

# ARLINGTON COUNTY, VIRGINIA

## County Board Agenda Item Meeting of October 16, 2021

### **BOARD REPORT AS CURRENT PROPOSED: FOR REVIEW BY TRANSPORTATION COMMISSION FOR SEPT 2021 MEETING**

**DATE:** September 16, 2021

**SUBJECT:** Request to authorize the advertisement of a public hearing to enact an Ordinance to Amend, Reenact and Recodify Chapter 14.2 (Motor Vehicles and Traffic) Section 14.2-12(a) of the Code of Arlington County, Virginia Concerning Maximum and Minimum Speed Limits by creating permanent 20 mph slow zones on 58 segments of streets near 13 schools within Arlington County, as allowed for in the Virginia State Code 46.2-1300, into County Code Chapter 14.2.

#### **C. M. RECOMMENDATION:**

1. Authorize the Advertisement of an October 16, 2021, public hearing to enact an Ordinance to Amend, Reenact and Recodify Chapter 14.2 (Motor Vehicles and Traffic) Section 14.2-12(a) of the Code of Arlington County, Virginia Concerning Maximum and Minimum Speed Limits by creating permanent 20 mph slow zones on 58 segments of streets near 13 schools within Arlington County, as allowed for in the Virginia State Code § 46.2-1300, into County Code Chapter 14.2.

**ISSUES:** The risk of traffic injuries and deaths increases as vehicle speed increases. On average, one in four crashes in Arlington involves speeding, as listed on page 32 of Arlington’s County Board-adopted [Vision Zero Action Plan](#). Further, there are 10+ crashes involving speeding within 600 feet of a school every year in Arlington. Therefore, attempts to reduce or eliminate fatal and critical crashes can be achieved by regulating unsafe speeds on our streets with measures such as signage and pavement markings. Lowering the speed limit can be a basic and powerful tool for reducing vehicle speeds.

**SUMMARY:** Arlington’s Vision Zero initiative supports lowering speed limits near schools, where children—who are vulnerable users—take frequent trips as pedestrians, bicyclists, or passengers. Specifically, creating new school zone guidelines is recommended in the Vision Zero Action Plan under Action Item B6, subheading 3. These guidelines will include setting standards for speed limits on roadways near schools and typical signs, crosswalks, pavement markings, and other aspects. Based on an initial assessment of best practices, Arlington County’s Department of

County Manager:

County Attorney:

Staff:

Environmental Services (DES) Transportation Engineering and Operations staff recommend creating 20 mile per hour (mph) slow zones on local residential streets within 600 feet of a school access point.

DES staff in collaboration with Arlington Public Schools (APS) staff identified 58 streets on residential roadways near 13 schools within Arlington County to demonstrate the recommended slow zone guidelines. The point of implementing 13 initial demonstration sites is to test proposed signs and pavement markings in a limited number of locations and collect data and feedback to determine the impact on speeds and safety before the County deploys the slow zone guidelines countywide.

## **BACKGROUND:**

### *Speed Limit Regulation & State Code*

A speed limit is a tool that facilitates speed regulation. Virginia State Code section § 46.2-1300 permits governing bodies, including counties, to adopt ordinances to decrease the speed limit within their boundaries below 25mph.

The Code of Virginia defines school crossing zones as areas located near schools at or near a highway where the presence of children on school property or going to and from school reasonably requires a special warning to motorists.

### *Speed Limit Setting on Residential Roadways near Schools*

The County's Vision Zero Action Plan addresses speeds in school zones under Action Item B6: Guidelines/Standards, which calls to "Refine school zone guidelines to establish consistent signage, signage placement, speed limit reductions, and pavement markings in school areas." New guidelines will include set standards for speed limits in school zones, as well as typical signs, crosswalks, and pavement markings.

Based on an initial assessment of Virginia State Code section § 46.2-1300 and national best practices, Arlington County recommends setting speed limits to 20mph permanently on local residential streets within 600 feet of a school access point. (Note: Arterial streets within 600 feet of schools will have flashing beacons for speed limit reduction only at arrival and dismissal times.)

