

Prince William County Residential Traffic Management Guide

JULY 2025

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Introduction

This comprehensive guide provides Prince William County (PWC) transportation professionals, community leaders, and planners with detailed information about traffic calming countermeasures and management strategies for residential roads. Each entry includes a description, placement and eligibility guidelines, benefits, challenges, and estimated cost ranges based on Virginia Department of Transportation (VDOT) and Prince William County standards. VDOT and PWC each have specific responsibilities related to traffic in residential communities. Both are partners in the administration of these policies and procedures.

County Transportation staff encourage developers to incorporate the enclosed traffic management techniques into their strategies for street designs within development plans. All these policies and procedures are subject to change by VDOT and/or PWC. Please refer to the specific policy sections in this guide for details.

Contact Information

For questions on any of the enclosed policies please contact Richard Weinmann at 703-792-8002, or email RWeinmann@pwcgov.org, or contact the Prince William County Department of Transportation at 703-792-6825.

Acronyms and Abbreviations

BOCS	Board of County Supervisors
CTB	Commonwealth Transportation Board
DTE	District Traffic Engineer
FHWA	Federal Highway Administration
HOA	Homeowners Association
MUTCD	Manual on Uniform Traffic Control Devices
NOVA	Northern Virginia
PMSD	Pole Mounted Speed Display
PWC	Prince William County
PWPD	Prince William County Police Department
PWC DOT	Prince William County Department of Transportation
TRIP	Transportation Road Improvement Program
VDOT	Virginia Department of Transportation

Traffic Calming Program

Traffic Calming Overview

Residential traffic calming plans are developed collaboratively with local communities, County staff, and state agencies. Funding is provided through the Transportation Road Improvement Program (TRIP) and remains available until the funds are exhausted.

Evaluation of installed traffic calming measures takes place at least six months post-installation. This allows for public adaptation to the devices. The review assesses effectiveness in speed reduction and identifies safety concerns. Devices may be removed if ineffective, or if they cause unforeseen issues. Funding for removal comes from the same source as installation. VDOT may unilaterally remove devices if they pose safety risks.

Residential Traffic Calming Policy

Residential traffic calming plans are developed collaboratively with local communities, County staff, and VDOT. Funding is provided through the Transportation Road Improvement Program (TRIP) and remains available until the program funds are exhausted.

The primary goal of the Residential Traffic Calming Program is to reduce vehicle speeds on local neighborhood streets where cut-through traffic is not the major concern, but where speeding is generated from vehicles within the community. These measures are intended to improve safety and neighborhood livability by encouraging slower driving behavior without restricting access (e.g., no turn restrictions).

To qualify for traffic calming consideration, roadways must meet the following criteria:

- A 24-hour recorded 85th percentile speed of 35 mph or more in at least one direction
- A daily traffic volume between 600 and 4,000 vehicles

Residential traffic calming measures applicable to residential streets include:

Physical Measures List

1. Advisory Bike Lanes*
2. Chicanes
3. Crossbikes/Bike Lane Extension Markings
4. Curb Extensions (Bulbouts)
5. Curb Radius Reduction
6. Delineator Curb Extensions**
7. Diverters
8. Hardened Centerlines
9. Fully Boxed Crosswalks
10. High Visibility Crosswalks

11. Illuminated Street Signs
12. In-Street Stop for Pedestrian Sign
13. Lane Narrowing
14. Mini Roundabouts
15. Pedestrian Median Refuge
16. Physically Separated Bike Lanes
17. Pole Mounted Speed Display (PMSD)
18. Raised Crosswalks
19. Raised Intersection
20. Rectangular Rapid Flashing Beacon (RRFB)
21. Right-In Right-Out Turn Restrictions
22. Road Diets
23. Rumble Strips
24. See Me Flags*
25. Shared Use Path (SUP)
26. Sidewalks
27. Speed Humps
28. Staggered/Z-Crossing Pedestrian Refuge
29. Standard Bike Lanes
30. Streetlights
31. Striped Medians
32. Striped Shoulder

*Countermeasures are not eligible for use on VDOT maintained roads

**On VDOT maintained roads, countermeasure is only eligible for temporary use

Management Strategies List

1. Community Engagement and Education
2. Community-Led Traffic Calming Initiatives
3. Improving Intersection Sight Distance
4. Neighborhood Speed Reduction Programs
5. Public Education and Awareness Campaigns
6. Residential Cut-Through Traffic Mitigation
7. Through Truck Restriction Program
8. Watch for Children Signage
9. \$200 Additional Fine for Speeding Signs

Traffic Calming Process Steps

The steps for request, study, building consensus, and implementation are outlined below, and further detailed on the flowchart on the following page:

Step 1: Community request & initial screening

- Request received by PWCDOT TSE and evaluated for eligibility based on RTMG criteria
- If eligible, will be added to the speed study list for data collection on a first come, first served basis

Step 2: Data collection

- PWCDOT will conduct a speed study at a location specified by the request, or another location as deemed appropriate by County staff
- Studies are performed on a first come first served basis and will be scheduled as field conditions and timing permits

Step 3: Engineering evaluation

- County staff will evaluate the data collected and screen for minimum criteria
- County staff will prepare a speed study report to summarize the data collection and recommendation
- County staff will coordinate with VDOT representatives on data validation and applicable traffic calming measures

Step 4: Plan Development

- PWCDOT will prepare a TC plan for review and approval by VDOT
- Traffic calming measures will be developed in conjunction with the District Supervisor, community, and VDOT stakeholders

Step 5: Community engagement and petition

- County staff, in coordination with the appropriate Magisterial District Supervisors Office, will develop a petition consisting of the affected residents
- County staff will provide a community representative with a petition to garner signatures in support of the traffic calming measures. The petition must garner a minimum of 75% of signatures from occupied households in support of the measures.
- The community has twelve (12) months from receipt of petition to collect the signatures
- Public hearing is authorized, held, and approved

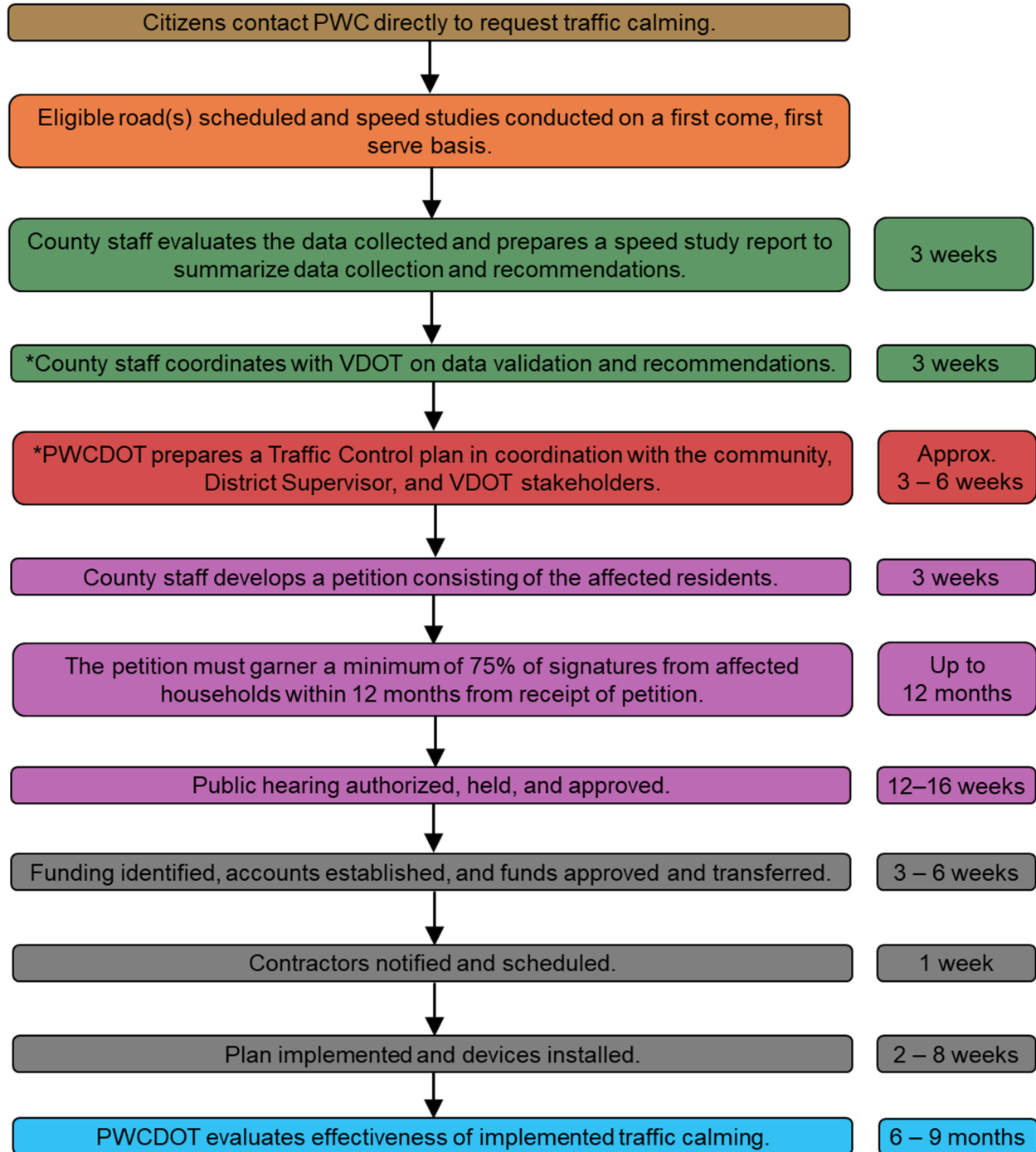
Step 6: Implementation

- Upon approval of the plan and project initiation by the Magisterial District Supervisor's Office, PWCDOT will procure necessary contractors to implement the approved traffic calming plan
- Implementation schedule is subject to contractor availability and weather dependent

Step 7: Post-implementation evaluation

- PWCDOT will, schedule permitting, evaluate the effectiveness of the implemented TC plan.
- This evaluation will occur no earlier than six (6) months after implementation of the TC plan.

Traffic Calming Flowchart



*Coordination with VDOT not required for non-VDOT maintained roads.

Traffic Calming Eligibility Criteria

To initiate a traffic calming project under the Prince William County Residential Traffic Calming Policy, the Board of County Supervisors must submit a formal resolution to the Virginia Department of Transportation (VDOT). The resolution must include the following support documentation:

- A community petition with signatures
- Functional classification of the street
- Average daily traffic (ADT) volume
- Documented average speeds
- Description of the petition area
- Description of adjacent impacted areas

All data must verify that the minimum eligibility requirements for traffic calming are satisfied. The County Department of Transportation (PWC DOT) and the applicable Supervisor's office typically assist in providing petition forms and verifying compliance.

A. Eligible Streets

The following criteria must be met for a street to be eligible for traffic calming measures:

- Classified as a local residential street with a posted speed limit of 25 mph or less
- In some cases, residential collector streets may qualify if they functionally operate like local residential streets
- Two-lane roadway
- Documented 24-hour 85th percentile speed of 35 mph or higher in at least one direction
- Average daily traffic volume between 600 and 4,000 vehicles
- Verified community support for the proposed measures
- Residences face the street (not reverse frontage)

B. Documented Speeding Problem

Eligibility is contingent on a documented speeding issue, confirmed by a county speed study. The following parameters apply:

- Required Speed Threshold: 85th percentile speed of 35 mph or higher (on streets posted at 25 mph or less)

Speed studies are:

- Conducted by PWC DOT staff
- Limited to two per location within a five-year period
- Spaced at least one year apart
- Performed on Tuesdays, Wednesdays, or Thursdays
- Conducted during non-holiday weeks with favorable weather
- Based on 48-hour data collection periods

C. Petition for Traffic Calming

At least 75% of the total occupied households in the identified impacted area must sign a petition requesting traffic calming (one signature per household, which can be a renter). The petition area encompasses residences on the proposed street section under study, and all streets that have access to it. The County, in cooperation with the appropriate Supervisor's office, will define the petition area. The impacted area typically includes the surrounding collector or arterial roads but should be defined by the County. The petition should not be circulated until it is verified that the street(s) in question meet the eligibility requirements. PWC DOT will verify that the petition is valid and forward to the VDOT District Traffic Engineer with the other necessary data.

Petition areas are developed in coordination between PWC DOT staff and the appropriate Supervisor's office. All petitions received must have dated signatures and petition language on each page submitted. They are valid for a period of 12 months and will be verified by PWC DOT staff to ensure compliance with the required percentages. In certain instances, documented community support in the form of a resolution from the homeowner's association or board of directors supporting the proposed measure can be accepted in lieu of a petition. In unique situations where it is unsafe to solicit support door to door, alternative methods of identified community support can be considered.

