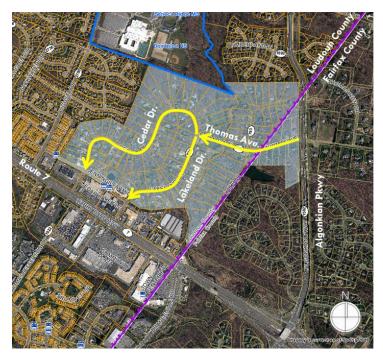






## **Remediation Options:**

#### **Recommendation To Consider PM Turn Restrictions**





Cut Through Volume > 150 VPH, and Cut Through % > 40%/Hr.

#### Hourly Summary for Cut-through Traffic

Time	Southbound Lakeland Dr. and Cedar Dr.			
Time	Hourly Volumes	Cut Through	Cut Through %	
7:00 AM	80	58	73%	
8:00 AM	234	175	75%	
9:00 AM	92	51	55%	
10:00 AM	73	45	62%	
11:00 AM	44	22	50%	
12:00 PM	53	29	55%	
1:00 PM	56	31	55%	
2:00 PM	71	53	75%	
3:00 PM	100	64	64%	
4:00 PM	187	135	72%	
5:00 PM	243	178	73%	



#### **Next Steps:**

Loudoun County recommends that Fairfax County and VDOT identify mitigation measures to address the cut-through traffic problem comprehensively in the Richland Acres community.





#### **Additional Questions?**

- Following the meeting, please provide any additional written questions or feedback directly to:
  - Supervisor Saines
  - Staff Aide: Omar Masood (<u>Omar.Masood@loudoun.gov</u>)





# Route 7 Westbound over Sugarland Run

Bridge rehabilitation/widening in Fairfax County





#### **Project Location & Limits**

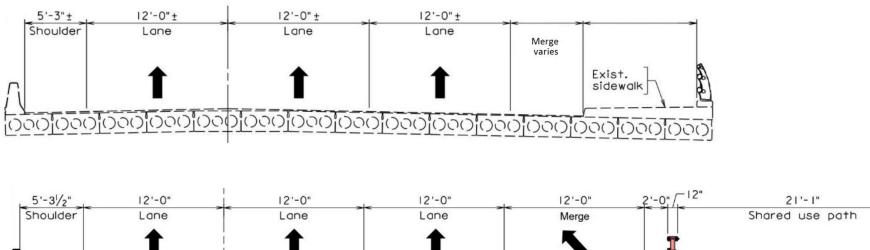


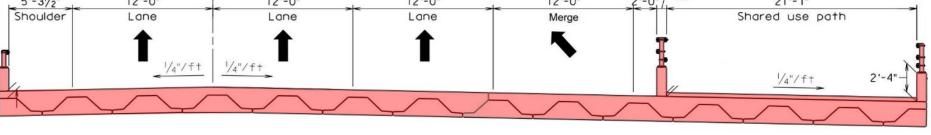




#### **Proposed Bridge Improvement**

**Existing Lane Configuration** 





Proposed Lane Configuration





#### **Algonkian Pkwy Merging Lane Extension**









## **Anticipated Schedule**

CurrentlyDesign PhaseSummer 2019Begin Right of Way AcquisitionWinter 2019Begin Utility RelocationWinter 2020Advertisement for ConstructionSummer 2021Begin Construction

#### **VDOT Staff Contact Information:**

-Shahrad Behboodi, P.E. (<u>shahrad.behboodi@vdot.virginia.gov</u>) -Andrew Beacher, P.E. (<u>andrew.beacher@vdot.virginia.gov</u>)