Staff identified twelve schools at which to demonstrate the proposed slow zone guidelines. At these twelve school locations, staff identified street segments within 600 feet of an access point to each school, which resulted in the identification of the 58 street segments identified for slow zone demonstrations. Staff then collaborated with Arlington Public Schools staff (including transportation staff and individual school staff) to confirm and adjust the slow zone recommendations to meet the school's observed concerns and needs.

### *Demonstration Location Rationale*

The point of implementing these initial demonstrations is to test proposed speed limit signs and pavement markings in a limited number of locations and collect data and feedback after installation to assess the impact on speed and safety before the County deploys new slow zone guidelines countywide.

The 13 demonstration locations include 11 Arlington Public Schools and 2 private schools. The different locations proposed will demonstrate the slow zone concept in different environments and assess whether the measures effectively reduce vehicle speeds.

Six (6) schools were identified because their existing school zone flashing beacons need immediate replacement:

- Tuckahoe Elementary
- Bishop O’Connell High (shares a school zone with Tuckahoe and requires coordination)
- Glebe Elementary
- Wakefield High
- Claremont Elementary (shares a school zone with Wakefield and requires coordination)
- St. Thomas More PreK-8

Three (3) schools were identified because of the Vision Zero program’s commitment to equitably improving transportation throughout the County. These schools are located in the Metropolitan Washington Council of Governments (MWCOC) equity emphasis areas and are near the Vision Zero High-Injury Network:

- Hoffman Boston Elementary
- Gunston Middle
- Drew Elementary

Four (4) schools were identified in coordination with APS’s New School Working Group—sites where either a new school is coming in or the school site is changing:

- Key-Escuela Key Elementary/Former Arlington Traditional (new location)
- Arlington Traditional Elementary/Former McKinley Elementary (new location)
- Innovation Elementary/Former Key ES (new school)
- Cardinal Elementary (new school)

### *Slow Zone Implementation*

The slow zones will be implemented using transportation engineering tools including signage and markings to clearly convey the reduced speed limit to drivers.

## **DISCUSSION:**

### *Benefits of Static Signage*

Traditionally, Arlington deploys flashing beacons as the primary form of speed regulation near our schools. The installation of these beacons has been inconsistently deployed at schools across the County. Additionally, the equipment is costly to install and maintain. The development of school zone guidelines and recommendations for 20mph slow zones on residential roadways near

schools takes a holistic approach to reducing speeds. The slow zones will use permanent, static signage and markings to establish a new reduced upper boundary for acceptable speeds. By establishing slow zones near schools through signage and markings, they are more cost-effective and thus more broadly applicable than the school zone flashers.

Schools often host activities outside of regular learning hours. Because of this, the residential roadways near schools carry a higher density of vulnerable users, such as young pedestrians and bicyclists, as well as a higher number of vehicles accessing the site. Establishing a slow zone that is not dependent on school arrival and dismissal times encourages lower speeds in these high traffic areas at all times.

### *Speed Limit Reduction Benefits*

The Institute of Transportation Engineers (ITE) guidance for setting speed limits from the *World Road Association Road Safety Manual* suggests that areas with large numbers of pedestrians, such as school zones, should have a speed limit of no more than 20 miles per hour.

Additionally, studies repeatedly demonstrate the effectiveness of reducing speed limits. For example, research in each of South Africa, Belgium, Finland, Germany, France, New Zealand, the United Kingdom, and the United States found reductions in the number of road crashes ranging from 8 to 40% upon reducing speed limits (*World Road Association Road Safety Manual*, pg 8). These findings are also supported by review of school zone changes across New South Wales, Australia showing that lowering speed limits reduced fatal and serious injury crashes, particularly among young children, by up to 46% (Graham and Sparkes, 2010).

### *Measuring Efficacy*

In advance of deploying the slow zones, DES and Arlington County Police Department (ACPD) staff will collect speed data within the demonstration locations. Once the slow zones have been in place for over three months, County staff will again collect speed data at the same locations and compare the before and after speeds to determine if and how effective the slow zone signage, markings, and infrastructure changes were at reducing speeds. DES will also work with APS to further understand how the slow zones impact transportation safety within the individual school zones based on experiences and observations. Findings from the before/after analysis will inform future decisions on the deployment of slow zones in Arlington.