D. Other Considerations

Traffic calming requests and installation must comply with the following additional considerations:

Emergency and Primary Response Routes:

- No more than four physical traffic calming devices may be installed on any emergency response route
- No physical devices are permitted on designated primary response routes, excluding non-physical measures (e.g., signage or markings)
- Routes will be confirmed through coordination with the PWC Department of Fire and Rescue on a case-by-case basis

Placement Requirements for Physical Devices:

- Devices must be visible from at least 200 feet in advance
- Devices must be located at least 200 feet from the nearest intersection for non-intersection countermeasures

Physical Traffic Countermeasures

Legend of Icons Used

	Pedestrian	The countermeasure improves pedestrian safety, visibility, or walkability. Examples: crosswalks, refuge islands, RRFBs.
	Bicyclist	Designed for or supportive of bicycle travel. Often used with bike lanes, contraflow lanes, and intersection markings.
	Vehicles	Intended to slow, restrict, or direct vehicle movements. Applies to traffic calming tools like speed humps, diverters, etc.
	Intersections	Applies to geometric or operational changes at full intersections, such as raised intersections or curb extensions.
	Intersection/ Crossings	Enhances safety and visibility at pedestrian crossings within intersections. Includes RRFBs and hardened centerlines.
	Pedestrians, Bicyclists & Vehicles	Multimodal countermeasures that benefit all users — ideal for shared streets, roundabouts, and road diets.
	Roadway Corridor	Indicates that the countermeasure is applied along an extended roadway segment, not a single point (e.g., buffered bike lanes, road diets).
	Speed Management	Used to reduce vehicle speeds through design, deflection, or visual cues — examples include speed tables and chicanes.
	VDOT	Identifies countermeasure that is applicable for use on VDOT owned and maintained roadways.

Advisory Bike Lanes



Bicyclists



Speed
Management

Description: Advisory bike lanes provide a dedicated space for cyclists on roadways that are otherwise too narrow for conventional bike lanes. They use a narrow central travel lane for two-way vehicle operations and dashed bicycle lane markings on each side of the street. Vehicles operate in yield conditions and use the advisory bike lane to pass oncoming traffic when the bike lane is clear. Standard bike lanes should be considered where the available street width exceeds 28' (excluding on-street parking).

Placement / Eligibility Criteria:

- Applicable to non-VDOT maintained roads only
- Low-volume residential streets (under 3,000 vehicles per day)
- Streets with speed limits of 25 mph or less
- Streets too narrow for standard bike lanes (typically 20-28 feet wide)
- Streets where bicycle traffic is encouraged
- Narrow streets that provide connections between dedicated bike lanes, trails, or shared use paths
- Often paired with mid-block pinch points such as curb extensions or chicanes to discourage vehicles from regularly driving within the advisory bike lanes

Benefits:

- Provides dedicated space for cyclists without requiring road widening
- Reduces effective width of roadway, encouraging slower vehicle speeds
- Improves bicycle connectivity in areas with constrained rights-of-way
- Cost-effective alternative, particularly when implemented during planned street resurfacing

Challenges:

- May not be appropriate for streets with peak hour traffic volumes in excess of 150 vehicles per travel direction
- Requires education campaign for proper use

Cost: \$20,000 - \$50,000 per mile



Buffered Bike Lanes



Bicyclists



Roadway
Corridor



Description: Buffered bike lanes provide a dedicated space for cyclists with increased lateral offset to adjacent vehicle traffic and/or vehicle parking lanes. Buffers of up to 2' wide should be marked by two parallel, solid, white lane lines. Buffers wider than 3' should include diagonal hatching or chevrons. Physically separated bike lanes should be considered when the combined



width of the bike lane and buffer exceeds 8' to prevent vehicles from parking or loading within the buffered bike lane. The combined bike lane and buffer width should not exceed 10' to prevent vehicles from using the buffered bike lane as an additional travel lane. When buffered bike lanes are between vehicle travel lanes and on-street parking, a 3' buffer should be provided adjacent to the parking lane to accommodate vehicle entry/exit and prevent incidents of "dooring" in which a driver opens their door into the path of a moving bicycle.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Residential streets with low to moderate vehicle traffic
- Streets with speed limits of 30 mph or less

Benefits:

- Increased cyclist perceived comfort level
- Allows side-by-side riding for cyclists

Challenges:

- No physical protection from motor vehicles
- Requires education and regular enforcement to reduce vehicle parking and loading within the bike lane
- May collect debris without regular maintenance
- Requires special consideration at intersections, particularly where dedicated right-turn lanes exist
- Providing comfortable ride quality to ensure cyclists utilize and stay within bike lanes
- May require reductions in lane width, number of travel lanes, or on-street parking or the removal of on-street parking

Cost: \$30,000 - \$70,000 per mile

Chicanes



Vehicles



Speed
Management



Description: Chicanes are a series of alternating curb extensions or islands that create an S-shaped path of travel, requiring motorists to slow down to navigate the lateral shifts in the roadway. Chicanes are usually installed on streets without dedicated bicycle lanes and can be constructed using concrete curb extensions or lower-cost materials such as delineators, curb extensions, planters, or bollards. Chicanes can reduce impervious areas when designed to incorporate green infrastructure and help to address issues of nuisance flooding, especially in areas with frequent ponding at curb ramps and pedestrian crossings

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Residential streets with speed limits of 25 mph or less
- Streets with reported speeding problems
- Mid-block locations (not at intersections)
- Streets where vertical deflection (speed humps) may not be appropriate

Benefits:

- Effectively reduces vehicle speeds
- Provides opportunity for landscaping and aesthetic improvements
- Does not affect drainage patterns as significantly as vertical measures
- Creates potential for additional street greening

Challenges:

- May reduce on-street parking
- Can create challenges for emergency vehicles and large maintenance equipment
- Additional maintenance considerations for street sweeping and snow removal

Cost: \$15,000 - \$30,000 per location



Contraflow Bike Lane



Bicyclists



Roadway
Corridor



Description: Contraflow bike lanes are one-way bike lanes that travel in the opposite direction of adjacent vehicle traffic. Contraflow bike lanes are typically installed on one-way streets for relatively short segments to connect between existing bike lanes or trails on either end. Contraflow bike lanes are often installed in residential areas as part of a street conversion from two-way operation to one-way operation or through the removal of on-street parking along one side of the street.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Residential streets with speed limits of 25 mph or less and low volumes of vehicle traffic
- As “missing segment” connections between existing bike lanes and shared use paths
- When converting two-way streets to one-way operation

Benefits:

- Effectively utilizes existing asphalt and right-of-way to provide missing bike connections
- Can reduce vehicle travel speeds through reduced lane widths

Challenges:

- May reduce on-street parking
- Requires education and signage on proper usage

Cost: \$25,000 - \$60,000 per mile



Cross Bikes/Bike Lane Extension Markings



Bicyclists



Intersections/
Crossings



Description: Cross bikes are pavement markings that extend bicycle lanes through intersections, driveways, and at transit stops using dashed line extensions to guide cyclists to receiving bike lanes and alert motorists to potential crossing conflicts. Cross bikes may include green colored paint to improve facility visibility.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- At intersections where bike lanes approach
- Near schools, parks, and other community facilities
- Along designated bicycle routes

Benefits:

- Increases visibility of bicycle crossing areas
- Provides directional guidance for cyclists through intersections
- Alerts motorists to expect crossing cyclists

Challenges:

- Requires regular maintenance to remain visible
- If used, green paint requires maintenance agreement

Cost: \$5,000 - \$15,000 per location



Curb Extensions (Intersections)



Pedestrians



Intersections



Description: Curb extensions (also called bulbouts) narrow the street width by extending the curbline into a parking lane or wide travel lane, creating shorter pedestrian crossing distances and reducing vehicle speeds. Curb extensions are typically installed in pairs or on all corners of an intersection and can be installed using



various combinations of striping, delineators, rubber/concrete curb stops, or concrete curb and gutter extensions. Existing curb ramps will require modification when using concrete curb and gutter but can typically remain when using striping, delineators, or curb stops. If a curb extension encroaches on a dedicated bike lane, bike ramps or an appropriate transition to shared lanes in advance of the curb extension must be provided. Curb extensions can reduce impervious area when designed to incorporate green infrastructure and help to address issues of nuisance flooding, especially in areas with frequent ponding at curb ramps and pedestrian crossings.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Intersections with moderate to high pedestrian activity
- Near schools, parks, commercial areas, and transit stops
- Streets with on-street parking, wide travel lanes/shoulders, or large-radii curb returns
- Areas with visibility concerns between vehicles and crossing pedestrians

Benefits:

- Reduces pedestrian crossing distance
- Improves intersection visibility for vehicles and pedestrians
- Creates space for street furniture, plantings, and green infrastructure
- Naturally slows down turning vehicles

Challenges:

- Additional maintenance considerations for street sweeping and snow removal
- May affect bus or large vehicle turning movements
- May require modifications to existing drainage structures

Cost: \$50,000 - \$120,000 per corner

Curb Extensions (Mid-Block)



Speed
Management



Roadway
Corridor



Description: Mid-block curb extensions (also called bulbouts) narrow the street width by extending the curbline into a parking lane or wide travel lane, creating shorter pedestrian crossing distances and reducing vehicle speeds. Mid-block curb extensions are typically installed in pairs, but can also be installed on just one side of a street with constrained right-of-way, and can use various combinations of striping, delineators, rubber/concrete curb stops, or concrete curb and gutter extensions.



Mid-block curb extensions provide ideal pedestrian crossing locations, particularly in areas where pedestrian crossings are spaced further than 600' apart and may require modifications to existing curb and sidewalk to install curb ramps and landing areas. Mid-block curb extensions may be offset from the face of curb to allow a continuous gutter and reduce impacts to existing drainage structures. If a mid-block curb extension encroaches on a dedicated bike lane, bike ramps or an appropriate transition to shared lanes in advance of the curb extension must be provided. Mid-block curb extensions can also be offset from existing curb and gutter to allow for a continuous bike lane. Mid-block curb extensions can reduce impervious area when designed to incorporate green infrastructure and help to address issues of nuisance flooding, especially in areas with frequent ponding at curb ramps and pedestrian crossings.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Typically placed in pairs but may be installed on one side on streets with constrained right-of-way or T-intersections
- Near schools, parks, commercial areas, and transit stops
- At unmarked mid-block crossings with moderate to high pedestrian volumes
- In series along the street

Benefits:

- Provides opportunity for new mid-block pedestrian crossings
- Reduces pedestrian crossing distance
- Improves visibility for vehicles and pedestrians
- Creates space for street furniture, plantings, and green infrastructure
- Naturally slows vehicles

Challenges:

- Additional maintenance considerations for street sweeping and snow removal
- May affect bus or large vehicle turning movements
- May require modifications to existing drainage structures

Cost: \$30,000 – \$90,000 per location

Curb Radius Reduction



Speed
Management



Intersections



Description: Curb radius reductions reduce vehicle turning speeds and create shorter crossing distances for pedestrians. Larger curb radii typically result in high-speed turning movements by motorists, which may increase the risk of pedestrians being struck by right-turning vehicles. Curb radius reductions can be implemented using striping, delineators, or concrete curb and gutter.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Urban and residential street intersections
- Areas with high pedestrian volumes
- Locations with history of pedestrian-involved crashes
- Intersections near schools, parks, and community facilities

Benefits:

- Slows turning vehicle speeds
- Shortens pedestrian crossing distances
- Improves sight lines between drivers and crossing pedestrians
- Reclaims space for pedestrian use and amenities

Challenges:

- Must be designed to accommodate larger vehicles
- Concrete curb and gutter require reconstruction of existing infrastructure and may impact existing drainage patterns and systems

Cost: \$15,000 – \$40,000 per intersection



Daylighting



Pedestrians



Intersections/
Crossings



Description: Daylighting refers to improving sight distances and pedestrian visibility at intersections, entrances, and mid-block pedestrian crossings. Existing on-street parking within 20'-25' of the intersection is restricted and may be replaced with curb extensions or in-street bicycle corrals. Daylighting typically involves a combination of traffic calming elements to increase effectiveness including curb extensions, high-visibility crosswalks, transverse rumble strips, or streetlights.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Intersections with inadequate sight distances
- Areas with high pedestrian volumes
- Locations with history of pedestrian-involved crashes
- Intersections near schools, parks, and community facilities

Benefits:

- Reduces pedestrian crossing distance
- Improves intersection visibility for vehicles and pedestrians
- Creates space for low- and mid-height plantings, green infrastructure, and bicycle corrals

Challenges:

- Typically requires the removal of one on-street parking space per travel direction
- May require regular maintenance of trees and vegetation to maintain sightlines

Cost: \$2,000 – \$5,000 per intersection



Delineator Curb Extensions



Pedestrians



Intersections



Description: Delineator curb extensions use vertical flexible posts or bollards to visually and physically extend the curb line without requiring major construction. They provide many of the benefits of concrete curb extensions at a lower cost and with faster implementation.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained roads for temporary installations and non-VDOT maintained roads for permanent installations
- Intersections or mid-block crossings with on-street parking
- Pilot locations to test curb extension impacts before permanent installation
- Areas with limited capital improvement budgets
- Locations with safety concerns requiring quick implementation

Benefits:

- Lower cost than concrete curb extensions
- Quick installation (days vs. months)
- Easily modified if design adjustments are needed
- Does not affect drainage infrastructure
- Can include artistic elements or community identity features

Challenges:

- Less durable than concrete installations
- Requires more frequent maintenance
- May be damaged by snowplows or street sweepers
- May be less visually appealing than permanent infrastructure

Cost: \$2,000 - \$5,000 per extension (includes delineators, paint, installation)



Hardened Centerlines



Pedestrians,
Bicyclists & Vehicles



Intersections

Description: Hardened centerlines refer to the use of delineators, longitudinal low-profile speed bumps, or mountable rubber curbing along the centerline of a road to reduce the effective turning radius of vehicles and physically prevent vehicles from taking wide left turns at intersections.

