

WRITTEN PUBLIC COMMENTS ON
Proposed Access Management Regulations (24VAC30-73) and
Design Standards for Entrances/Intersections (Road Design Manual Appendix G)
for Minor Arterials, Collectors, and Local Streets

Steve Adams, Chesterfield County Dept of Transportation	As a department, we understand how important it is to manage access along arterials and collectors and support VDOT in this endeavor; however, we are concerned that a simple approach is being proposed for a complex issue. The standards address the state as a whole, but do not provide flexibility to the VDOT residencies and locality to work together to make good engineering judgments where appropriate.
VDOT Response	The spacing standards, while applying to all state highways, are based on several variables to fit the standard to the situation: functional classification, urban vs. rural, speed limit, and type of entrance/intersection. A locality/VDOT approved highway corridor plan offers the flexibility to establish spacing standards unique to the corridor. A locality can adopt higher entrance standards that supersede VDOT's (24VAC30-73-60).
VDOT Response	Section 73-20 B does not address vested property rights as it pertains to previously approved zoning cases by the localities' governing body. For many years, Chesterfield County has made access management a high priority in the land development process. In many cases, the first stage in land development is zoning the property, which requires staff review and the Board of Supervisors' approval. The County Transportation Dept evaluates the request and determines the number of access points and road improvements in order to mitigate for the development's impact on the road network. These improvements are usually incorporated by the developer as textual proffers. In many cases, an exhibit has not been proffered. The regulations do not exempt previous zoning cases in which access management have been addressed through textual proffers. The regulations require a specific entrance location to be proffered. We recommend the regulations be modified to exempt developments in cases where access points have been proffered through textual statements and/or exhibits.
VDOT Response	Chesterfield is somewhat unique in its use of textual statements for proffers rather than plans of development and diagrams that illustrate details associated with the proposed use of the property. However written proffered conditions can be drafted to identify the specific location of an entrance, for example through distance from property boundaries. To address this situation, 24VAC30-73-20 B, now 24VAC30-73-120 C.3, has been amended to exempt a proffered written condition of development that identifies the specific location of an entrance or entrances. A property right to an entrance location cannot be vested if the location is not known.
VDOT Response	Section 73-20. The regulations exempt preliminary subdivision plats and site plans which have been approved. There are no exemptions for those plats/plans which have been reviewed and commented on by the department. We recommend exemptions be granted for the following circumstances: 1) Subdivisions/site plans submitted prior to the 10/1/09; 2) Subdivisions/site plans which have been reviewed and commented on by the department prior to October 1st. This would include tentative subdivisions and preliminary site plans, if applicable.
VDOT Response	This regulation references the Code sections that establish the validity or vesting of locality approved site plans and subdivision plats, and then extends this legal validity/vesting to the location of the entrances shown on these documents. 24VAC30-73-20 B, now 24VAC30-73-120 C.3, has been amended to also grandfather entrance locations identified on site plans and subdivision plats that <i>VDOT has approved</i> prior to the October 1 effective date. However, such vesting would still be dependent on the locality approving the documents after the effective date.

VDOT Response	<p>Section 73-120 A. We recommend modifying this section to provide the District Administrator’s designee to have the authority to approve exception request in cases where the location of an entrance is within the limits of an access management plan approved by the locality and/or VDOT. The regulation does not allow for a locality approved access plan to serve as an access plan for the development. This would impact many access plans approved by the County prior to the regulations being adopted. We recommend the regulation provide the ability for VDOT to use previously approved access plans by the locality as a basis for exception.</p>
VDOT Response	<p>A locality approved access management corridor plan for a VDOT controlled highway that specifies entrance/intersection spacing different from the spacing standards in Appendix G can be submitted to VDOT for review and approval.</p>
VDOT Response	<p>Section 73-120 B. A request for exception requires the applicant to submit a traffic engineering investigation report to the DA’s designee for consideration. We recommend providing a “stream-line” process in cases where an applicant is located in an area with an access plan, proffered conditions of zoning prior to regulations, or is located along an “older, established business corridor.” In cases as mentioned above, the applicant would make a written request to the District Administrator’s designee without a traffic report. The District Administrator’s designee may then request additional information, approve the request, or deny the request. This process may help avoid lengthy delays in the exception process.</p>
VDOT Response	<p>This section, now 24VAC30-73-120 C, has been amended to make it clear that traffic engineering studies are not necessarily required for certain exceptions identified in the 24VAC30-73-120, such as for shared entrances and vehicular/pedestrian connections to adjacent properties. VDOT decisions on exception requests will be made in a timely manner, if the proper documentation has been provided by the applicant. A more detailed description of the exception request process along with a deadline for a decision on the request has been added to Section 73-120 B, now 73-120 D.</p>
Fairfax County Board of Supervisors	<p>The Fairfax County Board of Supervisors’ comments on the proposed Access Management Regulations and Appendix G of the Road Design Manual:</p> <p>The proposed Access Management Regulations and Standards for Minor Arterials, Collectors, and Local Streets could preclude high quality urban design in places like Tysons Corner and elsewhere, and could negate the effectiveness of VDOT’s well designed revisions to subdivision street acceptance standards, by effectively requiring that individual subdivisions are not well connected with one another.</p>
VDOT Response	<p>VDOT can approve local access management plans for specific highway corridors that establish entrance/intersection spacing standards that differ from those in the proposed standards. 24VAC30-73-120 includes regulations on shared entrances and vehicular/pedestrian circulation between adjoining parcels, which promote connectivity. The regulations, though, do not address connectivity between subdivisions and as such do not conflict with the new Secondary Street Acceptance Requirements (24VAC30-92).</p>
	<p>It is important to ensure that these standards do not discourage implementation of smart growth urban design principles in Fairfax County, as such all Mixed-Use centers in the County, as defined by the Comprehensive Plan, should be exempt from these regulations.</p>

VDOT Response	<p>A variety of exceptions are identified in section 24VAC30-73-120 that recognizes there will be situations where a rule or standard cannot be met (e.g. adjacent landowner refuses to share an entrance). 24VAC30-73-120 A 3, now 73-120 C 3, describes an exception to the entrance and intersection spacing standards in locality designated urban development areas for mixed use developments that incorporate the principles of new urbanism and traditional neighborhood development. This exception has been expanded to include developments in areas designated in the locality's comprehensive plan for higher density development. The regulations also promote interparcel connectivity design principles.</p>
	<p>By forcing more cars into fewer intersections, the intersections will have to become larger and therefore less accessible to bikes and pedestrians. These regulations are well designed for rural areas where it does make sense to reduce curb cuts and intersections to the maximum degree possible. They would be counterproductive in suburban or urban areas that are trying to encourage a balanced transportation system that encourages walking, biking, and the use of transit.</p>
VDOT Response	<p>It is important to note that national research studies have found that reducing the number of entrances improves pedestrian and bicyclist safety by reducing pedestrian-vehicle and bicyclist-vehicle conflicts and that too closely spaced intersections degrades traffic operations producing congestion and air pollution as well as increasing vehicular crash rates. We have included additional guidelines in Appendix G on bike/pedestrian accessibility. The VDOT web site offers information on VDOT policies for accommodating bicycling and walking on state highways, including the "Bike & Pedestrian Implementation Guide for Locality Involvement." The proposed 660 ft spacing for unsignalized intersections on urban collectors with speed limits 45 mph or less has been reduced to 440 feet to help address this concern.</p>
<p>Katherine Ichter Fairfax County Dept of Transportation</p>	<p>General Comments on the proposed Access Management Regulations and Appendix G of the Road Design Manual:</p> <p>The regulations and standards are heavily oriented towards vehicular traffic flow and increasing capacity by limiting traffic signals and intersection spacing. There needs to be more explicit consideration of accommodating pedestrians and bicycles in the transportation system.</p>
VDOT Response	<p>The goals of the access management enabling legislation § 33.1-198.1 of the Code are to reduce congestion, fuel consumption, air pollution, traffic crashes, and the need for new or wider highways as well as to maximize the performance of existing highways. Recent, unprecedented cuts in highway construction funding underscores the critical importance of implementing access management to achieve these goals. We have included additional guidelines in Appendix G on bike/pedestrian accessibility and reference the VDOT web page that includes information on VDOT policies for accommodating bicycling and walking on state highways, including the "Bike & Pedestrian Implementation Guide for Locality Involvement." The regulations also support new urbanism development with pedestrian/bicycle friendly design.</p>
	<p>The proposed access spacing standards, turn lane lengths, and other elements often cannot be met urban areas such as Fairfax County, particularly in retrofit situations and in areas such as Tysons Corner, Springfield, Annandale, Merrifield, Springfield, and others which are planned for higher density and town centers within urban grid systems.</p>