## **PUBLIC ENGAGEMENT:**

### *Level of Engagement:*

The Vision Zero Action Plan development process included three robust public engagement checkpoints that engaged over 1,000 community members.

### *Outreach Methods:*

The Vision Zero Action Plan Engagement included three phases of public engagement including one in-person open house and three virtual public meetings (one in Spanish); three online

engagement forms; five pop-up events; mass postcard mailing efforts; one hotline; and one library kiosk at Central Library Holds Pick Up.

*Public Feedback:*

Feedback from this broad public engagement included support for speed reduction efforts. Specifically, [Phase II Vision Zero Public Engagement](#) asked almost 500 respondents about their top challenges to traveling safely in Arlington, and over two thirds responded that speeding/aggressive driving was their top concern.

During [Phase III Vision Zero Public Engagement](#), DES staff presented the draft Action Plan that specified we would “Develop and adopt a process to reduce speed limits below 25mph on County roads.” Of the community responses, about 75% strongly agreed or agreed that the actions described in the Process & Organization category would help Arlington achieve our transportation safety goals—this included the above-stated action item. Further, public comments in Phase III supported using technology and street design to lower speed and make streets safer and for the County to commit to on-the-ground safer interventions (like this slow zone effort).

*Future Engagement:*

DES, ACPD, and APS have been and will continue to conduct public outreach in advance of the planned slow zone demonstrations to inform the community about the slow zones and what to expect moving forward. ACPD will also have a sporadic presence in the slow zones to give warnings and help enforce the new speed limits.

Further, the County will collect public feedback on how the slow zones are working in the spring of 2022. The County will use this feedback to inform countywide implementation of slow zones on residential roadways near schools.

**FISCAL IMPACT:** The cost of equipment and labor for implementing 20mph slow zones on these 58 streets will be approximately \$50,000. These funds are available in the Fiscal Year 2022 Department of Environmental Services’ Transportation Engineering and Operations operating budget.

**ATTACHMENTS:** Language for Adoption into: ARLINGTON COUNTY CODE [Chapter 14.2](#) MOTOR VEHICLES AND TRAFFIC

**Attachment 1**

**AN ORDINANCE TO AMEND, REENACT, AND RECODIFY CHAPTER 14.2 (MOTOR VEHICLES AND TRAFFIC), SECTION 14.2-12(A) OF THE CODE OF ARLINGTON COUNTY, Virginia CONCERNING MAXIMUM AND MINIMUM SPEED LIMITS BY DECREASING THE SPEED LIMIT ON **RESIDENTIAL ROADWAYS NEAR THE FOLLOWING SCHOOLS:****

1. Claremont Elementary
2. Bishop O'Connell High
3. Drew Elementary
4. Glebe Elementary
5. Gunston Middle
6. Hoffman-Boston Elementary
7. Arlington Traditional Elementary
8. Cardinal Elementary
9. Escuela-Key Elementary
10. Innovation Elementary
11. St. Thomas More Cathedral
12. Tuckahoe Elementary
13. Wakefield High

- I. BE IT ORDAINED Chapter 14.2, Section 14.2-12(A) of the Code of Arlington County, Virginia is hereby amended, reenacted, and recodified to read, in pertinent part, as follows:**

**Chapter 14.2 Motor Vehicles and Traffic**

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**§ 14.2-12. Maximum and Minimum Speed Limits.**

- A. No person shall drive any vehicle upon a highway in this County at a speed in excess of twenty-five (25) miles per hour except upon the following highways or portions thereof on which the speed limits shall be as follows:

Thirty (30) miles per hour upon:

*North 10th Street* between Arlington Boulevard and North Washington Boulevard.

*Fairfax Drive* between North Monroe Street and North Glebe Road.

*George Washington Parkway* marked portions either side of Key Bridge.

*Lorcom Lane* from Old Dominion Drive to Spout Run Parkway.

*Nellie Custis Drive* from Lorcom Lane to Military Road.

*South Arlington Mill Drive* from Shirlington Road to Walter Reed Drive.

*North Carlin Springs Road* from North Glebe Road to Arlington Boulevard.