Placement / Eligibility Criteria:

- Applicable to non-VDOT maintained roads only
- Intersections with high rates of failure to yield to pedestrians
- Crossings where drivers frequently cut across centerlines when turning
- Locations with a history of pedestrian-involved crashes
- Wide intersections where turning speeds are problematic

Benefits:

- Forces proper turning paths and slower speeds
- Encourages drivers to turn directly into a receiving lane instead of turning over a lane line
- Improves pedestrian safety at crosswalks
- Low cost and quick implementation
- Can be installed as a pilot before permanent infrastructure

Challenges:

- May be damaged by vehicles and require frequent replacement
- Additional maintenance considerations for street sweeping and snow removal
- Must be designed to accommodate emergency vehicles and delivery trucks

Cost: \$3,000 - \$8,000 per intersection



Diverter



Pedestrians
& Bicyclists



Intersections



Description: Diverters are physical barriers placed at intersections to restrict vehicle through movements while allowing bicycle and pedestrian access. Diverters are used to control traffic volumes along streets and to restrict cut-through traffic on residential streets. Diverters can be constructed to accommodate emergency vehicles while effectively discouraging passenger vehicles and delivery vehicles from making through movements. The implementation of diverters may increase traffic volumes on surrounding streets, which in turn may require additional traffic calming measures.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Residential streets experiencing high-speed vehicle cut-through traffic
- Streets with a history of perpendicular crashes
- Neighborhood entry points from major arterials
- Areas where a neighborhood traffic management plan is in place
- Streets where lower traffic volumes are desired without closing the street entirely

Benefits:

- Effectively reduces or eliminates vehicle cut-through traffic while maintaining pedestrian and cyclist connectivity
- Creates opportunities for added green space
- Significantly improves neighborhood livability

Challenges:

- May increase traffic volumes on surrounding streets
- Effectively breaks the street grid and may require accommodation for emergency vehicles depending on surrounding street connectivity
- May require residents to alter travel patterns
- Requires significant community consensus before implementation

Cost:

- Temporary/pilot installation: \$5,000 - \$15,000
- Permanent installation: \$20,000 - \$50,000



Fully Boxed Crosswalks



Pedestrians



Intersections



Description: Fully boxed crosswalks include high visibility striping for all sides of a crosswalk, creating a complete rectangular box that increases pedestrian compliance by using marked crossings and reduces unnecessary circuitous pedestrian routes at intersections. Fully boxed crosswalks also increase visibility and driver awareness of the pedestrian crossing area.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Intersections with existing or anticipated pedestrian activity
- School zones and routes to schools
- Near transit stops, parks, and community facilities
- Locations with pedestrian safety concerns
- May require justification for use on VDOT maintained roads

Benefits:

- Increases visibility of the crosswalk from all approaches
- Clearly defines pedestrian space within the intersection
- Low-cost pedestrian safety improvement with rapid implementation timeline
- Can be enhanced with advance stop bars and supplemental signage for additional safety

Challenges:

- Requires regular maintenance to remain visible
- Less effective without supporting measures like advance signage

Cost:

- \$2,000 - \$5,000 per intersection (standard paint)
- \$5,000 - \$12,000 per intersection (thermoplastic material)



High Visibility Crosswalks



Pedestrians



Intersections/
Crossings



Description: High visibility crosswalks use continental (ladder), zebra, or other enhanced marking patterns instead of traditional parallel lines to increase the visibility of pedestrian crossing areas to oncoming motorists.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- School zones and routes to schools
- Mid-block crossings
- Uncontrolled intersection crossings
- Areas with moderate to high pedestrian volumes or safety concerns
- May require justification for use on VDOT maintained roads

Benefits:

- More visible to drivers than traditional parallel line crosswalks
- Clearly designates the pedestrian crossing area
- Low-cost pedestrian safety improvement with rapid implementation timeline

Challenges:

- Higher maintenance costs than traditional crosswalks
- Effectiveness decreases during adverse weather conditions and as markings wear overtime

Cost:

- \$1,500 - \$3,000 per crossing (standard paint)
- \$3,000 - \$7,000 per crossing (thermoplastic material)



Illuminated Street Signs



Pedestrians,
Bicyclists & Vehicles



Description: Illuminated street signs incorporate LED lighting within or behind traffic signs to enhance visibility, particularly during nighttime and low-light conditions. They may be solar-powered or connected to the electrical grid.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Intersections with limited visibility or lighting
- High-crash locations
- School zones and routes to schools
- Pedestrian crossings with nighttime activity

Benefits:

- Improves sign visibility during nighttime and adverse weather
- Increases driver compliance with traffic controls
- Solar options available for locations without electrical access
- Enhances safety without changing roadway geometry

Challenges:

- Higher initial cost than standard signs
- Requires ongoing maintenance and occasional component replacement
- May require electrical service connection
- Requires maintenance agreement

Cost:

- \$1,500 - \$3,000 per sign (solar-powered)
- \$2,500 - \$5,000 per sign (connected to electrical grid)



In-Street Stop for Pedestrian Sign



Pedestrians



Intersections/
Crossings



Description: In-street pedestrian crossing signs are placed in the center of the roadway at uncontrolled pedestrian crossings to remind drivers of their legal obligation to yield to pedestrians in crosswalks. Centerline hardening is often provided in advance of the in-street pedestrian crossing sign.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Mid-block crosswalks
- Uncontrolled intersection crossings
- Near schools, parks, and trail crossings
- Low to moderate speed roadways (35 mph or less)
- Areas with moderate pedestrian activity

Benefits:

- Increases driver compliance with traffic laws
- Low-cost pedestrian safety improvement with rapid implementation timeline
- No impact on drainage or utilities

Challenges:

- Vulnerable to damage from vehicles
- Must be removed from the street at night or when not in use

Cost: \$500 – \$1,000 per sign



Lane Narrowing



Vehicles



Speed
Management



Description: Lane narrowing reduces the width of travel lanes, typically from 12+ feet to 10 or 11 feet, to encourage slower driving speeds and create space for other uses such as bike lanes, wider sidewalks, or buffer zones.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Streets with reported speeding issues
- Areas where additional space is needed for bicyclists or pedestrians
- Transition zones between higher-speed and lower-speed areas
- Streets undergoing resurfacing or restriping

Benefits:

- Reduces vehicle speeds
- Creates space for other uses such as on-street parking
- Can be implemented through restriping during regular maintenance
- Low cost if implemented during planned resurfacing

Challenges:

- May not be suitable for streets with significant truck or bus traffic
- Limited effectiveness as a standalone measure
- May increase perceived congestion

Cost: \$5,000 – \$15,000 per mile



Mini Roundabouts



Pedestrians,
Bicyclists & Vehicles



Intersections



Description: Small circular intersections with a traversable center island that slows traffic while maintaining flow, typically used as an alternative to stop-controlled intersections. Passenger cars navigate the roundabout using the circulating lane for through movements and turns. Larger vehicles, such as delivery trucks or moving trucks, may use the mountable center median for through movements and turns. Miniature roundabouts can often be installed without modifying existing curblines, curb ramps, crosswalks, or drainage structures. Miniature roundabouts may incorporate stormwater harvesting, planting, or aesthetic treatments.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Intersections with balanced traffic volumes
- Areas with crash history related to angle collisions
- Locations with speeding concerns near intersections
- Where traffic flow improvement is desired without signals

Benefits:

- Reduces crash severity (eliminates right-angle crashes)
- Maintains traffic flow more efficiently compared to an all-way stop-control
- Reduces vehicle speeds through intersections
- Lower long-term maintenance costs than signals

Challenges:

- May require additional right-of-way as compared to a stop-controlled intersection
- May require educational outreach for proper use
- Need to ensure large vehicle movements are accommodated
- Must be designed to discourage wrong-way left-turns, especially when using striped approach splitters

Cost: \$200,000 – \$500,000



Pedestrian Median Refuge



Pedestrians



Intersections/
Crossings



Description: Protected spaces in the middle of the street that allow pedestrians to cross one direction of traffic at a time. Pedestrian median refuges may be placed at intersections or mid-block crossings and are particularly useful on roadways with wide lanes, large curb return radii, or more than one lane in either direction.



Pedestrian median refuges may be installed using striping, delineators, curb stops, or concrete curb and gutter. When installed at intersections using vertical elements, pedestrian median refuges harden the centerline and reduce vehicle turning speeds. On-street parking spaces closest to the pedestrian refuge may need to be eliminated to ensure appropriate visibility and sight distances.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Streets with wide lanes, long pedestrian crossing distances, or more than one lane in both directions
- Midblock crossings
- Near schools, transit stops, and trail crossings
- As a gateway treatment between collectors and local streets
- Locations with documented pedestrian safety issues
- Locations with moderate to high volumes of children, elderly, or mobility-impaired pedestrians

Benefits:

- Allows pedestrians to focus on one direction of traffic at a time
- Reduces pedestrian exposure time in the roadway
- Can incorporate landscaping and aesthetic improvements
- Hardens the centerline and reduces vehicle turning speeds
- Works well with other crossing enhancements
- Can be implemented into existing medians

Challenges:

- Requires adequate street width and may require reductions in on-street parking
- May impact existing drainage patterns

Cost: \$40,000 – \$100,000

Physically Separated Bike Lanes



Bicyclists



Speed
Management



Description: Physically separated bike lanes are similar to buffered bike lanes with the additional use of vertical elements including delineators, planters, bollards, curb stops, longitudinal low-profile speed bumps, vehicle parking, or medians to create physical separation between bicycle and motor vehicle travel lanes. Physically separated bike lanes



provide greater protection than standard or buffered bike lanes, increase the perceived comfort of cyclists, and reduce the likelihood of drivers encroaching the bike lane. Street segments with a high density of driveways may require the specific use of longitudinal low-profile speed bumps to maintain property access. Vertical elements should be offset from the edge of the bike lane as they reduce the effective rideable width. Physically separated bike lanes can be used for short stretches at intersections to effectively harden lane edges and reduce vehicle turning speeds. Temporary and/or interim facilities may utilize low-cost materials including delineators, longitudinal speed bumps, and rubber or concrete curb stops.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained for temporary installations and non-VDOT maintained roads for permanent installations
- Areas with existing or anticipated bicycle usage
- Connector routes between trails, parks, schools, and activity centers
- Streets with sufficient width to accommodate separation

Benefits:

- Provides increased comfort and safety for cyclists compared to standard bike lanes
- Reduces vehicle speeds
- Reduces the likelihood of vehicles encroaching the bike lane or buffer
- Increases effectiveness and reach of transit systems

Challenges:

- Delineators, curb stops, and other modular or mountable elements require regular maintenance to address damage and maintain proper drainage patterns
- Concrete curbing and medians may alter existing drainage patterns and require new inlets
- Additional maintenance considerations for street sweeping and snow removal
- Must be designed to accommodate vehicle turning movements at driveways for property access

Cost: \$200,000 – \$500,000 per mile

Pole Mounted Speed Display (PMSD)



Vehicles



Speed
Management



Description: Electronic signs that display drivers' current speed, often accompanied by the posted speed limit, to increase awareness and encourage compliance.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Transition zones (rural to urban)
- School zones
- Work zones
- Areas with documented speeding problems
- Streets with steep downgrades

Benefits:

- Immediate feedback to drivers about their speed
- Can reduce driver speeds by 5-10 mph when first installed
- Data collection capability for traffic studies
- Mobile units provide flexibility for deployment

Challenges:

- Effectiveness may decrease over time
- Requires power source (electrical or solar)
- Ongoing maintenance requirements
- Not as effective without periodic enforcement or supplemental traffic calming elements

Cost: \$3,000-\$10,000 per sign, depending on features (data collection, solar power, etc.)