VDOT Response	A variety of exceptions are identified in section 24VAC30-73-120 that recognizes there will be situations where a rule or standard cannot be met (e.g. adjacent landowner refuses to share an entrance). 24VAC30-73-120 A 3, now 73-120 C 3, includes an exception to the entrance and intersection spacing standards in locality designated urban development areas for mixed use developments that incorporate the principles of new urbanism and traditional neighborhood development. The regulations also promote interparcel connectivity design principles. The spacing standards are based on several variables to fit the standard to the situation: functional classification, urban vs. rural, speed limit, and type of entrance/intersection. The proposed spacing for unsignalized intersections on urban collectors with speed limits 45 mph or less has been reduced to 440 feet. Finally, a locality/VDOT approved access management highway corridor plan can establish spacing standards that differ from VDOT's.
VDOT Response	It is not clear how the transition period will work in implementing these new standards and regulations. Many of the topics covered in new Appendix G of the Road Design Manual are also covered in existing Appendix C and the process for obtaining design waivers is different.
VDOT Response	Once the proposed regulations and standards take effect, VDOT plans to consolidate the Appendix G standards with Appendix F (Principal Arterials) to produce one document for all highway types. We also plan to consolidate the access management regulations so there is only one set of regulations for all functional classifications. This will make it less confusing for the user.
VDOT Response	<p>Specific Comments on the proposed Access Management Regulations:</p> <p>Page 7, 24VAC30-73-20 B. What is meant by “was proffered”, recommend being more specific, is the rezoning submitted or approved?</p>
VDOT Response	24VAC30-73-20 B, now 73-120 C 3, references the conditional zoning sections of the Code. We have amended this section to specify that the provision applies to <i>locality approved rezonings</i> .
VDOT Response	Page 7, 24VAC30-73-20 B. Recommend that all plans submitted by October 1, rather than only plans that have been approved by October 1. Every plan that is in the process of being reviewed or bonded, including second submissions, would have to comply to the new requirements if it is just approved.
VDOT Response	This regulation references the Code sections that establish the validity or vesting of locality approved site plans and subdivision plats, and then extends this legal validity/vesting to the location of the entrances shown on these documents. 24VAC30-73-20 B, now 73-120 C3, has been amended to grandfather entrance locations identified on site plans and subdivision plats that <i>VDOT has approved</i> prior to the October 1 effective date. However, such vesting would still be dependent on the locality approving the documents after the effective date.
VDOT Response	Page 5, 24VAC30-73-10. According to the definition for private entrance, the entrance is limited to serving up to two private residences. Fairfax County allows pipestem driveways up to five residences. Does this mean that pipestem driveways serving more than two residences would be required to meet intersection sight distance? This would be difficult to provide given on-street parking. There may be other counties that have this situation as well. Please make the requirement clear and feasible.
VDOT Response	Pipestem driveways serving more than two lots are considered commercial entrances under the proposed regulations as well as the current Minimum Standards of Entrances to State Highways, 24VAC30-71. As such, VDOT currently reviews such entrances for sight distance. Subdivision streets designed to VDOT standards should provide adequate sight distance at such driveway connections. The regulations and standards allow entrance design details to be modified to suit actual conditions and since the County minimum 18 ft pipestem driveway width is sufficient for the traffic generated by five residences, VDOT can approve of such driveway entrances.

VDOT Response	Page 10, 24VAC30-73-50 B. Please check the reference to the Manual on Uniform Traffic Control Devices; it is not clear where in the MUTCD there are requirements set forth that would form the basis for an engineering report on sight distance exceptions (methodology and format).
	The correct citation is the VDOT Location and Design Division's <i>Instructional and Informational Memorandum IIM-LD-227</i> for requirements concerning Federal Highway Administration (FHWA) approval of sight distance waiver. This change has been made.
VDOT Response	Page 10, 24VAC30-73-60 A. It is not clear if/how the VDOT Land Use Permit Manual will be used in conjunction with the new regulations.
	We have coordinated the preparation of the regulations with the Land Use Permit Manual so that there will not be any conflicts. The Manual focuses on bonding, permits for work in the right of way by utilities and loggers, while the proposed regulations/standards deal with entrance design matters.
VDOT Response	Page 12, 24VAC30-73-70 A. This talks about entrances within the limits of a "funded" roadway project but often a permit applicant needs to construct an entrance to be compatible with a roadway project that is on the County's Transportation Plan but is not yet funded.
	See 24VAC30-73-100 "Commercial entrances - coordination with local governments."
VDOT Response	Page 12, 24VAC30-73-70 A.5. For some developments the impact of the traffic during peak hours of the generator may be worse than during the peak hours of the abutting highway.
	We amended this section after "during the peak hours of the abutting highway" to add "or peak hours of the generator whichever is appropriate."
VDOT Response	Page 14, 24VAC30-73-70 B.3. Mitigation measures – In addition to installing or modifying traffic signals, an applicant may need to escrow funds for a future traffic signal or contribute to the cost of a future signal as a mitigation measure.
	VDOT can handle this on a case by case basis where a development is expected to generate sufficient traffic to warrant a signal in the future. Generally the locality should address escrowing of funds or contributions to the cost of a future signal through zoning proffered conditions.
VDOT Response	Page 15, 24VAC30-73-90. Private Entrances, should reference 24VAC30-73-170A rather than 180.
	We have made this correction.
VDOT Response	Page 15, 24VAC30-73-80 A. Safety would be promoted if the language on the use of legal speed is reversed to say that design speed shall be used unless VDOT approves the use of the legal speed limit.
	The focus is on legal speed limit because it is more readily obtainable and the design speed may not be available for older roads. However, your suggestion and the language used in the regulation are compatible; if the design speed is available, VDOT can approve its use.
VDOT Response	Page 19, 24VAC30-73-120 A. There are cases where a right-in, right-out entrance is necessary within the functional area of an intersection because the right turn lane is several hundred feet long. If the property frontage is entirely within the functional area so the property owner has no alternative for access to the property, then the formal exception process should not be required
	The regulations recognize that parcels may not have sufficient frontage to meet the regulations, but such parcels are still entitled to access. 24VAC30-73-120 specifies several ways to obtain access (shared entrances, interparcel connections) that need to be explored. Subsection B, now subsection C 1, requires that the applicant prepare a traffic engineering study on the proposed location of the entrance to show that all avenues were explored to mitigate impacts on highway operation and safety.