*South Carlin Springs Road* from Arlington Boulevard to Columbia Pike.

*Fairfax Drive* from Arlington Boulevard to North Barton Street.

*Quaker Lane* from Shirley Highway to King Street.

*Walter Reed Drive* from Columbia Pike to King Street.  
*North Westmoreland Street* from Arlington County line to Fairfax Drive.  
*Chain Bridge Road* from North Glebe Road to Fairfax County Line.  
*Washington Boulevard* from Kirkwood Road to Lee Highway.  
*Williamsburg Boulevard* from North Glebe Road to North 29th Street.  
*Old Dominion Drive* from Lorcom Lane to North Abingdon Street.  
*Military Road* from North Glebe Road to Lee Highway.  
*South George Mason Drive* from Arlington Boulevard to Fairfax County line.  
*South Four Mile Run Drive (West Roadway)* from Columbia Pike to South Walter Reed Drive.  
*Washington Boulevard* from North Pershing Drive to North 10th Street.  
*Columbia Pike* from South Oak Street to South Dinwiddie Street.  
*Wilson Boulevard* from North Glebe Road to Fairfax County Line.  
*South Four Mile Run Drive* from South Walter Reed Drive to Shirlington Road.  
*North George Mason Drive* from Yorktown Boulevard to Arlington Boulevard.  
*North Roosevelt Street* from North 17th Street to Falls Church City line.  
*North Sycamore Street* from Williamsburg Boulevard to 17th Street North.  
*Fairfax Drive* from Little Falls Road to Washington Boulevard.  
*Fort Myer Drive* from Key Bridge to westbound Lee Highway.  
*North Glebe Road* from Arlington Boulevard to Lee Highway.  
*South Glebe Road* from Walter Reed Drive to Arlington Boulevard.  
*Lee Highway* from the Federal line at the approach to Key Bridge at Rosslyn to North Nash Street.  
*Lee Highway* from North Quincy Street to Falls Church City Line.  
*North Lynn Street* from westbound Lee Highway to Key Bridge.  
*Washington Boulevard* from Lee Highway to North Westmoreland Street.  
 Thirty-five (35) miles per hour upon:  
*U.S. Route 1.*  
*Old Dominion Drive* from Military Road to Lorcom Lane.  
*Columbia Pike* from South Dinwiddie Street to Fairfax County line.  
*South Glebe Road* from Walter Reed Drive to Jefferson Davis Highway.  
*State Route 233 (Airport Viaduct)* from Jefferson Davis Highway to Mount Vernon Parkway right-of-way.  
*South 5th Road* from South Carlin Springs Road to Fairfax County line.  
*Washington Boulevard* from Arlington Boulevard to North Pershing Drive.  
*Old Dominion Drive* from North Abingdon Street to North Glebe Road.  
*South Joyce Street* from Columbia Pike to Army Navy Drive.  
*Old Dominion Drive* from North Glebe Road to Fairfax County line.  
*North Glebe Road* from Lee Highway to ramp from Military Road.

*Lee Highway* from North Veitch Street to North Quincy Street.

*Spout Run Parkway* from George Washington Memorial Parkway to Lee Highway.

Twenty (20) miles per hour upon:

*South Chesterfield Road* from South Dinwiddie Street to South Columbus Street

*South Columbus Street* from South Chesterfield Road to 14<sup>th</sup> Street South

*South Dinwiddie Street* from South Chesterfield Road to South George Mason Drive

*South Buchanan Street* from South Chesterfield Road to 23<sup>rd</sup> Road South

*23<sup>rd</sup> Street South* from South Columbus Street to Dead End

*14<sup>th</sup> Street South* from South Dinwiddie Street to Fairfax County Line

*South Frederick Street* from 12<sup>th</sup> Street South to South George Mason Drive

*South Kenmore Street* from Shirlington Road to 22<sup>nd</sup> Street South

*22<sup>nd</sup> Street South* from South Monroe Street to Shirlington Road

*South Monroe Street* from 22<sup>nd</sup> Street South to 24<sup>th</sup> Road South