Raised Crosswalks



Pedestrians



Speed
Management



Description: Raised crosswalks allow pedestrians to cross the street at the same level as the sidewalk, eliminating the need for curb ramps and establishing pedestrian priority at the crossing. Vehicle speeds are reduced due to the vertical deflection (ramping) prior to the crossing, resulting in increased compliance with state laws to stop for pedestrians in crosswalks.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Midblock pedestrian crossings
- Near schools, parks, and trail crossings
- Commercial districts with high pedestrian activity
- Intersections with significant pedestrian-vehicle conflicts

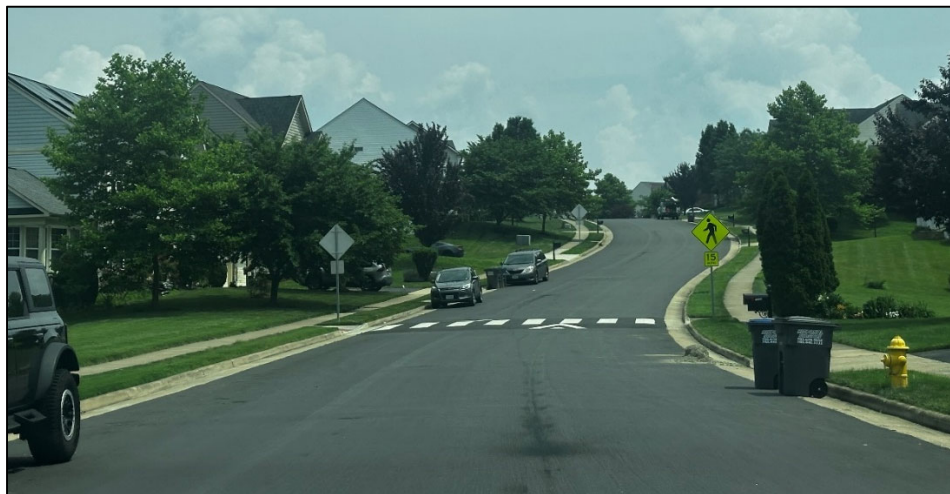
Benefits:

- Significantly increases crossing comfort due to the elimination of curb ramps, particularly for wheelchairs, strollers, scooters, and cyclists
- Increases pedestrian visibility and likelihood of vehicle yielding
- Effectively reduces vehicle speeds

Challenges:

- Additional maintenance considerations for street sweeping and snow removal
- Higher installation cost than standard crosswalks
- May increase road noise from vehicles braking, traversing, and accelerating
- May impact existing drainage patterns

Cost: \$10,000 – \$30,000 per crosswalk



Raised Intersection



Pedestrians,
Bicyclists & Vehicles



Intersections



Description: An intersection where the entire roadway surface is raised to sidewalk level, creating a platform that encourages slower vehicle speeds and prioritizes pedestrians. Raised intersections are typically constructed to the level of adjacent sidewalks and eliminate the need for pedestrian curb ramps. Raised intersections may significantly alter existing drainage patterns and require modifications to drainage systems.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Downtown and commercial districts
- Campus environments
- Neighborhood centers
- Areas where high pedestrian volumes cross in multiple directions

Benefits:

- Calms traffic in all approaches to the intersection
- Enhances accessibility by minimizing level changes
- Clearly defines pedestrian priority areas
- Can incorporate distinctive materials and placemaking elements

Challenges:

- Higher cost than conventional intersections
- May impact emergency response vehicles
- Additional maintenance considerations for street sweeping and snow removal
- May impact existing drainage patterns and require new or relocated drainage inlets
- May impact existing utility manholes

Cost: \$100,000 – \$250,000 per intersection



Rectangular Rapid Flashing Beacon (RRFB)



Pedestrians



Intersections/
Crossings



Description: User-activated warning beacons that use an irregular flashing pattern to alert drivers to the presence of pedestrians at mid-block crossings and roundabout approaches. RRFBs are typically accompanied by high visibility crosswalks and may incorporate curb extensions, in-street stop for pedestrian signs, and raised crosswalks.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Uncontrolled crossings on streets with more than one lane in either direction
- Locations with inadequate stopping sight distance
- Locations with nighttime crossing activity
- Midblock crossings with moderate to high volumes of cyclists, children, elderly, or mobility-impaired pedestrians
- Near schools, parks, and trail crossings

Benefits:

- Increases driver yielding rates from 18% to 80%+
- Solar power options for sustainable operation
- Less expensive than traffic signals
- Maintains traffic flow efficiently

Challenges:

- Less effective than signals for high-volume roads
- Requires maintenance agreement
- May not be appropriate in all urban contexts
- Requires user activation (passive detection systems add cost)

Cost:

- \$15,000-\$25,000 per crossing (for a pair of beacons)



Right-In Right-Out Turn Restrictions



Vehicles



Intersections



Description: Physical or signed restrictions that prevent left-turns at an intersection or driveway, allowing only right-turns in and out of the side street or access point. Turns can be restricted using either diversion islands on the approach street (typically consisting of concrete but may utilize delineators or curb stops) or vertical elements along the median of the cross street (typically delineators or concrete curbing/median). When using vertical elements along the median of the cross-street, it may be possible to utilize mountable curb or low-profile speed bumps between delineators or concrete curbing to accommodate emergency vehicle movements while effectively discouraging passenger vehicles and delivery vehicles from making through movements and left-turns.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Intersections with high crashes related to left turns
- High-volume corridors with more than one lane in either direction in which left-turning vehicles and through vehicles cannot adequately see oncoming traffic
- Access management for commercial developments
- Near major intersections to reduce turning conflicts

Benefits:

- Reduces potential conflict points from 32 to 8 at a typical four-way intersection
- Improves traffic flow on major streets
- Enhances safety by eliminating riskier turning movements
- Can be implemented with various levels of physical restriction

Challenges:

- May encourage high-speed vehicle turns and increase risk of collisions with pedestrians and cyclists
- Increases travel distance for some trips
- Shifts left turn and through traffic to other intersections
- Can create concerns about access and connectivity
- May restrict emergency vehicle movements and increase response times
- Requires clear signage and sometimes enforcement

Cost: \$25,000 – \$70,000 per intersection



Road Diets



Pedestrians,
Bicyclists & Vehicles



Roadway
Corridor



Description: Reconfiguration of a roadway to reduce the width and/or number of travel lanes, often converting a four-lane undivided road to two travel lanes with a center turn lane and adding bike lanes, sidewalks, and/or greenspace.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Roads with excess asphalt including unnecessary turn lanes, striped medians, and lane widths in excess of 12'
- Residential streets with frequent or extreme speeding vehicles
- Corridors with crash patterns related to lane changes and turning vehicles
- Corridors with high volumes of turning vehicles
- Streets lacking bicycle facilities or with moderate to high volumes of in-lane cyclists
- Areas where pedestrian crossing distance is a concern

Benefits:

- Can reduce crashes by 19-47%
- Creates space for bicycle facilities
- Increased pedestrian visibility
- Reduces pedestrian crossing distances
- Improves vehicle traffic flow when providing dedicated turn lanes

Challenges:

- May increase congestion if implemented on high-volume roads
- Public perception concerns about "reducing capacity"
- Requires careful analysis of traffic patterns

Cost:

- \$25,000-\$75,000 per mile for restriping only; significantly higher if reconstruction is needed



Rumble Strips



Vehicles



Roadway
Corridor



Description: Milled or raised patterns on roadways that create noise and vibration when driven over, alerting drivers to changing conditions or potential hazards. Rumble strips may be incorporated longitudinally along centerlines, lane lines, and bike lane edge lines or transversely across vehicle travel lanes and bike lanes. Longitudinal rumble strips alert drivers when they have crossed a lane line, reducing the likelihood that vehicles will enter oncoming traffic or a bike lane. Longitudinal rumble strips installed along a bike lane edge can be an effective way to maintain vehicle separation when a street does not have sufficient width to accommodate a buffered or physically separated bike lane. Transverse rumble strips alert drivers and cyclists to upcoming conditions such as pedestrian crossings, sharp turns, speed humps, and roundabout yield points.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Along centerlines, lane lines, and bike lane edge lines
- At approaches to intersections and mid-block pedestrian crossings with inadequate sight distance
- Along striped shoulders or roadway edge lines for open drainage street sections
- School zones and other areas requiring heightened attention

Benefits:

- Effective at alerting inattentive drivers or drivers that are unfamiliar with a unique road condition
- Low-cost roadway safety improvement with quick implementation timeline

Challenges:

- Can increase road noise, particularly for longitudinal applications, that may impact nearby residents
- Longitudinal rumble strips may create challenges for cyclists and should include breaks at crossings, entrances, and intersections to accommodate bike turning movements
- May accelerate pavement deterioration
- Not suitable for all residential contexts

Cost:

- \$3,000-\$8,000 per location, depending on length and installation method



See Me Flags



Pedestrians



Intersections/
Crossings

Description: Brightly colored handheld flags available at crossing locations that pedestrians can use to increase their visibility when crossing the street. See Me Flags are extremely low-cost and easy to install, providing sponsorship and maintenance partnership opportunities from local businesses, residents, community organizations, or homeowners associations.

Placement / Eligibility Criteria:

- Applicable to non-VDOT maintained roads
- Mid-block crossings with low rates of vehicles yielding to pedestrians or inadequate sight distances
- Near schools, parks, and trail crossings
- On streets with more than one lane in either direction
- Interim solution as a response to safety concerns, documented crash history, and locations where additional infrastructure improvements are planned but not yet implemented

Benefits:

- Extremely low-cost pedestrian safety improvement with quick installation timeline
- Effective at stopping vehicles when used by pedestrians in crosswalks
- Creates an opportunity for community engagement and can increase support for additional traffic calming elements
- Particularly helpful for children, caregivers, older adults, and pedestrians with mobility issues

Challenges:

- Requires public education and/or informational signage on appropriate usage
- Requires maintenance agreement

Cost: \$300 – \$800 per set



Shared Use Path (SUP)



Pedestrians
& Bicyclists



Roadway
Corridor



Description: Shared use paths are off-street pathways separated from vehicle traffic that are designed to accommodate both pedestrians and cyclists. Shared use paths are typically 10' wide but may be as narrow as 8' for short stretches in constrained locations. Shared use paths may be as wide as 20' for high-volume recreational trails, in commercial areas, and in multi-use environments. Shared use paths may be incorporated as part of a road diet or along one side of the road in place of a sidewalk in areas with constrained right-of-way.



Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Streets with moderate to high vehicle traffic volumes, frequent heavy vehicles, or transit service
- Corridors in which side-by-side riding is expected such as near schools, parks, and commercial/recreational destinations
- Streets with sufficient right-of-way outside of vehicle travel lanes
- Along waterways, rail corridors, and utility easements
- As part of larger trail networks
- As a low-stress facility to supplement on-street bike lanes and corridors

Benefits:

- Provides complete separation from motor vehicle traffic and the highest level of cyclist comfort
- Serves both transportation and recreational purposes
- Increases effectiveness and reach of transit systems

Challenges:

- Must comply with ADA and PROWAG regulations
- Higher construction costs than on-street facilities
- May require reductions in lane width, number of lanes, or on-street parking or the purchase of additional right-of-way
- May significantly impact existing drainage patterns, especially when reconstructing driveways and modifying curblines
- Requires education and enforcement to ensure that mopeds and high-powered e-scooters/e-bikes capable of traveling in excess of 20 mph are not using the shared use path

Cost: \$300,000 – \$1 million per mile

Sidewalks



Pedestrians



Roadway
Corridor



Description: Sidewalks are dedicated pedestrian pathways separated from vehicle traffic and typically constructed using concrete, asphalt, bricks, or pavers. Sidewalks are typically 6' wide but may be as narrow as 4' for short stretches in constrained locations. Sidewalks greater than 8' in width are typically constructed as shared use paths to accommodate both pedestrians and cyclists.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- All streets in all contexts, regardless of surrounding land use or development pattern
- Continuously along at least one side of a street
- Along transit corridors
- Connecting residential areas to commercial, recreational, or institutional destinations

Benefits:

- Reduces pedestrian crashes by 65-89%
- Increases walking trips and physical activity
- Essential for ADA compliance and universal access
- Increases effectiveness and reach of transit systems

Challenges:

- May face homeowner resistance in some neighborhoods
- May significantly impact existing drainage patterns, especially when reconstructing driveways and modifying curb lines
- May impact existing underground and overhead utilities
- May require reductions in lane width, number of lanes, or on-street parking or the purchase of additional right-of-way

Cost: \$100 – \$300 per linear foot



Speed Humps



Vehicles



Speed
Management



Description: Raised sections of pavement designed to reduce vehicle speeds, typically 3-4 inches high and 12-14 feet in length with a rounded or parabolic profile. Speed humps may include wheel path cutouts to accommodate emergency vehicles while still requiring passenger vehicles to navigate at least one portion of the speed hump.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Residential streets with documented speeding issues
- Areas with 25-30 mph speed limits
- Near schools, parks, and trail crossings
- Not on primary emergency response routes

Benefits:

- Effectively reduces speeds by 5-10 mph
- Self-enforcing speed control
- Relatively inexpensive compared to other treatments
- Can be designed to accommodate emergency vehicles

Challenges:

- Additional maintenance considerations for street sweeping and snow removal
- May increase road noise due to vehicles braking, traversing, and accelerating
- May impact existing drainage patterns

Cost:

- \$3,000-\$6,000 per hump



Staggered/Angled Pedestrian Refuge



Pedestrians



Intersections/
Crossings



Description: A pedestrian crossing that is split by a median with offset entrances on either side of the median, directing pedestrians to turn in the median and face oncoming traffic prior to turning again to complete the crossing. Staggered crossings also force cyclists to reduce their crossing speeds and reduce the likelihood of bicycle collisions.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Streets with wide lanes, long pedestrian crossing distances, or more than one lane in either direction
- Locations where pedestrians may have difficulty judging gaps
- Midblock crossings
- Near schools, transit stops, and trail crossings
- As a gateway treatment between collectors and local streets
- Locations with documented pedestrian safety issues
- Locations with moderate to high volumes of cyclists, children, elderly, or mobility-impaired pedestrians

Benefits:

- Allow pedestrians to focus on one direction of traffic at a time and ensure pedestrians look toward oncoming traffic prior to crossing
- Reduces pedestrian crossing distance and exposure time
- Prevents pedestrians and cyclists from crossing both directions of traffic impulsively and at high speeds
- Can incorporate landscaping and aesthetic improvements
- Hardens the centerline and reduces vehicle turning speeds

Challenges:

- May requires more median width than standard crossings and pedestrian refuges
- Higher implementation costs than standard median refuges
- May impact existing drainage patterns and utility manholes
- May require reductions to on-street parking

Cost: \$25,000 – \$60,000 per location



Standard Bike Lanes



Bicyclists



Roadway
Corridor



Description: Designated portions of the roadway for exclusive use by bicyclists with pavement striping, symbols, and signage. Standard bike lanes are typically 5 feet wide, though they may be as narrow as 4 feet when adjacent to curb and gutter along constrained streets. For narrow streets, particularly with steep grades, a standard bike lane may be installed for the uphill direction of travel and a shared lane may be used for the downhill direction of travel. Tall curbs greater than 6 inches and retaining walls reduce the effective riding width of the bike lane and may require additional bike lane width to provide a comfortable riding experience. Standard bike lanes that exceed 6.5 feet in width should consider buffers or physical separation to reduce the likelihood of vehicles parking in the bike lane.



Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Streets with low to moderate traffic volumes and speeds up to 30 mph
- Streets with excess pavement (wide travel lanes, narrow striped medians, on-street parking) that can be reallocated for bike lanes
- Constrained streets that cannot accommodate buffered bike lanes or physically separated bike lanes
- Streets parallel to collector and arterial streets with regular connectivity to the adjacent collector or arterial street
- As a facility upgrade along existing shared streets where lane width exceeds 14 feet

Benefits:

- Defines dedicated space for bicyclists, increasing cycling rates, safety, and perceived comfort levels
- Reduces vehicle lane width and vehicle travel speeds
- Low-cost bicycle safety improvement with quick implementation timeline
- Reduces the likelihood of drivers being stuck behind an in-lane cyclist
- Increases cycling rates and improves safety
- Increases effectiveness and reach of transit systems

Challenges:

- No physical protection from motor vehicles
- Requires education and regular enforcement to reduce vehicle parking and loading within the bike lane
- May collect debris without regular maintenance
- Requires special consideration at intersections, particularly where dedicated right-turn lanes exist

Cost: \$20,000 – \$50,000 per mile

Streetlights



Pedestrians,
Bicyclists & Vehicles



Roadway
Corridor



Description: Roadway illumination designed to improve visibility for all roadway users during nighttime and/or inclement weather conditions. Pedestrian streetlights illuminate sidewalks, bike lanes, underpasses, and crossings.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Intersections and midblock crossings
- Areas with nighttime pedestrian activity
- Locations with nighttime crash history
- Locations with inadequate sight distance
- Streets with on-street bike facilities (shared lanes, dedicated bike lanes, buffered bike lanes, and physically separated bike lanes)

Benefits:

- Reduces nighttime crashes by 30-50%
- Improves security and perceived safety
- Enhances visibility of pedestrians crossing
- Makes roadway hazards visible to all users

Challenges:

- Installation and energy costs
- Light pollution concerns
- Maintenance requirements
- Potential tree canopy conflicts

Cost: \$5,000 – \$15,000 per pole



Striped Medians



Vehicles



Roadway
Corridor



Description: Painted buffer areas in the center of the roadway that separate opposing traffic flows without physical barriers.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Roads with adequate width but no need for left-turn accommodations
- Transition zones to prepare for physical medians
- Areas with head-on crash concerns
- Where physical medians are cost-prohibitive

Benefits:

- Increases separation between opposing traffic
- Can reduce head-on and sideswipe crashes
- Very low cost to implement
- Can be easily modified if needed

Challenges:

- Limited effectiveness compared to physical medians
- Requires maintenance of markings
- Can be ignored by drivers if not enforced

Cost: \$10,000-\$25,000 per mile, depending on marking materials and width



Striped Shoulder



Vehicles



Roadway
Corridor



Description: Paved roadway shoulders delineated with pavement markings and signage to provide space for bicyclists, pedestrians, and disabled vehicles outside the travel lanes.

Placement / Eligibility Criteria:

- Applicable to VDOT maintained and non-VDOT maintained roads
- Low-volume and low-speed streets
- Areas with bicycle and pedestrian traffic despite limited infrastructure
- Roads with run-off-road crash histories

Benefits:

- Provides space for non-motorized users on roads without dedicated facilities
- Reduces run-off-road crashes
- Extends pavement life by reducing edge deterioration
- Lower cost than adding sidewalks or bike lanes

Challenges:

- Less protection than dedicated facilities
- Often collects debris
- May not be perceived as bicycle/pedestrian space by all users

Cost: \$10,000 – \$25,000 per mile



Non-Physical Traffic Management Strategies

Public Education and Awareness Campaigns

Description: Multimedia campaigns to increase awareness of traffic safety issues and promote behavior change among roadway users.

Implementation Approach:

- Develop targeted messaging for specific behaviors (speeding, distraction)
- Utilize multiple channels (social media, signage, local media)
- Partner with schools, businesses, and community organizations
- Evaluate effectiveness through surveys and behavior observations

Benefits:

- Reaches large audience quickly
- Can change social norms around driving behaviors
- Complements engineering and enforcement efforts
- Can be tailored to specific community concerns

Challenges:

- Difficult to measure direct impact on crash reduction
- Requires professional development of materials for effectiveness
- Needs consistent refreshing to maintain awareness
- May not reach all demographic groups equally

Community Engagement and Education

Description: Programs that involve residents in traffic safety efforts while providing education about the importance of safe driving, walking, and biking behaviors.

Implementation Approach:

- Organize neighborhood traffic committees
- Host workshops and community forums
- Develop educational materials specific to local issues
- Partner with schools, businesses, and community organizations

Benefits:

- Builds a sense of community responsibility for traffic safety
- Addresses behavioral aspects that engineering alone cannot solve
- Relatively low cost compared to many engineered interventions
- Can lead to long-term cultural changes in communities

Challenges:

- Results may take time to materialize
- Requires ongoing coordination and staffing
- Effectiveness difficult to measure precisely

Community-Led Traffic Calming Initiatives

Description: Programs that allow residents to initiate, develop, and implement traffic calming measures with technical support from County staff.

Implementation Approach:

- Establish clear application and qualification process
- Provide technical assistance for community-identified issues
- Develop cost-sharing options for implementations
- Create toolkit of approved measures for community selection

Benefits:

- Addresses concern most important to residents
- Builds community support for implementations
- Leverages local knowledge of traffic patterns
- Can be more responsive than traditional processes

Challenges:

- May create inequities between communities with different resources
- Requires staff time for coordination and technical support
- Can lead to piecemeal implementations without corridor-wide planning

Improving Intersection Sight Distance

Description: Strategic removal of visual obstructions at intersections to ensure drivers can see approaching vehicles, pedestrians, and cyclists.

Implementation Approach:

- Inventory intersections with sight distance concerns
- Restrict parking countywide within 20 feet of intersections
- Manage vegetation and other obstructions
- Establish community reporting tool for the public to identify intersections with visibility concerns

Benefits:

- Community-driven program that increases support for traffic calming measures
- Low cost for high safety benefit

Challenges:

- May create additional responsibilities for staff to monitor requests and analyze intersections
- May create public opposition when removing on-street parking, trees, or vegetation
- Ongoing maintenance requirements when addressing sight distance concerns related to trees and vegetation
- May not address speed-related issues

Neighborhood Speed Reduction Programs

Description: Comprehensive approaches to address speeding in residential areas through a combination of education, enforcement, and engineering measures.

Implementation Approach:

- Conduct speed studies to identify problem areas
- Implement targeted enforcement periods
- Deploy temporary speed feedback signs
- Work with residents to identify appropriate physical measures
- 85th percentile speed is 10 mph or greater above the posted speed limit

Benefits:

- Addresses multiple aspects of speeding behavior
- Builds community support for speed management and traffic calming
- Collects data to inform future interventions
- Can lead to sustained behavior change

Challenges:

- Requires coordination between multiple departments
- Enforcement presence cannot be maintained indefinitely
- May face resistance from residents
- Results may vary between neighborhoods

Residential Cut-Through Traffic Mitigation

Description: Residential cut-through traffic refers to vehicles using neighborhood streets as shortcuts without stopping or having a destination within the area. This creates unnecessary traffic burdens on local streets not designed for through traffic. To combat this, Prince William County collaborates with VDOT to implement mitigation strategies, including both traditional traffic calming measures and access restrictions like turn prohibitions.

Eligible Streets:

To qualify for cut-through traffic mitigation, streets must meet all of the following criteria:

- Classified as local residential streets (or function similarly, even if designated as collectors)
- Posted speed limit of 25 mph or less
- Two-lane roadways
- Do not serve as primary access to major commercial or industrial sites
- Have documented speeding problems
- Experience an average daily traffic volume between 600 and 4,000 vehicles
- Have at least 75% documented community support within the impacted area
- Additionally, a road must show that 40% or more of the hourly volume in one direction consists of cut-through traffic, with a minimum of 150 such trips in one hour
- Shall meet VDOT criteria and requires VDOT review and approval

Implementation Approach:

1. Initiation: The Board of County Supervisors (BOCS) adopts a resolution requesting VDOT to review the issue.
2. County Study: PWC DOT collects technical data, including traffic counts, classification, and verification of cut-through volumes and community support.
3. VDOT Evaluation:
 - Field reviews and studies by VDOT District Traffic Engineer
 - Analysis of alternate routes, intersection impacts, roadway geometry, and pedestrian safety
 - Public comment period and/or public hearing based on expected controversy
4. Mitigation Plan: Includes physical devices and access restrictions (e.g., left-/right-turn bans).
5. Installation: VDOT implements selected measures and conducts a follow-up evaluation within 1–6 months.
6. Adjustments: Based on effectiveness, measures may be refined or removed.

Benefits:

- Reduces non-local traffic on residential streets
- Improves neighborhood safety and livability
- Supports equitable use of roadway infrastructure
- Incorporates community input and approval

Responsibilities

County Responsibilities

The County is responsible for initiating the residential cut-through traffic measures.

Identification of the problem of residential cut-through traffic is done through resolution by the County Board of Supervisors requesting VDOT to review and address possible solutions. This request is submitted to VDOT Traffic Engineering, with the following support data compiled by County staff:

- Functional classification of the street(s) in question as a local residential street and its relationship to the comprehensive plan.
- Identification of the primary use area including all streets accessed primarily by using the study street(s) and associated roadway networks. The information will include the functional classification and relationship to the comprehensive plan for all streets in the primary use area.
- Verification by the County that cut-through traffic on the local residential street to be studied is 40% or more of the total one-hour single directional volume, with a minimum of 150 cut-through trips occurring in one hour in one direction. Acceptable planning techniques may be used to determine the amount of cut-through traffic. A description of the technique used should be provided to VDOT along with the vehicle volume data. Speed studies are typically conducted on Tuesdays, Wednesdays and Thursdays. Samples are collected over a 48-hour period, on non-holiday weeks and when weather permits.
- Verification by the County that the petition outlining the perceived problem area is signed by at least 75% of the total occupied households within the primary use area.
- Identification of alternate routes for through traffic if travel is restricted on the street(s) in question.

If these support data requirements are not met, the process is terminated.

VDOT Responsibilities

VDOT is responsible for completing a study of the roadway network identified in the formal request from the County. They will conduct this study in four phases:

1. VDOT Traffic Engineering will review and submit the adopted resolution along with any recommendations to the District Administrator.
2. When the County submits a study request to VDOT, a field meeting should be held between the County and VDOT staff. If a simple solution can be agreed upon at this meeting, an initial study or public hearing may not be necessary. VDOT should implement the solution, conduct an after-study and modify as needed. A task force should be established if the solution recommended is expected to generate a great deal of public interest or to significantly impact access and traffic circulation. The task force should include representatives from VDOT, Prince William County staff and residents.
3. As directed by the District Administrator, the District Traffic Engineer will conduct the necessary studies and evaluate the County's request. The District Traffic Engineer's study may include:

- Detailed traffic counts on existing affected streets and potentially affected streets.
 - Intersection analysis on the proposed alternative route(s). Residential cut-through traffic measures can only be implemented if the alternative routes are acceptable.
 - Identification of potential adverse safety impacts.
 - Identification of the geometrics of the existing facilities in light of the traffic analysis.
 - Speed analysis of the affected streets.
 - Pedestrian circulation and safety analysis in the study area.
4. After conducting the traffic studies, the District Traffic Engineer will provide the District Administrator with findings and recommendations. These recommendations will provide alternatives for reducing residential cut-through traffic. It will include any sketches or diagrams necessary to implement the alternatives, as well as the impact of each alternative on the existing roadway network. The District Administrator will determine the appropriate alternatives.

If the County and the District Administrator fail to agree on the remedial measures to be implemented, the Board of County Supervisors may appeal to the Commonwealth Transportation Commissioner. The Commonwealth Transportation Commissioner will analyze all the supporting data and render a binding decision.