VDOT Response	<p>Page 23, 24VAC30-73-120 A.4. In urban areas such as Fairfax County pedestrian connections are needed to adjoining properties whether developed or undeveloped.</p> <p>We have amended this section, now 73-120 C 4, as suggested for pedestrian connections. A locality can also adopt this requirement pursuant to 24VAC30-73-60 D: locality entrance standards can be stricter than VDOT's.</p>
VDOT Response	<p>Page 23, 24VAC30-73-120 A.4. "If an applicant cannot or does not wish to comply..." There would usually be different circumstances between an applicant who cannot comply (because of terrain or other geometric/environmental reasons) and an applicant who chooses not to comply. An applicant who can't make a connection may still need full access including left turns due to the amount of traffic generated that would create problems in the network without it (due to U-turns).</p> <p>We have amended this section, now 73-120 C 4, to limit the right-in/right-out restriction only when the applicant refuses to comply with the interparcel connection requirement. Regarding U-turns, though, research studies have shown that making a U-turn at a median opening is about 25% safer than a direct left turn from or into an access point. Research sponsored by the Florida DOT shows that the right turn and U-turn option has substantially lower conflict rates than the direct left turn.</p>
VDOT Response	<p>Page 26. Header missing for 24VAC30-73-170 Documents incorporated by reference.</p> <p>The header has been added to the regulations.</p>
VDOT Response	<p>Fairfax County Specific Comments on the proposed Appendix G of the Road Design Manual:</p> <p>Many of the topics covered in Appendix G, Road Design Manual are also covered in Appendix C (crossover spacing and grade, roundabouts, left turns, right turns). Recommend the design information on a given topic be covered in one location in the manual to avoid confusing or conflicting information.</p> <p>The items referenced were retained in Appendix C because Appendix F only applies to principal arterials. When Appendix G becomes effective, covering all other highway types, such design information will no longer be needed in Appendix C. Our plan is to combine Appendix F and G so the design information will be consolidated in one location within the Road Design Manual.</p>
VDOT Response	<p><u>Definitions:</u></p> <p>On Page 4, according to the definition for private entrance, the entrance is limited to serving up to two private residences. Fairfax County allows pipe stem driveways up to five residences. Does this mean that pipe stem driveways serving more than two residences would be required to meet intersection sight distance? This would be difficult to provide given on-street parking. There may be other counties that have this situation as well. Please make the requirement clear and feasible.</p> <p>Pipestem driveways serving more than two lots are considered commercial entrances under the proposed regulations as well as the current Minimum Standards of Entrances to State Highways, 24VAC30-71. As such, VDOT currently reviews such entrances for sight distance. Subdivision streets designed to VDOT standards should provide adequate sight distance at such driveway connections. The regulations and standards allow entrance design details to be modified to suit actual conditions and since the County minimum 18 ft pipestem driveway width is sufficient for the traffic generated by five residences, VDOT can approve such driveway entrances.</p>
VDOT Response	<p><u>Section 2 – Intersection Design; Spacing Standards:</u></p> <p>On Page 14, next to the last bullet, "Accommodate the needs of pedestrian and bicyclists", Figure 3-26 does not illustrate refuge island.</p> <p>We have revised Figure 3-25 "Typical Application with Sidewalks and Bike Lanes" to illustrate a pedestrian refuge island and reference the correct Figure.</p>

VDOT Response	<p>On Page 21, first sentence under “Signalized Intersection Spacing”, should refer to Table 2-1 not 2-2.</p> <p>The signalized intersection spacing standards are presented in Table 2-2. We have changed the title of Table 2-1 so that it is not misleading. The title for Table 2-1 should be “The Relationship Between Speed, Cycle Length, and Signal Spacing.”</p>
VDOT Response	<p>On Page 26, Note 4 does not match what is in Table 2-2 for partial access on Page 25. The numbers do not reflect stopping sight distance or AASHTO standards.</p> <p>The spacing standards listed for partial access entrances represent either AASHTO stopping sight distance or the length of a right turn lane based on the AASHTO standards for the length of a deceleration lane (according to the design speed of the highway) plus the 100 ft length for a taper. Note 4 has been corrected: Table 2-5 is cited not Figure 2-5.</p>
VDOT Response	<p><u>Section 3 – Turning Lanes:</u> This section does not address urban areas. Turn lane lengths are an issue in Fairfax County and it is our understanding VDOT is currently in discussion with FHWA/AASHTO about how much of deceleration lengths can be included within the storage length.</p> <p>Section 3, Figure 3-1 states that on urban highways the length of the storage portion of the turn lane is to be determined by capacity analysis and the length of the taper applies to urban and rural situations. VDOT is working with other state DOTs and FHWA on the 2010 version of AASHTO’s <u>A Policy on Geometric Design of Highways and Streets</u>. Detailed recommendations for the length of a turn lane have not been finalized yet.</p>
VDOT Response	<p>Appendix C includes additional information on turning lanes such as passing left turn lane detail, adjustment for trucks and double left turn lane detail. Should this information be in Appendix G?</p> <p>The Appendix C, Sect. C-1, Design Features will be removed after Appendix G becomes effective and is consolidated with Appendix F Principal Arterials so it covers all highway types.</p>
VDOT Response	<p>On Page 36, “Left and Right Turn Lane Criteria”, values are adjusted upward using Figure 3-3 not 3-1.</p> <p>This correction has been made to reference Figure 3-3.</p>
VDOT Response	<p>On Page 36, “For Four-Lane Highways”, L is adjusted upward using Figure 3-3 not Figure 3-1.</p> <p>This correction has been made to reference Figure 3-3.</p>
VDOT Response	<p><u>Section 3 – Turning Lanes:</u> On Page 37, first sentence under “For Two-Lane Highways”, L is adjusted upward using Figures 3-4 through 3-21, not the table.</p> <p>This correction has been made.</p>
VDOT Response	<p>Page 39, Table 3-1, in note under the table, the word “legal” is misspelled.</p> <p>The spelling of “lepel” has been corrected.</p>
VDOT Response	<p><u>Section 4 – Entrance Design:</u> On Page 63, regarding “Entrance Radius and Width”, recommend that this mentions emergency access as well as accommodating vehicles expected to use the entrance on a daily basis.</p> <p>In special situations such as emergency vehicles using an entrance, the expectation is that the motorist and the emergency vehicle will need to make the appropriate adjustments (motorist moves over to provide more room for the emergency vehicle; the emergency vehicle has to drive over the curb).</p>

VDOT Response	On Page 65, Figure 4-1, recommend referring to PE-1 detail in Road and Bridge Standards instead of copying detail. This would avoid inconsistencies in the future regarding updates to PE-1.
	It is important that a design diagram be included in this section on private entrances for the user's information. A new subsection 5 references the PE-1 detail and a link to the appropriate web page is provided.
VDOT Response	On Page 67, under "Profile", entrance configurations are shown beginning on page 80, not 78.
	This correction has been made.
VDOT Response	On Page 77, under "Frontage Roads", recommend adding definition of Primary Routes to definitions.
	Definitions of Primary Route and Secondary Road have been added to Appendix G.
VDOT Response	On Page 79, Figure 4-8, recommend deleting and referring to Road and Bridge Standards PE-1.
	The commercial entrance design illustrations do need to be comprehensive and include the design details for a standard private subdivision road/street entrance. The Minimum Standards of Entrances to State Highways includes a design for this type of entrance on page 33.
Dean Hawkins, Chesterfield, VA	I have encountered many instances where it is impossible to comply with spacing standards. The VDOT residency seems to have no ability to use their judgment to make decisions without a formal review process (possibly having to go to the district or above). This was not always the case.
VDOT Response	24VAC30-73-120 B, now 73-120 C, has been revised to explain in more detail the potential exceptions and the documentation necessary for their approval. The regulations provide the District Administrator the discretion to designate staff to make decisions on exceptions. A more detailed description of the exception request process along with a deadline for a decision on the request has been added to Section 73-120 B, now 73-120 D.
Paul Julian, Countryside Service Co., Staunton	Appreciate the opportunity to hear about and ask questions at the Augusta County public hearing. Would like VDOT to address reducing intersection sight distance from 14.5 feet to 10 feet or 12 feet. In rural areas the 14.5 foot will cause issues with agricultural uses adjacent to entrance.
VDOT Response	VDOT uses the intersection sight distance standard recommended by AASHTO's <u>A Policy on Geometric Design of Highways and Streets</u> . 14.5 ft (4.4m) is specified in the AASHTO 2004 edition (p.657) and the 2001 edition (p.660). Prior to 2001 (AASHTO 1994 edition) this distance was 20 ft.
VDOT Response	Would also request VDOT evaluate the need for such regulations in rural areas. These regulations will only continue to hinder development and make the cost of doing business more expensive with the bottom line being that the public having to pay more for goods and services.
	The need to implement access management in rural areas is particularly important so that land development does not lead to the congestion and traffic crashes experienced along urban and suburban highway corridors where access was not managed. Access management promotes economic development by improving highway operation. The efficient movement of people and goods benefits businesses by increasing their market area while reducing travel time for truck deliveries.
VDOT Response	Let engineers who are charged by the Commonwealth design entrances that are safe for the public. We don't need more regulation.
	The proposed regulations and Appendix G provide the details for engineers to design entrances that do not adversely affect highway operation, preventing congestion and traffic crashes.