*South Lincoln Street* from South Lowell Street to South Kenwood Street

*South Kenwood Street* from South Lincoln Street to 25<sup>th</sup> Street South

*25<sup>th</sup> Street South* from South Kenwood Street to Shirlington Road

*24<sup>th</sup> Street South* from South Monroe Street to South Lowell Street

*South Lowell Street* from 24<sup>th</sup> Street South to 20<sup>th</sup> Street South

*South Lincoln Street* from 22<sup>nd</sup> Street South to 21<sup>st</sup> Street South

*24<sup>th</sup> Street South* from South Kenmore Street to Shirlington Road

*North Culpeper Street* from 19<sup>th</sup> Street North to 17<sup>th</sup> Street North

*20<sup>th</sup> Street North* from North Glebe Road to Dead End

*South Lang Street* from South Arlington Ridge Road to South Glebe Road

*28<sup>th</sup> Street South* from 1500 28<sup>th</sup> Street South to South Arlington Ridge Road

*South Meade Street* from 28<sup>th</sup> Street South to South Glebe Road

*South Queen Street* from 13<sup>th</sup> Street South to Dead End

*13<sup>th</sup> Road South* from South Rolfe Street to Dead End

*South Rolfe Street* from 12<sup>th</sup> Street South to 14<sup>th</sup> Road South

*14<sup>th</sup> Road South* from South Rolfe Street to South Queen Street

*14<sup>th</sup> Street South* from Dead End to South Queen Street



*South Poe Street* from 13<sup>th</sup> Street South to 13<sup>th</sup> Road South  
*South Pierce Street* from 13<sup>th</sup> Street South to 13<sup>th</sup> Road South  
*11<sup>th</sup> Street North* from North Ohio Street to North Potomac Street  
*9<sup>th</sup> Road North* from North Manchester Street to North Quantico Street  
*North Potomac Street* from North Quantico Street to 11<sup>th</sup> Street North  
*10<sup>th</sup> Road North* from North McKinley Road to North Montana Street  
*North McKinley Road* from 16<sup>th</sup> Street North to 18<sup>th</sup> Street North  
*18<sup>th</sup> Street North* from North McKinley Road to Patrick Henry Drive  
*North Longfellow Street* from 18<sup>th</sup> Street North to 16<sup>th</sup> Street North  
*North Lexington Street* from 19<sup>th</sup> Street North to 18<sup>th</sup> Street North  
*19<sup>th</sup> Street North* from North Madison Street to North Lexington Street  
*North Madison Street* from 19<sup>th</sup> Street North to 18<sup>th</sup> Street North  
*18<sup>th</sup> Street North* from Washington Boulevard to North Madison Street  
*North Edison Street* from Fairfax Drive to Wilson Boulevard  
*Fairfax Drive* from North Buchanan Street to North Edison Street  
*9<sup>th</sup> Street North* from North Frederick Street to North Edison Street  
*8<sup>th</sup> Road North* from North Frederick Street to North Edison Street  
*9<sup>th</sup> Street North* from North George Mason Drive to North Burlington Street  
*Key Boulevard* from North Uhle Street to North Adams Street  
*North Adams Street* from 18<sup>th</sup> Street North to 16<sup>th</sup> Street North  
*North Wayne Street* from 18<sup>th</sup> Street North to Key Boulevard  
*North Custis Road* from North Barton Street to 16<sup>th</sup> Street North  
*16<sup>th</sup> Street North* from North Barton Street to North Adams Street  
*North Thomas Street* from 2<sup>nd</sup> Road North to Cathedral Lane  
*Cathedral Lane* from North Glebe Road to North Thomas Street  
*26<sup>th</sup> Street North* from North Underwood Street to North Sycamore Street  
*North Underwood Street* from Williamsburg Boulevard to Langston Boulevard  
*24<sup>th</sup> Street North* from North Underwood Street to North Tuckahoe Street  
*North Tuckahoe Street* from Dead End to Langston Boulevard  
*North Trinidad Street* from Williamsburg Boulevard to 26<sup>th</sup> Street North  
*Little Falls Road* from North Underwood Street to North Trinidad Street

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II. The remaining subsections of 14.2-12(A) not hereby amended shall remain as previously enacted.