Joint Responsibilities

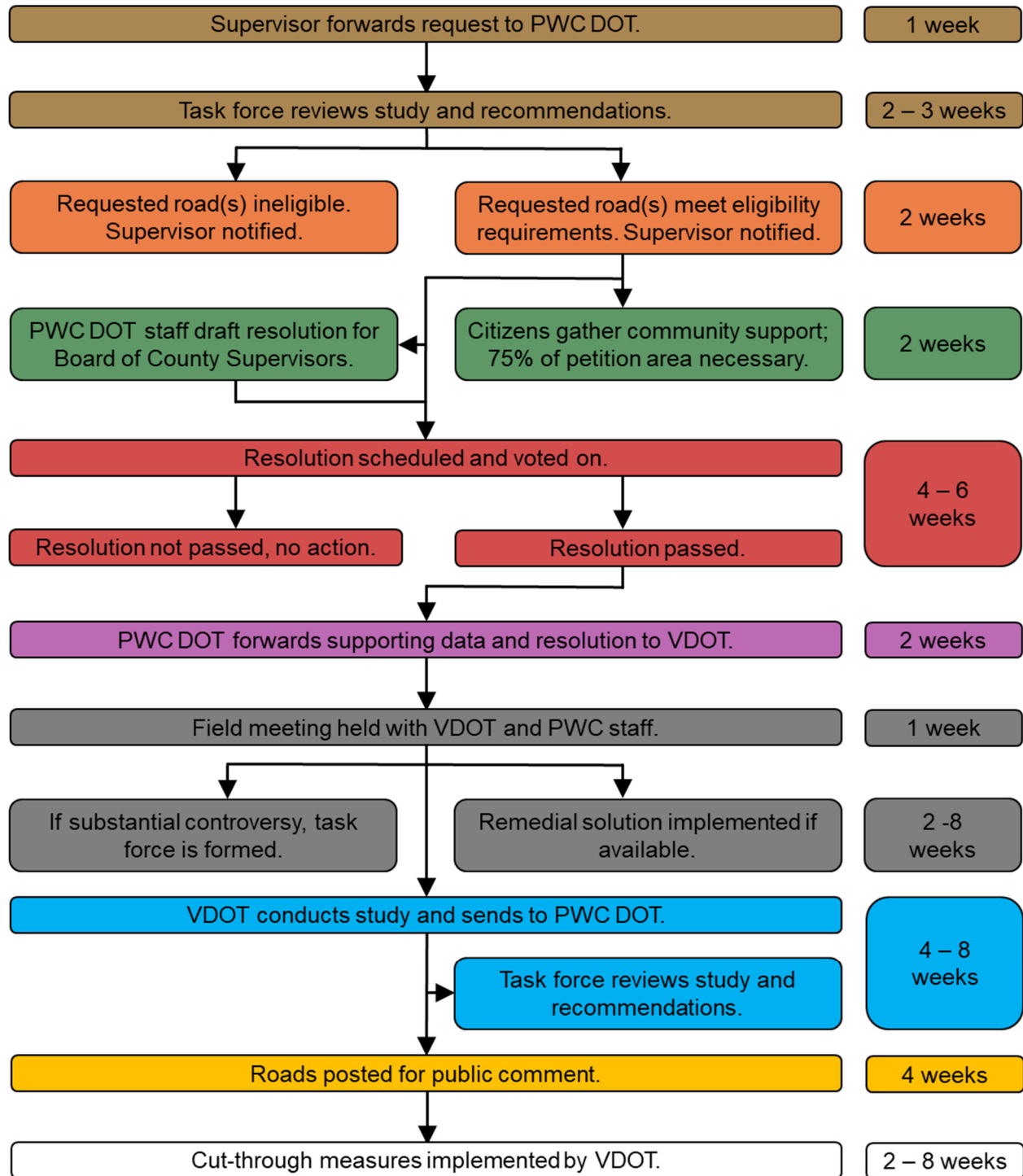
After receiving VDOT findings and recommendations, Prince William County will ask for comments from appropriate local agencies such as the Fire and Rescue Association, Police, and School Transportation.

VDOT and Prince William County will hold a public hearing to gain citizen input on the VDOT findings and recommendations. Advance notice of the public hearing must be provided by VDOT, including the following notice requirements:

- A notice placed by VDOT in a County newspaper once a week for at least two successive weeks.
- Notice posted by the County of the proposed hearing at the front door of the courthouse 10 days prior to the hearing.
- Signs placed by VDOT on the affected street(s) with a contact who can answer questions concerning the findings or recommendations.

The County will furnish a summary and transcript of the public hearing, and an approved resolution to VDOT.

Cut-Through Traffic Policy Flowchart



Through Truck Restriction Program

Description: Establish designated truck routes and/or truck restrictions to reduce truck volumes and heavy vehicles within residential areas. This program restricts through-truck traffic on any part of a secondary roadway designated as a local or collector road that is residential in nature, if a reasonable alternate route is available. The restriction is not applicable to trucks passing through a specific residential area that make at least one trip end within the area such as trucks making deliveries or trash service.

Implementation Approach:

Procedures for Considering Requests for Restriction Through-Trucks on Secondary Highways:

The County must take the following steps to restrict through-way traffic on secondary roads as required by Section § 46.2-809. Regulation of truck traffic on primary and secondary highways of the Code of Virginia:

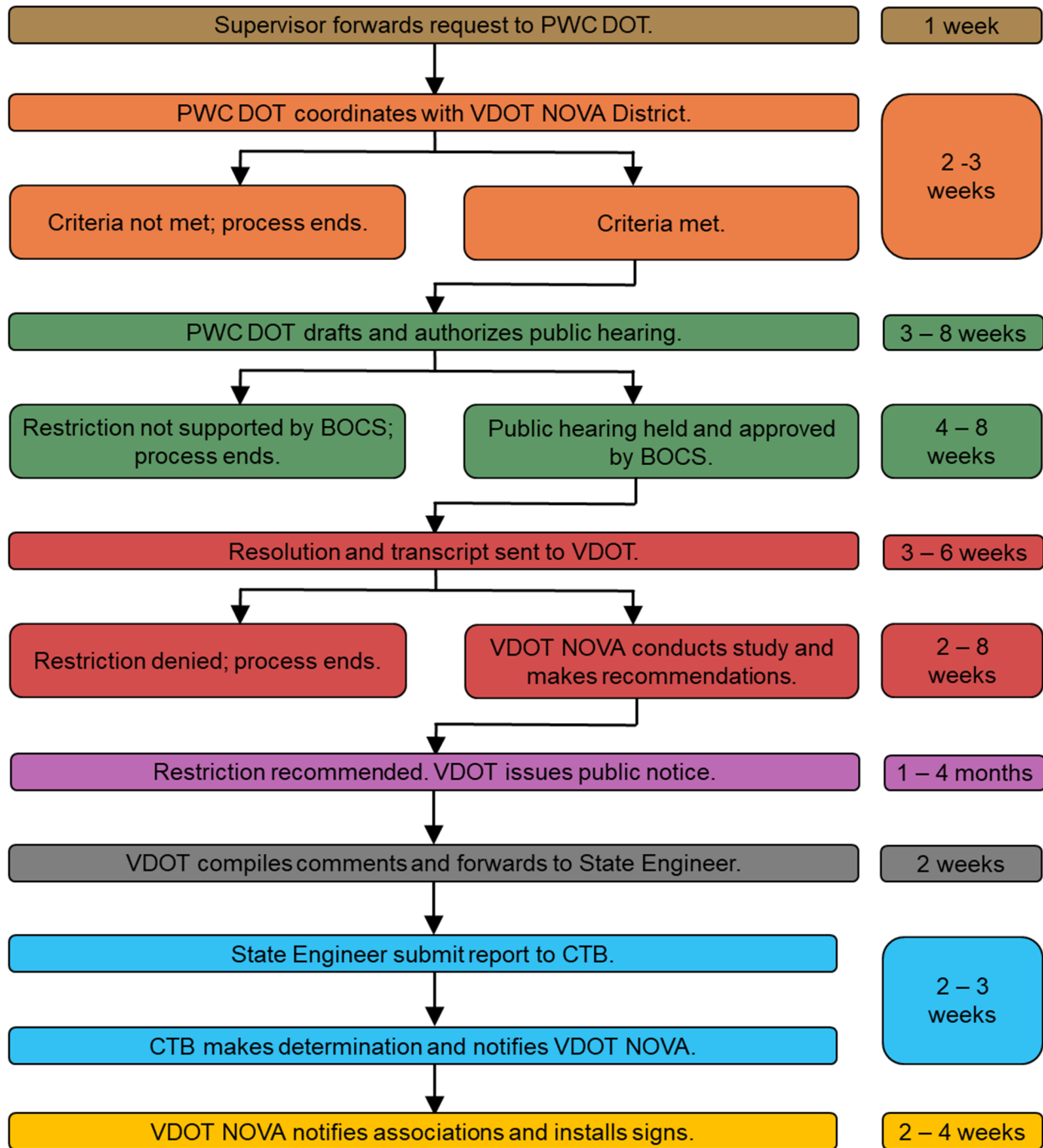
- 1) Hold a legally advertised public hearing, which must include:
 - A public notice with a description of the route(s) of the proposed through-truck restriction and alternate route(s) with the same termini. A copy of all public notices must be provided with this request.
 - A transcript of the hearing must be provided with the request to restrict through-trucks.
 - A copy of the adopted resolution describing the proposed through-truck restriction and a description of the alternative route with termini must be provided with the request.
 - Prince William County must include in the resolution that it will have the proposed restriction enforced by the appropriate local law enforcement agency.
 - A failure on the part of the County to comply with the above will result in the return of the request to the County for compliance.
- 2) The County must make a formal request through VDOT, certifying that it has met all the requirements noted in item #1. VDOT, upon acceptance of the truck restriction request will forward it to the District Traffic Engineer requesting consideration of the restriction, which will entail a study to be completed by the NOVA District Traffic Engineering staff.
- 3) The District Traffic Engineer will evaluate the following data:
 - The functional classification for the routes(s) proposed for the restrictions and for the route(s) proposed as an alternative.
 - A traffic engineering study to include:
 - a) Traffic volumes by vehicle type and date(s) for the route(s) proposed for restriction and the proposed alternative routes.

- b) A 12-hour origin/destination study of all trucks on the route(s) proposed for restriction by date.
 - c) The number and percentage of "through-trucks" on the route(s) proposed for restriction by date.
 - d) Comparison of driving runs on the routes proposed for restriction and alternate route(s) to indicate travel time/distance penalties or savings.
 - e) An inventory of roadway characteristics and geometrics for the route(s) proposed for restriction and the alternate route(s).
- 4) The District Traffic Engineer will secure and evaluate all available accident data for the route(s) proposed for restriction and the alternate route(s).
- 5) Following receipt of all requested data and information, the District Traffic Engineer will conduct a traffic and engineering study of the restriction request. This report will warrant action in one or more of the following categories:
- Publish public notice of the proposed restriction requesting written comment only.
 - Publish public notice of the proposed restriction and advise of VDOT's willingness to hold a public hearing if requested.
 - Publish a public notice of the time and place of a public hearing on the proposed restriction.

If a public hearing is required, VDOT will hold the hearing in accordance with established procedures. In conjunction with the public notice being published, signs will be erected at each end of the proposed restricted routes advising of the proposed restriction and listing an address for the public to send comments. The signs will be placed for a period of thirty (30) days. A copy of the public notice will be sent to the Virginia Trucking Association for distribution to the trucking industry and other interested parties.

- 6) The District will draft a report, with their recommendation and all pertinent materials (i.e. transcript of public hearing, if held, copy of published public notice, and any written or oral comments received). This report will be sent to the local Commonwealth Transportation Board (CTB) Member for comments and approval. Once approved, the report is then forwarded to the State Traffic Engineer.
- 7) The State Traffic Engineer will review all data and material in addition to the District Traffic Engineer's recommendation. A report will be prepared and submitted to the Commissioner of the Commonwealth Transportation Board (CTB) recommending approval or denial of the proposed restriction.
- 8) Following approval from the Commonwealth Transportation Board (CTB), the District Traffic Engineer may notify the Virginia Trucking Association and will install signs on the route(s).

Through Truck Restriction Flowchart



Watch for Children Signage

Introduction: On July 1997, the Commonwealth Transportation Board (CTB) adopted this policy. In the 2012 General Assembly, HB 914 was passed to amend the Code of Virginia, which became effective July 1, 2012. The amended code provides that the County or town may install and maintain “Watch for Children” warning signs (W15-V1) at certain locations through an agreement with the Commissioner and that the County or town will pay for the associated purchase, installation and maintenance costs. The amended section deleted previous language stipulating the source of funding to be used by the County for such signs.

Implementation Approach: The governing body of any County or town may enter into an agreement with the Commissioner allowing the County or town to install and maintain, at locations specified in such agreement, signs alerting motorists that children may be at play nearby. This Agreement for the Installation and Maintenance of Watch for Children Signs was approved on December 6, 2012. The cost of the signs and their installation shall be paid by the County.