<p>Nicole Mogul and Joseph Stowers, Reston Association's Pedestrian & Bicycle Advisory Committee</p>	<p>First we want to support the comments on the proposed VDOT regulations being submitted by Fairfax County, as adopted by the County Board at its December 8 meeting. In particular we would like to call attention to these 2 points in the adopted comments of the Fairfax County Board:</p> <ul style="list-style-type: none"> • “These regulations are well designed for rural areas where it does make sense to reduce curb cuts and intersections to the maximum degree possible. They would be counterproductive in suburban or urban areas that are trying to encourage a balanced transportation system that encourages walking, biking, and the use of transit. It is important to ensure that these standards do not discourage implementation of smart growth urban design principles in Fairfax County, as such Mixed-Use centers in the County, as defined by the Comprehensive Plan, should be exempt from these regulations.”
<p>VDOT Response</p>	<p>A variety of exceptions are identified in section 24VAC30-73-120 that recognizes there will be situations where a rule or standard cannot be met (e.g. adjacent landowner refuses to share an entrance). 24VAC30-73-120 A 3, now 73-120 C 3, provides an exception to the entrance and intersection spacing standards for mixed use developments that incorporate the principles of new urbanism and traditional neighborhood development. The regulations also promote interparcel connectivity design principles.</p>
<p>VDOT Response</p>	<ul style="list-style-type: none"> • “The regulations and standards are heavily oriented towards vehicular traffic flow and increasing capacity by limiting traffic signals and intersection spacing. There needs to be more explicit consideration of accommodating pedestrians and bicycles in the transportation system.”
<p>VDOT Response</p>	<p>The goals of the access management enabling legislation § 33.1-198.1 of the Code are to reduce congestion, fuel consumption, air pollution, traffic crashes, and the need for new or wider highways as well as to maximize the performance of existing highways. We have included additional guidelines in Appendix G on bike/pedestrian accessibility and reference the VDOT web page that offers information on VDOT policies for accommodating bicycling and walking on state highways, including the “Bike & Pedestrian Implementation Guide for Locality Involvement.”</p>
<p>VDOT Response</p>	<p>We want to request that these proposed regulations go one step beyond exempting such planned mixed-use areas, as well as such existing areas as Reston Town Center and Lake Anne Village Center, and add a new section encouraging the development of such centers with well-recognized traffic calming principles and techniques. In support of specific characteristics that should be made part of this proposed new section we cite 3 documents which can be quoted from and used as attachments:</p> <ol style="list-style-type: none"> 1. The Reston MetroRail Access Group final report 2. Fairfax County's adopted policy for Transit-Oriented Development 3. Design Guidelines for the Revitalization of Lake Anne Village Center.
<p>VDOT Response</p>	<p>Local governments plan and regulate the use of land. They can encourage planned mixed use development through their comprehensive plan and zoning ordinance. VDOT offers a wealth of information on traffic calming on its web site under “Info Center”, “Frequently Asked Questions”. We will keep a list of the documents cited for future reference.</p>
<p>Rick Canizales, Prince William County Dept. of Transportation</p>	<p>The County does thank you and your staff for working hard to have a draft completed and ready for public hearings and comment.</p> <p><u>Two general comments below:</u></p> <p>These standards need to take into consideration local Design Construction Standards Manual regulations. It needs to specify which standards are applicable when there are discrepancies.</p>
<p>VDOT Response</p>	<p>VDOT establishes and applies standards for the design and construction of connections to state highways. The proposed regulations, 24VAC30-73-60 D (now 73-60 C), allow localities to establish entrance design standards that are stricter than VDOT's.</p>

VDOT Response	<p>Some of the standards included in the draft are set for a statewide application, but may not work well under the urbanized Northern Virginia scenario. It seems that there will be many waivers/exemptions that will be generated from Northern Virginia to be able to implement some of the standards properly.</p>
VDOT Response	<p>Exceptions in section 24VAC30-73-120 recognize there will be situations where a rule or standard cannot be met (e.g. adjacent landowner refuses to share an entrance). 24VAC30-73-120 A 3, now 73-120 C 3, offers an exception to the spacing standards for mixed use developments that incorporate the principles of new urbanism and traditional neighborhood development. 24VAC30-73-120 B, now 73-120 D, provides details on the procedure and timeline for submitting a request for an exception.</p>
VDOT Response	<p><u>The following are detailed comments on Appendix G:</u></p> <p>Page 25, Table 2-2. The County believes that a closer examination of the spacing requirements for Urban Minor Arterials and Urban Collectors need to be done. These requirements are extremely high and would be hard to implement in an urban setting. For example for an Urban Minor Arterial of over 50 mph, a half mile spacing requirement is almost impossible to meet in such places as Route 1, Route 28, and other roads of this classification in a suburban or urban setting. Also, on an un-signalized Urban Collector under 30 mph, 660 feet is on the high end and no different than the same functional road at speeds of 45 mph.</p>
VDOT Response	<p>National research studies have shown that half mile signal spacing is necessary to achieve optimum traffic progression; reducing congestion, fuel emissions, and travel time. Half mile signal spacing is needed to provide efficient progressions of 30 mph with a 120 second cycle commonly used in developed urban areas during peak hours. 660 ft is proposed for urban collector signalized intersections and urban minor arterial un-signalized intersections to allow sufficient room for intersection turning movements. However, we have reduced the 660 ft un-signalized intersection spacing standard for urban collectors with speeds 45 mph or less to 440 ft to address your concern. 24VAC30-73-120 A, now 73-120 C, includes an exception for established urban business corridors where the entrance/intersection spacing pattern does not meet the spacing standards.</p>
VDOT Response	<p>Page 27-28. It seems that the same spacing standard is set for Arterials and Collectors when you come off an interchange or ramp. These numbers may need adjusting, since a collector has different characteristics. It may require a lower spacing requirement.</p> <p>The spacing standards near interchange ramps focus on assuring safe ramp exit and entry movements. Two-lane versus multilane highways are specified because the motorist's maneuvers at multilane roads are more complex, crossing through lanes to reach a left turn lane at an intersection. Greater separation between ramp terminals and such intersections is necessary. Functional classification is not used because arterials may be two lane or multilane. In addition, the National Cooperative Highway Research Report that was cited as the source for these standards used two vs. multilane criteria.</p>
VDOT Response	<p>Page 30, Table 2-7. The sight distance requirement for a 30 mph, four-lane undivided roadway should be 355 feet, not 335 feet. We believe this may be a typo or copy/paste error.</p> <p>Yes, this correction has been made. The intersection sight distance for 30 mph is 355 ft in Exhibit 9-64 of AASHTO's <u>A Policy on Geometric Design of Highways and Streets, 2004.</u></p>
VDOT Response	<p>Page 65. The standards are requiring an entrance median for entrances that have more than 2,000 vehicles per day. The County believes this number is low and should only apply to entrances with more than two lanes, with a higher threshold.</p> <p>We have eliminated the 2,000 VPD threshold and only require an entrance median when the entrance has two or more lanes for entering and exiting movements.</p>