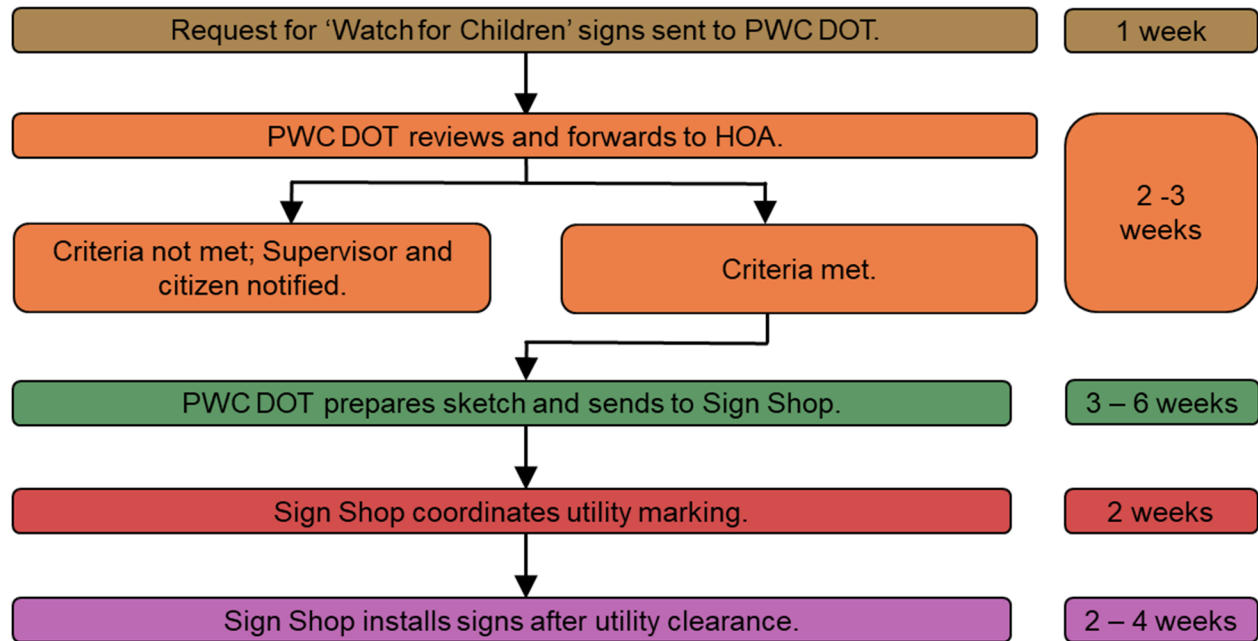
“**Persons with Disability**” warning signs are installed and maintained by VDOT. Requests for “Persons with Disability” signs should be made directly to VDOT. PWCDOT staff can assist members of the community with submitting these requests to VDOT. It is not recommended to post individual streets with these signs since demographics constantly change (families). The result would be inherent disregard for the signs since they would be posted on every street in every community and there would be budgetary constraints of installing these indiscriminately countywide. With this in mind, it is recommended these signs be installed at entry points to communities.

Process: Prince William County may install and maintain these signs. The following process has been established:

- 1) PWC DOT reviews the requested road(s) to determine if eligibility requirements are met.
- 2) After the review, the PWC DOT provides a sketch recommending the sign placement.
- 3) The source of funding for the installation of the signs is identified from:
 - Country Traffic Safety Sign Budget;
 - Direct contributions/grants made for such purpose to the governing body; or,
 - Other sources provided by Prince William County.
- 4) Generally, "WATCH FOR CHILDREN" signs are installed only on secondary roads within residential areas at entry points of communities.
- 5) Under a countywide VDOT permit, PWC DOT will install the “Watch for Children” sign(s).

All signs installed by PWC DOT under this policy will be designed in accordance with VDOT standards and require VDOT review prior to installation.

Watch for Children Flowchart



\$200 Additional Fine for Speeding Signs

Background

Roads designated as having the \$200 fine in addition to normally imposed fines for speeding are posted as such below the existing speed limit signs. County and state staff found that once an individual street within a community had their road designated for additional fines, other streets within the same neighborhood requested the signs to be installed as well. This required VDOT to post an additional speed limit 25 MPH and additional fines for speeding signs. As communities proliferated with these signs, we realized it would be more practical to have the entire community support the additional fines. Hence, it could be posted at the entry points of the neighborhoods where the existing speed limit signs are. The addition of the signs typically takes place beneath existing speed limit signs but will be reviewed on a case-by-case basis to determine if additional speed limit signs are necessary to clarify the designated area. An entire community can be subject to the additional fines for speeding without posting the individual streets within the community. For these reasons, we encourage that the neighborhoods become involved in designating additional fines for speeding for entire communities.

Purpose

The purpose of this policy is to address the issue of vehicles exceeding the posted speed limit on local residential and collector streets that have residential characteristics.

Petition for Speeding Additional \$200 Fine

At least 51% of the total occupied households in the impacted area must sign a petition requesting additional fines for speeding. The petition area encompasses residences on the proposed study street section, and all streets that have access to it. Petition areas are developed in coordination between PWC DOT staff and the appropriate Supervisor's office. All petitions received must have dated signatures and will be valid for (12) months. These petitions will be verified by PWC DOT staff to ensure compliance with the required percentages. Typically, the appropriate District Supervisor's office handles providing the petition to interested citizens to gather support. Once received, the Supervisor's office forwards the petition to the PWC DOT for verification. The County will verify that the petition is valid and draft a resolution for the County Board of Supervisors requesting VDOT to impose the additional fines.

Based on the size of the community in question, the requirement for a petition may not be practical. In those cases, a resolution from the homeowner's association, board of directors or similar support can be used instead of a petition. This will be reviewed on a case-by-case basis and coordinated by County staff. If an entire community is requested for the additional fines, PWC DOT will post the entry points for public comments. These comments are compiled and forwarded to the appropriate County Supervisor for consideration.

CTB Policy

It is the Commonwealth Transportation Board's (CTB) policy that VDOT, upon a formal request from Prince William County, install these signs on local residential and collector streets. These streets must have a posted speed limit of 35 mph or less and be part of the VDOT system (no private roads are eligible for this policy). This policy is also not applicable to highways in the state primary system (roads with route numbers 600 and below). The warning signs advise motorists of an additional fine up to \$200 above other penalties provided by law, for exceeding the posted speed limit in certain designated residential districts.

Definitions

The following definitions apply to this policy:

- **"Local Residential Streets"** are roadways built as part of a residential development or a roadway where residential development has taken place resulting in a neighborhood or community resembling a residential development. Further, a local residential street must have residential units facing the street and provide driveway connections or curbside parking for a majority of the residential units.
- **"Collector Streets and Roads"** are roads exhibiting the residential characteristics listed for local residential streets as well as serving traffic movements between residential areas and major roadways.
- **"Residence District"** means the area bordering a road, not part of a business district, where 75% or more of the property along a distance of 300 feet or more on either side of the road is occupied by dwellings and land improved for dwelling purposes.

Criteria

To qualify for sign installation, a road(s) shall meet the following criteria:

- Documented speeding problem per the traffic calming requirements
- Meet the definitions of a local or residential street
- Have a posted speed limit of 35 miles per hour or less
- Gained community support
- Accepted into the state system (no private roads)

*Responsibilities***County Responsibilities**

To initiate these procedures, Prince William County shall first request that VDOT conduct a review of the road(s) in question to verify eligibility. If criteria are met, the County will request by resolution that VDOT install the appropriate signs as stipulated.

This request shall be submitted to VDOT in the form of a resolution, along with the following support data:

1. Identification of the neighborhood or specific road(s) where signs are requested.
2. Confirmation that the road(s) meet the definitions of local and collector streets as listed in this section definition.
3. Notification that a speeding problem exists and that the requested increased penalty has community support.

VDOT Responsibilities

It is the responsibility of VDOT to review the requested road(s) in question to verify eligibility requirements. Then, to provide, install and maintain the signs once the resolution is received.

The following procedure will be observed:

1. VDOT Traffic Engineering receives the request and confirms eligibility with PWC DOT.
2. VDOT, upon receipt of the adopted resolution and support data, will review the package and forward it to the District Traffic Engineer.
3. The District Traffic Engineer will review, reconfirm eligibility and forward a sketch to the VDOT Traffic Field Operations for sign installation. VDOT Traffic Engineering staff will inform County staff when the signs are installed.
4. Sign installation under this policy will typically take place within 60 days of the date the resolution is approved and received by the District Traffic Engineer.
5. The District Traffic Engineer or their representative will notify the VDOT Traffic Engineering Central Office of the location and date of installation of the signs so that records can be kept at their facility.

Parking Management

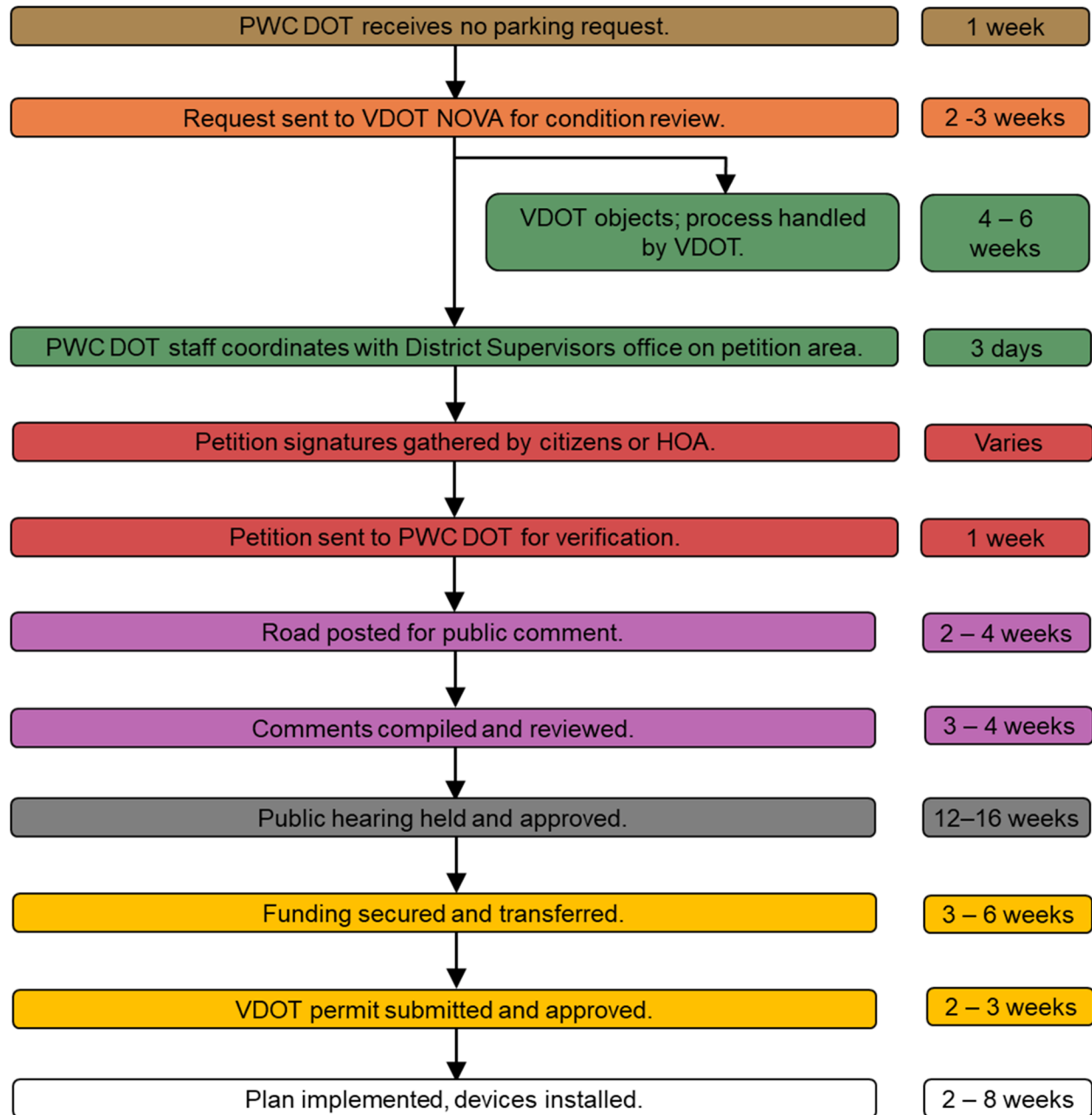
Overview of Parking Restrictions

Prince William County receives various requests related to on-street parking, particularly when it concerns emergency access or roadway width limitations. This section outlines the County's and VDOT's roles in evaluating and approving parking restrictions, including the distinction between state-maintained and private roads. Requests typically stem from community concerns about safety, emergency response time, and traffic capacity.

General Parking Restrictions Policy

PWC evaluates parking restriction requests on VDOT-maintained roads when concerns arise over safety (e.g., sight distance), access (e.g., less than 29 feet curb-to-curb), or emergency response. Roads under 29 feet may only support partial parking, and in narrow or curved streets, parking may be restricted. Requests require a public petition or HOA resolution, a public comment period, and approval by the Board of Supervisors.

Parking Restrictions Process Flowchart



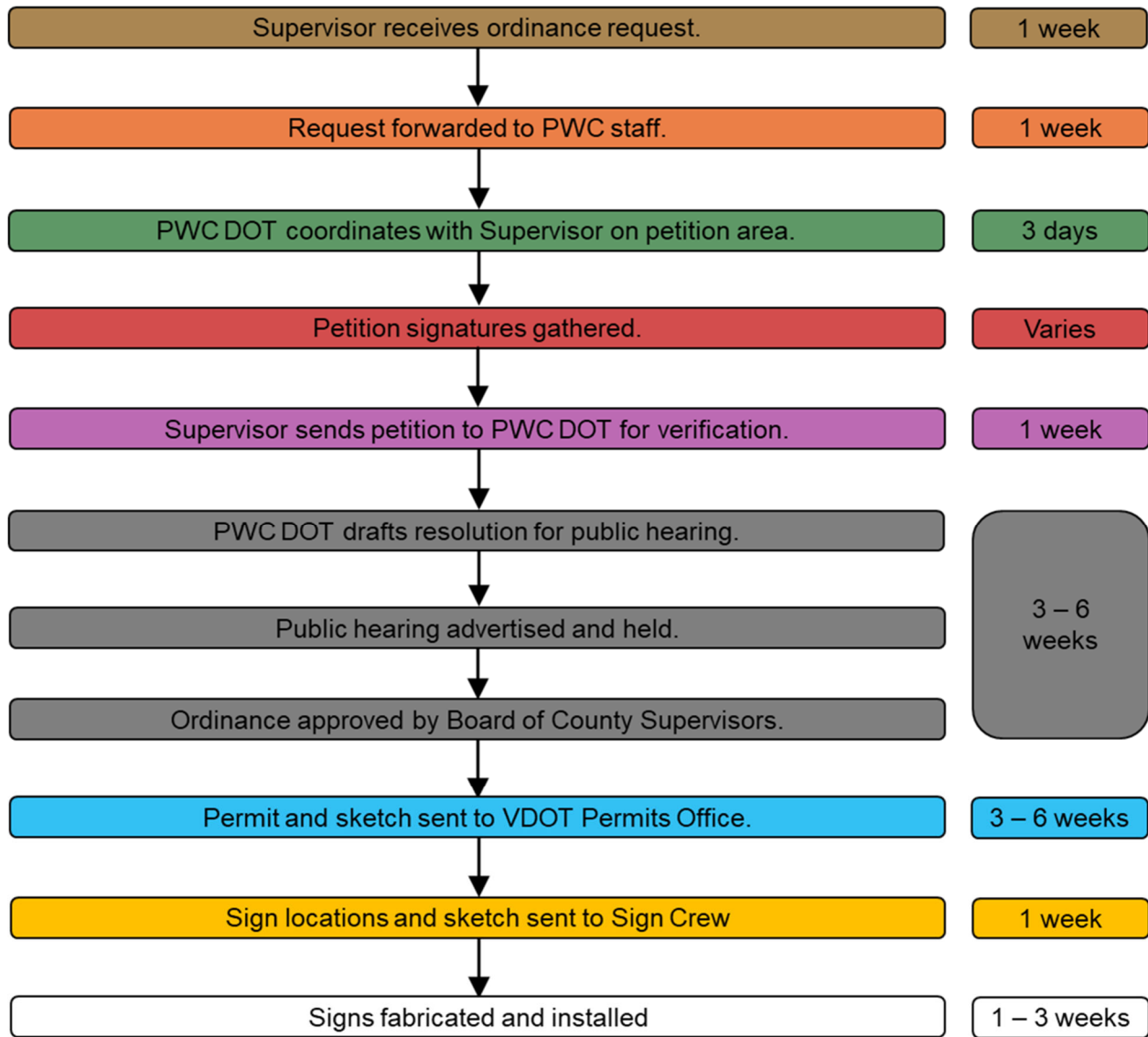
County Code – Sec. 13-320: General Parking Prohibitions

- A. No person shall park a vehicle, except when necessary to avoid other traffic or in compliance with the directions of a police officer or traffic control device, in any of the following places:
- 1) On a sidewalk.
 - 2) Within an intersection.
 - 3) In front of a public or private driveway.
 - 4) Within 15 feet of a fire hydrant.
 - 5) On a crosswalk.
 - 6) Within 20 feet of a crosswalk at an intersection; provided that, where there is no crosswalk at an intersection, no person shall park a vehicle within 20 feet from the intersection of curb lines or, if none, within 15 feet of the intersection of property lines.
 - 7) Within 30 feet of any flashing beacon, stop sign or traffic control signal located at the side of a roadway.
 - 8) Between a safety zone and the adjacent curb or within 30 feet of points on the curb immediately opposite the ends of a safety zone, unless a different length is indicated by official signs or markings.
 - 9) Within 50 feet of the nearest rail of a railroad grade crossing.
 - 10) Within 15 feet of the driveway, the entrance to any fire station and, on the side of a street opposite the entrance to any fire station, within 75 feet of the entrance, when properly signposted.
 - 11) Alongside or opposite any street excavation or obstruction, when such parking would obstruct traffic.
 - 12) On the roadway side of any vehicle parked at the edge or curb of a street or to leave more than two feet between the vehicle and the edge or curb, measured at the nearest point of the vehicle to the curb or edge.
 - 13) Upon any bridge or other elevated structure upon a highway or within a tunnel.
 - 14) At any place where official signs prohibit parking.
- B. Law enforcement officers may move motor vehicles to any place they may deem expedient without regard to the provisions of this section, when in the performance of their lawful duties. (Code 1965, § 12.1-138)

Ordinance 13-320.1 – Restriction of Watercraft, Trailers, RVs, and Camping Trailers

Under County Code §13-320.1, the Board of County Supervisors can restrict parking of watercraft, boat trailers, motor homes, and camping trailers within specific residential areas. Communities may request these restrictions through a petition signed by at least 51% of affected households or an HOA resolution. Following a public hearing and approval, signs are installed at entry points or throughout the neighborhood. Only state-maintained roads are eligible.

Ordinance 13-320.1 Restriction of Watercraft, Trailers, RVs, and Camping Trailers- Process Flowchart



Parking Restrictions for Certain Vehicle Types

§ 46.2-1222.1. of the Code of Virginia states that Prince William County may by ordinance regulate or prohibit the parking on any public highway in such county or town of any or all of the following: (i) **watercraft**; (ii) **boat trailers**; (iii) **motor homes**, as defined in § 46.2-100; and (iv) **camping trailers**, as defined in § 46.2-100. Individual districts (areas) have been established prohibiting these types of vehicles. In addition, Prince William County Code Section 13-327 states that commercial vehicles are prohibited from parking in any residence district countywide. The definition of commercial vehicles includes **any trailer**.

In addition, commercial vehicles are:

Any solid waste collection vehicle, tractor truck or tractor truck/semitrailer or tractor truck/trailer combination, dump truck, concrete mixer truck, towing and recovery vehicle with a registered gross weight of 12,000 pounds or more, and any heavy construction equipment, whether located on the highway or on a truck, trailer or semitrailer.

Company trucks (i.e., vans with company logos) are not considered commercial vehicles and can park on state-maintained roadways in any residence district. A residence district means the territory contiguous to a highway, not comprising a business district, where 75 percent or more of the property abutting such highway, on either side of the highway, for a distance of 300 feet or more along the highway consists of land improved for dwelling purposes.

Parking Restrictions on Private Roads Open to Public Use

Parking enforcement on private roads is the responsibility of the HOA or managing entity. However, if signs and markings meet MUTCD standards, Prince William County Police may enforce no parking areas. Developers must be released from bonds or amend plans before no parking rules are applied. Private HOAs may set rules, but the County and VDOT do not enforce HOA covenants.

No Parking - Roads Under Developer Control

In order for an HOA to designate no parking areas on private streets, the developer must be released from their bond or have an approved set of plans reflecting the no parking designation. If the developer is not released from their bond, then a plan revision would be necessary and must go through the approval process to designate no parking areas. Once the developer is off of bond, the HOA or responsible entity has the authority to regulate parking on private streets as they deem necessary.

HOA Covenants

The County and State have no involvement in covenants, which are private contracts, and neither VDOT nor the County would enforce them in any respect. VDOT enforces State laws, and the County enforces County ordinances.

Local Speed Limit Reduction Policy

(Adopted under Code of Virginia § 46.2-1300 and HB 1071, effective July 1, 2024)

Prince William County (PWC) adopts this policy to guide the reduction of posted speed limits below **25 miles per hour**, in accordance with **§ 46.2-1300 of the Code of Virginia**, as amended by HB 1071. This policy applies to public roads, including those within the state highway system—located in residence or business districts where the posted speed limit is currently **25 mph**. Reductions may lower the limit to **20 mph** on state-maintained roads, provided all the conditions outlined are met, and can be reduced to **20 mph** or **15 mph** on privately maintained roads. The policy ensures local implementation is consistent with the **Virginia Department of Transportation (VDOT) technical guidance**, the **Manual on Uniform Traffic Control Devices (MUTCD)**, and the **Virginia Supplement to the MUTCD**.

Eligibility Criteria

To be eligible for speed limit reduction, the following must be met:

- Existing Speed Limit Signage:
 - The roadway must currently have 25 MPH signs installed (**R2-1** signs in both directions at the beginning of the zone).
 - A single **R2-1** sign with a supplemental **R2-5P** plaque (“Unless Otherwise Posted”) is permitted for neighborhood or town entrances.
 - Roads not currently signed may not be reduced unless VDOT first installs 25 MPH signs under IIM-TE-365.

- District Type:

The roadway must be in a:

- Residence District, where 75% or more of the frontage over a distance of 300 feet is residential, zoned residential, or within a subdivision; or
- Business District, where 75% or more of the frontage is used for commercial or business purposes.
- Permissible Reductions:
 - Only 20 mph reductions are permitted.
 - Speed limits must be posted in 5 mph increments per MUTCD.

Legal and Procedural Requirements

All speed limit changes must be established via a formal ordinance adopted by the County and indicated by lawfully placed signs that conform to MUTCD and VDOT standards.

For roads in the state highway system:

- Prince William County must submit written notice to VDOT at least 30 days prior to the planned speed limit change.
- The submission must include:
 - A copy of the ordinance
 - Street name, route number, and termini
 - Documentation of existing 25 MPH signage
 - Proof that the area qualifies as a residence or business district
 - A sign layout map or diagram showing:
 - All proposed, replaced, or relocated signs
 - Transitions, advance warnings, and school zone signs (if affected)
- If the change affects a traffic signal, the County must:
 - Submit new clearance/change intervals based on IIM-TE-306^[5]
 - Request VDOT assistance if needed (at County's expense)
- If the change affects a school zone, the County must:
 - Follow VDOT IIM-TE-183.1
 - Re-establish or remove the school zone speed limit as appropriate
 - Pay for any required signage modifications

Once approved, the County must apply for a Land Use Permit for Locality-Reduced Speed Limits (LUP-LRSL) before installing signs.

Implementation and Inspection Process

The implementation process includes the following steps:

1. County receives request for Local Speed Limit Reduction
2. County adopts and submits ordinance and submits to VDOT
3. VDOT reviews and issues comments or adjustments
4. County submits LUP-LRSL permit
5. County installs all signage per VDOT's conditions
6. County notifies VDOT upon installation completion
7. VDOT inspects and verifies compliance
8. VDOT files the change using the TE-382 form, recording it in the statewide RNS database

Best Practices and Application Limits

Speed limit reductions are most effective when applied in:

- Dense residential or business areas with:
 - On-street parking
 - Pedestrian activity
 - Sidewalks or crosswalks

Reductions should not be used on:

- Arterials or collector roads with through traffic
- Long, wide, low-density subdivision streets with little enforcement

The minimum length of a reduced speed zone should be 0.2 miles (1,056 feet) to avoid confusion and promote compliance.

Locality Responsibilities

Prince William County is responsible for:

- Purchasing, installing, and maintaining:
 - R2-1 Speed Limit signs
 - Warning and transition signs
 - School-related signage (if applicable)
 - Foundations and signposts
- Clearly labeling new signs with:
 - Locality name
 - Installation date
- Removing any signs that are no longer applicable
- Covering all costs, including:
 - VDOT assistance (e.g., signal retiming)
 - Revised school signage
 - Sign installation labor and materials

Enforcement and Reversal

If the reduced speed limit creates operational or safety issues, or roadway conditions change, VDOT and the County must collaborate to restore the original 25 mph limit. Restoration requires:

- A new ordinance by the County
- Removal of reduced speed signage
- Resubmittal of TE-382 for database update

References

VDOT Traffic Calming Guide for Local Residential Streets – 11/2017

VDOT Subdivision Street Design Guide

Manual on Uniform Traffic Control Devices (MUTCD) – 2023 Edition

Code of Virginia § 46.2-878.2 – Installation of Signs Advising of Maximum Penalty for Exceeding Posted Speed Limit

Code of Virginia § 33.2-210 – Installation and Maintenance of Certain Signs in Counties and Towns

Code of Virginia § 46.2-1222.1 – Regulation or Prohibition of Parking of Certain Vehicles in Certain Counties

Code of Virginia § 46.2-1222.1 Definitions

Prince William County Code § 13-327 – Limitation on Parking Commercial Vehicles in Residence Districts

Prince William County Code § 13-320 – Restricted Parking Areas

VDOT Residential Cut-Through Traffic Program (2020)

VDOT Traffic Calming Guide for Neighborhood Streets (2018)

VDOT IIM-TE-365: Speed Limit Change Process on State-Maintained Roads

Code of Virginia § 46.2-100: Definitions of “Business District” and “Residence District”

MUTCD & Virginia Supplement (24VAC30-315-10)

Code of Virginia § 46.2-1300(C); Notice required 30 days prior

VDOT IIM-TE-306: Signal Timing and Clearance Intervals

VDOT IIM-TE-183.1: School Zone Speed Limit Guidance