Montgomery County Board of Supervisors	The Board of Supervisors of Montgomery County, Virginia hereby submits the following questions concerning the administration of the proposed regulations: 1. What will the process be for eliminating “excess” entrances at existing sites and businesses? Will VDOT begin closing them after October 2009?
VDOT Response	The tenure of commercial entrances section of the regulations (now titled “existing commercial entrances”), 24VAC30-73-110, requires entrances to be maintained in good condition and specifies that VDOT can require the reconstruction, relocation, consolidation, or upgrading of existing entrances when there are or will be significant changes in the traffic volume or types of vehicles using the entrance. For example, the redevelopment of a site may affect existing entrances.
VDOT Response	2. Is VDOT going to require the cross parcel connections? Will VDOT review documents such as plat, site plan and lease/deed to ensure language is appropriate to guarantee connection?
VDOT Response	24VAC30-73-120 A, now 73-120 C, requires an entrance permit applicant to provide an easement and stub connection to the boundaries of their land when abutting undeveloped property. The regulation describes reasons for an exception to this rule. While VDOT does not have the legal resources to evaluate cross access easements, VDOT will make sure they have been recorded. Each property owner will need to protect their interests in the drafting of the easement. VDOT will review site plans and business subdivision plats to assure the site design includes the stub connections.
VDOT Response	3. Will VDOT be proactively removing crossovers that do not meet new criteria after October 2009?
VDOT Response	VDOT already has the authority to remove crossovers on state highways and will use the new criteria to improve highway operation and safety. Traffic crash records may indicate the need to close a crossover. Crossovers may be closed as part of construction projects. Crossover improvements may be required due to an increase in the volume or type of traffic generated by land development.
VDOT Response	4. Does VDOT have time limits to respond to requests for entrance permits?
VDOT Response	No, the review time is dependent on the characteristics of the entrance, the information provided by the applicant to demonstrate its impact on the highway, and the review of any measures that may be needed to mitigate impacts, such as turn lanes.
VDOT Response	5. What defines “Urban Area”?
VDOT Response	Urban area is defined in 24VAC30-73-10 Definitions based on Federal Highway Administration criteria. It is an urbanized area with a population of 50,000 or more, or an urban place (small urban area) as designated by the Census Bureau with a population of 5,000 or more and not within an urbanized area.
VDOT Response	6. If a locality has an existing corridor plan with different spacing requirements or is considering developing a new corridor plan, does VDOT need to approve? If so, what is the process for obtaining the approval of VDOT?
VDOT Response	Yes, VDOT would need to approve a corridor plan proposing different spacing standards on a state highway (24VAC30-73-120 C). The VDOT District Transportation Planning or Land Development section should be contacted concerning the review and approval process.
VDOT Response	7. How will VDOT handle spacing issues near Town/County boundaries since Towns are not subject to the same requirements?
VDOT Response	Near the boundaries of a town that maintains its own roads, proposed entrances and intersections on the state controlled segment of the highway will need to be separated according to the spacing standards. VDOT will have to consider on a case by case basis how traffic safety is impacted by proximity to existing entrances/intersections in the neighboring city or town.

VDOT Response	<p>8. How will VDOT coordinate reviews and approvals of projects that may involve Chapter 527 review, Access Management and subdivision street review? Will the local VDOT residency have the staff to review and comment on all these regulations? Will the review be coordinated?</p> <p>The Residencies are the clearinghouse for land development review. Chapter 527 traffic impact analysis studies are forwarded to the District Land Development section. The review of site plans and subdivision plats may be handled at the Residency or forwarded to the District depending on degree of complexity. Training workshops have been conducted on each set of regulations for the applicable District and Residency staff. VDOT's review will be conducted in a timely manner; however, the timeline will depend on the developer submitting the required information for VDOT to evaluate to assure compliance with the regulations and standards.</p>
Elijah Sharp, New River Valley Planning District Commission	<p>Comments on the Road Design Manual, Appendix G, Access Management Design Standards for Entrances and Intersections: Minor Arterials, Collectors, and Local Streets. Sheet 15: Improve image resolution, Figure 2-1A.</p>
VDOT Response	We have enlarged the illustration of a typical roundabout to make it easier to read.
VDOT Response	<p>Sheet 16: Line work shift/add at entrances (arc, dashed line), Figure 2-2. We have made revisions to this illustration.</p>
VDOT Response	<p>Sheets 17-18: Traversable median; adjust to a right turn only through lane with yield sign where "No Left Turn" conditions are shown, Figures 2-3 and 2-4. We have made revisions to this illustration.</p>
VDOT Response	<p>Sheet 19: Provide minimum/maximum median widths to define the minimum median before "flare-out" is required, Figure 2-5. The minimum median width would be determined by the turning radius of the design vehicle. There would not be a maximum width.</p>
VDOT Response	<p>Sheet 58-62: Update drawings for Figures 3-25, 3-26, 3-27, 3-28 and 3-29 to show standard pavement markings and tangent curves. These Figures are provided to illustrate the basic concepts identified and are not intended to be detailed diagrams drawn to scale.</p>
VDOT Response	<p>Sheet 69: Move figure to/near sheet 36 or forward reference figure on Sheet 36. The diagram on p. 69 illustrates the functional area of an intersection concept described on p. 68.</p>
George M. Homewood, New Kent County Director of Community Dev.	<p>These are the same comments made at the public hearing on 28 October 2008. Overall, we believe the policy embodied in the draft to be the correct course of action and offer the comments as a way of improving the regulation to ensure that the regulation lives up to its promise in practice.</p> <p>24VAC30-73-60. B. We suggest that "...as of 1 October 2009" be added to the end of the first sentence. This will help make clear that the newly created individual lots of subsequent subdivisions may not be entitled to individual access.</p>
VDOT Response	24VAC30-73-60 B reflects case law on a property owner's right of access. VDOT does not have to permit the most convenient access, nor the preferred entrance location and for corner lots VDOT can determine which road to allow access based on impact to efficient highway operation and traffic safety. However, VDOT does have to provide reasonable access to a landowner.

	<p>24VAC30-73-60. B. We suggest adding as the last sentence: “Subdivision of parcels shall not be used to create more access than would otherwise be allowed prior to the subdivision.” Once again, the purpose is to make clear that the access arrangements are based on the parent parcel and not on daughter parcels. The County believes that the foregoing provisions are absolutely critical to prevent traditional lot stripping along roadways which will result in unacceptable safety deficiencies and loss of roadway capacity. Access should be one of the primary points of emphasis and focus during the subdivision process.</p>
VDOT Response	<p>State law authorizes local governments, not VDOT, to develop and administer subdivision regulations. A locality can choose to adopt the recommended requirement. 24VAC30-73-60 D, now 73-60 C, specifies that stricter entrance standards adopted by a locality supersede VDOT’s.</p>
	<p>24VAC30-73-60. C. We suggest that the following sentences be added at the beginning of the paragraph: “Where newly created parcels adjoin along a roadway encompassed by these regulations, joint access between them at a rate no greater than one access per each two parcels so situated shall be provided. In all cases of existing undeveloped adjoining parcels along a roadway, the use of shared entrances between such properties shall be the preferred method of access.” Again, this sets the bar at an appropriately high level in preserving safety and capacity, but without being overly restrictive for existing parcels.</p>
VDOT Response	<p>The entrance applicant is required per 24VAC30-73-120 A, now 73-120 C, to contact the adjacent property owner to see if an agreement can be reached to share an entrance. However, the intent of the regulation and state law, § 33.1-198, is that the applicant not be penalized if the neighbor refuses to cooperate. Otherwise the applicant would be denied access to the highway leading to a potential property taking. We have, though, added the second sentence suggested in your comment to 24VAC30-73-70 A to emphasize the importance of shared entrances.</p>
	<p>We suggest adding the following sentence as a new paragraph 24VAC30-73-60.E: “A restricted access easement shall be recorded along all roadway frontages except in those locations where approved entrances are permitted.” This will keep access restrictions in place and hopefully avoid unintentional errors at later dates.</p>
VDOT Response	<p>VDOT controls access to state highways by requiring a property owner to obtain an entrance permit and comply with the access management regulations and design standards as well as the requirements in the Land Use Permit Manual.</p>
	<p>In Appendix G, we are extremely disappointed to note that out of more than 30 diagrams of entrances and entrance treatments, only 2 show bicycle accommodations being provided. Given that this group of roadways is highly likely to meet the criteria for required bicycle and pedestrian accommodation under the Commonwealth Transportation Board policy, we believe that EVERY diagram, and especially Figures 4-8 through 4-13, MUST demonstrate how bicycles and pedestrians are to be accommodated properly and safely.</p>
VDOT Response	<p>Additional information on bicycle lane design criteria has been added to Appendix G. VDOT’s designated Bicycle and Pedestrian Accommodations List has been referenced. Section 200 in the new 2008 VDOT Road and Bridge Standards includes design specifications for sidewalks at entrances (CG-9A, CG-9B and CG-9D) and Section 2E-3 of the Road Design Manual presents sidewalk design standards. We have provided the VDOT web site address for these documents. Finally, sidewalks, bicycle lanes, and accessible crosswalks have been added to a number of the illustrations, including one for roundabouts (Figure 2-11).</p>

Jennifer DeVaughn, Timmons Group, Richmond	<p><u>General Comments:</u></p> <p>1. Many of the same standards appear in the tables and figures in both Appendix F (for Principal Arterials) and the draft Appendix G (for Minor Arterial, Collectors, Local Streets) of the Road Design Manual. Since Functional Classification is a system to classify highways according to the character of service they are intended to provide, it seems that some of the standards should be different for say a Major Arterial highway that is providing mobility versus a Local Street that is providing land access.</p>
VDOT Response	<p>The type of abutting highway is not relevant to many of the standards. For example, throat depth is based on the traffic generated by the land use, Appendix G, Table 4-2. The design of turn lanes focuses on the speed of the highway and the distance necessary to safely decelerate. Entrance radii are designed to accommodate the design vehicle expected to use the entrance. Sight distance is based on the speed of the highway.</p>
VDOT Response	<p>2. Since the proposed standards for Minor Arterials, Collectors, and Local Streets (and the standards already in effect for Principal Arterials) apply only to VDOT maintained roadways; this could be viewed as anti-competitive. A County or City that maintains their own roads (and therefore is not subject to VDOT's access management regulations) may be able to lure development away from an adjacent locality where roads are VDOT maintained with the promise of greater site access than would be allowed under VDOT's access management guidelines.</p>
VDOT Response	<p>On the other hand, the reduced congestion and traffic crashes associated with better access management can attract business interest in an area. The market areas of businesses can expand and the movement of goods improves when highways provide better traffic flow at a higher level of service. There are examples throughout the state where new highways have had to be built to allow traffic to bypass roads where greater site access led to excessive congestion and traffic crashes. Business development, then, migrated to locations near the intersections along the bypass.</p>
VDOT Response	<p>3. It is not clear from the text of Draft Appendix G whether the minimum spacing standards for commercial entrances, intersections, and crossovers apply only to divided highways or to both divided and undivided facilities.</p>
VDOT Response	<p>A note has been added to Table 2-2 spacing standards to make it clear that they apply to divided and undivided highways and crossovers.</p>
VDOT Response	<p>4. All of the figures in Appendix G showing the types of access channelization depict a multi-lane, divided facility with a median (either non-traversable or traversable). There are no figures depicting channelization on undivided facilities. This has been an issue with VDOT in the past; right-in/right-out channelization on an undivided facility would not be allowed and in order to get access, the developer would be required to install a median.</p>
VDOT Response	<p>Figure 4-4 illustrates entrance channelization island options for right-in/right-out entrances on two lane highways. A median segment is an alternative way to prevent left turns in and out of entrances.</p>
VDOT Response	<p>5. Many of the figures in Appendix G have a note indicating that pedestrians and bicycle users must be accommodated but the appropriate locations of these accommodations are not depicted on the figures.</p> <p>Additional information on bicycle lane design criteria have been added to Appendix G. VDOT's designated Bicycle and Pedestrian Accommodations List has been referenced. Section 200 in the new 2008 VDOT Road and Bridge Standards presents design specifications for sidewalks at entrances (CG-9A, CG-9B and CG-9D) and Section 2E-3 of the Road Design Manual presents sidewalk design standards. We have provided the VDOT web site address for these documents. Finally, sidewalks, bicycle lanes, and accessible crosswalks have been added to a number of the illustrations, including one for roundabouts (Figure 2-11).</p>

VDOT Response	<p>6. A separate set of figure/exhibits for undivided facilities should be provided in Appendix G. Since it is part of the design manual, examples should reflect all types of roadways to which the standards apply.</p> <p>Figures 3-25 to 27 and 3-29 are examples of illustrations for undivided facilities; Figures 2-2 to 2-4, 2-9, and 2-10 apply to divided highways.</p>
VDOT Response	<p>7. The legislation states that VDOT may approve alternate spacing for developments incorporating the principles of new urbanism and traditional neighborhood development (24VAC30-73-120.A.3.b.) but this is not addressed in Appendix G. Exceptions to the standards should be noted in the design manual. Additionally, there is no indication in the legislation that VDOT can approve alternate turning radii; traditionally neighborhood developments often have shorter turning radii and this should be addressed in the legislation as well as in Appendix G.</p> <p>VDOT believes the commenter is referring to the 'regulation,' not the 'legislation.' An additional note has been added to Appendix G Table 2-2 spacing standards to reference the exceptions in the regulations and a new section has been added to Appendix G summarizing the exceptions. The discussion on radii in Appendix G's Commercial Entrance section states that the Subdivision Street Design Guide in Appendix B, Road Design Manual applies to radii and width for subdivision streets. In general, lower turning radii will tend to force larger vehicles with greater turning radii (such as trucks, buses) to drive over and damage intersection curb/gutter.</p>
VDOT Response	<p>8. It is not clear whether the corner clearance takes precedence over the minimum spacing standards for commercial entrances and intersections. All but one of the minimum spacing standards for commercial entrances and intersections exceed the minimum corner clearance distance.</p> <p>Corner clearance provides a minimum distance entrances need to be separated from an intersection to prevent queued vehicles from backing up into the highway or blocking entrances near the intersection. Corner clearance is measured from the edge of pavement on the intersection's major street to edge of entrance on the minor intersecting street. The spacing standards are measured from the centerlines of an intersection and an entrance. As a result, the spacing measurement may result in a distance that is less than the corner clearance, such as in the case of right-in/right-out entrances. The greater of the spacing standards and the corner clearance will apply. We have added a footnote to the Appendix G Table 2-2 spacing standards about the relationship between corner clearance and entrance spacing near intersections.</p>
VDOT Response	<p><u>Specific Comments:</u></p> <p>1. The legislation states that VDOT may approve alternate spacing for developments fully incorporating the principles of new urbanism and traditional neighborhood development (24VAC30-73-120.A.3.b.) but this is not addressed in Appendix G. Exceptions to the standards should be noted in the design manual. Additionally, there is no indication in the legislation that VDOT can approve alternate turning radii; traditionally neighborhood developments often have shorter turning radii and this should be addressed in the legislation as well as in Appendix G.</p> <p>VDOT believes the commenter is referring to the 'regulation,' not the 'legislation.' We have added a summary of the spacing standards exceptions to Appendix G including the exception for traditional neighborhood developments. The Road Design Manual contains a new Appendix B(1) Subdivision Street Design Guide that provides new intersection design criteria as well as sections on traditional neighborhood design and innovative subdivision design.</p> <p>2. Figures 2-3 and 2-4 (pages 17-18 of Appendix G) depict only four-lane, divided facilities in the examples of access channelization. Will channelization be allowed on undivided facilities? If so, there should be figures depicting this.</p>

VDOT Response	Yes. We amended the labels on the Traversable Median illustrations to specify that the access channelization examples would also apply on undivided highways.
VDOT Response	3. The discussion of signal spacing standards in Appendix G pages 21-22 references major arterials and major suburban arterials. Are the same spacing standards applicable to minor arterials and collectors? We have revised the terminology on these pages to reference "arterials" so that the discussion is consistent with functional classifications. The signalized intersection spacing standards for collectors are generally reduced by 50% compared to minor arterials and 75% compared to principal arterials.
VDOT Response	4. Figure 2-8 (page 23 of Appendix G) illustrates entrance and intersection spacing and depicts u-turns at the signalized intersections. None of the channelization figures depict u-turn (un-signalized at mid-block) nor is there any discussion that signal timing plans will need to include u-turns and possibly exclude over-lapped right-turn phases in order to accommodate the u-turn traffic generated by partial mid-block access. Figure 2-8 illustrates the results of a Colorado DOT research study that found that a four lane highway with good access management can handle the same traffic flow as a six lane facility without managed access. It is not intended to be used as a design diagram. Appendix G, Section 3, Medians contains a discussion on U-turns and median channelization. VDOT uses the Manual on Uniform Traffic Control Devices for standards on traffic control devices. A link to the MUTCD is available on the VDOT web site.
VDOT Response	5. The criteria for determining un-signalized intersection spacing (page 24 of Appendix G) does not include divided or undivided highway. Are the spacing standards applicable to only divided facilities? 6. Note A under Table 2-2 (page 25 of Appendix G) indicates the spacing standards apply to crossovers on divided highways. Do the spacing standards in Table 2-2 apply to undivided highways? Regardless, it should be clearly stated that the spacing standards apply to only divided highway or that they apply to both divided and undivided highways.
VDOT Response	We have revised the Table 2-2 notes to make it clear that it applies to divided and undivided highways as well as crossovers. 7. Notes included with Table 2-2 (page 25 of Appendix G) should indicate that alternate spacing for developments fully incorporating the principles of new urbanism and traditional neighborhood development may be approved by VDOT.
VDOT Response	We have added a note that references the exceptions to the spacing standards in the regulations and included a new section that presents a summary of the regulatory exceptions. 8. Notes included with Table 2-2 (page 25 of Appendix G) for un-signalized intersections should address limitations if future volumes would warrant signalization (from 24VAC30-73-120.A.5.): "commercial entrances that are expected to serve sufficient traffic volumes and movements to require signalization shall not be permitted if the spacing between the entrance and at least one adjacent signalized intersection is below signalized intersection spacing standards in Appendix G of the Road Design Manual (see 24VAC30-73-170 A). If sufficient spacing between adjacent traffic signals is not available, the entrance shall be physically restricted to right-in or right-out movements or both or similar restrictions such that the public interests in a safe and efficient flow of traffic on the systems of state highways are protected and preserved."
VDOT Response	We have added a new footnote to Table 2-2 entrance and intersection spacing standards that references this provision of the regulations.

VDOT Response	<p>9. The minimum spacing standards for multi-lane crossroads near interchanges shown in Table 2-3 (page 27 of Appendix G) for minor arterials, collectors and local streets are the same minimum spacing standards used for principal arterials (Table 2-3 on page 27 of Appendix F). Why does functional classification appear to have no bearing on the spacing standards?</p> <p>The spacing standards near interchange ramps focus on assuring safe ramp exit and entry movements. Two-lane versus multilane highways are specified because the motorist's maneuvers at multilane roads are more complex, crossing through lanes to reach a left turn lane at an intersection. Greater separation between ramp terminals and such intersections is necessary. Functional classification is not used because arterials may be two lane or multilane. In addition, the National Cooperative Highway Research Report that was cited as the source for these standards used two vs. multilane criteria.</p>
VDOT Response	<p>10. Figure 2-9 (Appendix G, p. 27) addresses the access control on multi-lane highways at interchanges and depicts a divided highway. Do the interchange spacing standards apply to undivided facilities? How is distance M (distance to first median opening) impacted is the multi-lane highway is undivided?</p> <p>Figure 2-10 depicts access control on a highway without a median (two lane highway) and shows how the distances can be measured. Multilane crossroads can be divided or undivided.</p>
VDOT Response	<p>11. Figure 2-9 (page 27 of Appendix G) references minimum spacing from start of ramp taper and drawing also shows end of ramp taper as the starting point for calculating distances. How will the minimum spacing be measured if the off-ramp has a full auxiliary lane rather than a merge lane or if the on-ramp has a full auxiliary lane rather than a diverge lane?</p> <p>The spacing would be determined as if there were a ramp taper. The length of the ramp merge lane and taper would be calculated as if the off- or on-ramp did not have a full auxiliary lane.</p>
VDOT Response	<p>12. The minimum spacing standards for two-lane crossroads near interchanges shown in Table 2-4 (page 28 of Appendix G) for minor arterials, collectors and local streets are the same minimum spacing standards used for principal arterials (Table 2-4 on page 28 of Appendix F). Why does functional classification appear to have no bearing on the spacing standards?</p> <p>Functional classification is not used because arterials may be two lanes or multilane. The distances and roadway types are based on guidelines from studies prepared for the National Cooperative Highway Research Program of the National Research Council (NCHRP Report 420) and by studies conducted by the Oregon Dept. of Transportation.</p>
VDOT Response	<p>13. Figure 2-10 (page 28 of Appendix G) addresses the access control on two-lane highways at interchanges and seems to depict an undivided highway. Distance X refers to the distance to the first right-in/right-out only access; however, none of the access channelization diagrams in Figures 2-3 and 2-4 show how channelization is applied to an undivided facility. In the past, some VDOT staff have not allowed right-in/right-out on undivided facilities; requiring that a median be installed first. Will channelization be allowed on undivided facilities? If so, this should be specifically stated and figures depicting access channelization on undivided facilities need to be included.</p> <p>The spacing standards for Partial Access Entrances (including right-in/right-out) apply to divided and undivided highways. Figure 4-4 illustrates commercial entrance channelization island options for right-in/right-out entrances on two lane highways. Figures 2-3 and 2-4 depict different types of access channelization. A new section on commercial entrance channelization has been added.</p> <p>14. The left and right turn lane criteria shown in Figure 3-1 (Appendix G, p. 36) for minor arterials, collectors and local streets are the turn lane criteria used for principal arterials (Figure 3-1, Appendix F, p. 36). Why does functional classification appear to have no bearing on the spacing standards?</p>

VDOT Response	The entrance/intersection spacing standards are according to a highway's functional classification. The length of a left or right turn lane is not related to the type of highway but on such factors as highway speed. The faster a vehicle is moving, the longer the turn lane needs to be to allow ample area to slow down sufficiently to make a safe turning movement.
VDOT Response	15. Notes included with Table 4-1 (page 63 of Appendix G) should address whether VDOT will approve alternate turning radii for developments fully incorporating the principles of new urbanism and traditional neighborhood development.
VDOT Response	Turning radii in Table 4.1 are for the design vehicles listed in the table. These come directly from AASHTO's <u>A Policy on Geometric Design for Highways and Streets</u> . The more quickly a vehicle can enter an entrance or turn at an intersection, the less chance there is of a rear end collision or congestion. Also, a lower turning radius will tend to cause larger vehicles with greater turning radii (trucks, buses) to drive over and damage intersection curb/gutter. The discussion on radii in the "Commercial Entrances" section of Appendix G states that the Subdivision Street Design Guide in Appendix B, Road Design Manual applies to radii and width for subdivision streets.
VDOT Response	16. The minimum throat lengths shown in Table 4-2 (Appendix G, p. 66) for minor arterials, collectors, and local streets are the same minimum throat lengths used for principal arterials (Table 4-2 of Appendix F, p. 66). Why does functional classification appear to have no bearing on the throat length?
VDOT Response	The throat lengths are based on the traffic a land use will generate, not the characteristics of the abutting highway. The more traffic using the entrance, the greater the number of ingress/egress lanes within the entrance. The purpose for the throat length is to assure traffic does not back up into the highway.
VDOT Response	17. The minimum corner clearance depicted on Figure 4-3 (page 72 of Appendix G) seems to violate the minimum spacing requirements from Table 2-2 (page 25 of Appendix G) for everything except a partial access on an urban collector with a speed limit less than 30 mph. It is not clear whether the corner clearance takes precedence over the minimum spacing standards for commercial entrances and intersections. If the intersection of the major street and the minor side street counts as an intersection for minimum spacing purposes, then should the spacing in Table 2-2 be used rather than the spacing from Figure 4-3? Does the corner clearance only apply if the minor side street is a local street or a non-VDOT maintained road (private road, County road, or City street)?
VDOT Response	The corner clearance standard provides a minimum distance entrances need to be separated from an intersection to prevent queued vehicles from backing up into the highway or blocking entrances near the intersection. Corner clearance is measured from the edge of pavement on the intersection's major street to edge of entrance on the minor intersecting street. The entrance and intersection spacing is measured from the centerlines of the intersection and the entrance. As a result, the spacing measurement may result in a distance that is less than the corner clearance, such as in the case of right-in/right-out entrances. The greater of the spacing standards and the corner clearance will apply. We have added a footnote to the Appendix G, Table 2-2 spacing standards about the relationship between corner clearance and entrance spacing near intersections.
VDOT Response	18. The commercial entrance channelization island options shown on Figure 4-4 (page 73 of Appendix G) do not indicate whether they are for divided or undivided facilities or both. This should be specified and if different options are needed for divided and undivided highway, then both should be depicted in the figure.
VDOT Response	The options shown will generally apply to undivided highways. A divided highway's median will accomplish the same purpose as the channelization island by preventing entrance left turn movements.

Rachael Lumpkin, Chesterfield Utilities Dept.	The addition of bicycle and pedestrian ways could impact existing utilities that are located both within and outside existing right-of-way, requiring potential relocations of critical utility lines.
VDOT Response	Utilities can be located under VDOT maintained sidewalks just as utilities are located under the road pavement. If the sidewalk is outside the right of way, the developer will be responsible for coordinating the sidewalk location in relation to underground utilities.
VDOT Response	<p>Bicyclists and pedestrian walks were not clear on where they fit in the picture.</p> <p>24 VAC 30-73-60 A.2 specifies that <u>all</u> entrance design and construction <u>shall</u> accommodate pedestrian and bicycle users of the highway in accordance with the Commonwealth Transportation Board's "Policy for Integrating Bicycle and Pedestrian Accommodations." Notes on the Policy have been added to the entrance diagrams at the end of the Appendix G standards. Additional information on bicycle lane design criteria have been added to Appendix G. VDOT's designated Bicycle and Pedestrian Accommodations List has been referenced. Section 200 in the new 2008 VDOT Road and Bridge Standards contains design specifications for sidewalks at entrances (CG-9A, CG-9B and CG-9D) and Section 2E-3 of the Road Design Manual presents sidewalk design standards. We have provided the VDOT web site address for these documents. Finally, sidewalks, bicycle lanes, and accessible crosswalks have been added to a number of the illustrations, including one for roundabouts (Figure 2-11).</p>
VDOT Response	<p>Limiting access points could have potential conflicts with local fire departments.</p> <p>24VAC30-73-120 A 4, now 73-120 C 4, requires interparcel connections which provide alternate means of access for emergency vehicles. 24VAC30-73-120 A 3, now 73-120 C 3, allows the VDOT District Administrator's designee to approve reduced spacing standards where a development's second or additional entrances are necessary for the streets to be eligible for state maintenance.</p>
Jennifer Wampler, Dept. of Conservation and Recreation	It was good to note that all entrance design and construction shall accommodate pedestrian and bicycle users in accordance with CTB policy. The state is undergoing a paradigm shift in transportation philosophy, which is somewhat reflected in these regulations. The conventional philosophy emphasized capacity, operational efficiency, and vehicular level of service and minimized vehicular delay. The emerging philosophy emphasizes livability and balance, context sensitive design/ solutions, relationships to land use and smart growth, and collaboration. Please consider emphasizing in these regulations that the size and character of the road influences the quality of the urban environment, and that it is critical to design context-sensitive solutions with all interest groups at the table.
VDOT Response	Access management seeks to improve the quality of the environment by reducing traffic congestion, leading to less fuel consumption, vehicular emissions, and air pollution. By maximizing the performance of existing roads, the need for new roads and road widening is reduced resulting in less pavement, stormwater runoff, and other environmental impacts. Context sensitive approaches to street designs can be a component of local and VDOT approved access management plans for highway corridors (24 VAC 30-73-120 A.). Training workshops will address this matter. Also, a new section on accommodating pedestrians and bicyclists has been added to Appendix G.
	Options which can help preserve the environment and quality of life in the community, like 25 mph speed-limits, narrow lanes (10'), bicycle and pedestrian facilities, on-street parking, and street trees/furniture should be encouraged. One way to encourage these features is to include them in the figures in your design standards. Currently, bicycle and pedestrian facilities are only included in Figure 2.1A. and to some extent in Figures 3.25-3.29. In accordance with CTB policy, as much thought should be given to bicycle and pedestrian movement as vehicular movement in these guidelines, but bike/ped movement does not seem to be reflected in the design standards.

VDOT Response	Additional information on bicycle lane design criteria have been added to Appendix G. VDOT's designated Bicycle and Pedestrian Accommodations List has been referenced. Section 200 in the new 2008 VDOT Road and Bridge Standards presents design specifications for sidewalks at entrances (CG-9A, CG-9B and CG-9D). We have provided the VDOT web site address for these documents. Sidewalks, bicycle lanes, and accessible crosswalks have been added to a number of the illustrations, including one for roundabouts (Figure 2-11).
VDOT Response	A concern is also raised over mandated signalized intersection spacing, which may impact walkability. Is it possible to address mid-block crossings in the design standards or other solutions that could make crossings safer for pedestrians when signals aren't present?
VDOT Response	Access management reduces the number of entrances and intersections which lowers pedestrian-vehicle conflicts. A new "Accommodating Pedestrian and Bicyclists" section in Appendix G includes a discussion on the use of midblock pedestrian crossings and specifies design criteria to consider for such crossings including using median pedestrian refuge areas (divided highway), ladder-style pavement markings, illumination, and advanced warning signs for motorists. National research studies have repeatedly concluded that intersections that are spaced too close to each other reduce traffic progression speeds to the point that congestion is created, vehicular collisions with pedestrians and bicyclists increase, and higher fuel emissions from stop & go traffic adversely affects all users of the highway.
VDOT Response	The Department of Conservation and Recreation works in concert with the Department of Game and Inland Fisheries (DGIF) and other agencies to identify and implement public access for boating, fishing, swimming and other recreational activities. DCR also serves on the Chesapeake Bay Public Access Committee. Given these roles and responsibilities, it may also be advisable to include DCR along with DGIF as a partner to determine access to public waters (24VAC30-73-160).
VDOT Response	The Commissioner has authority to grant access to a state highway pursuant to §§ 33.1-197 and 33.1-198. Previously VDOT's Land Use Permit Manual, 24VAC30-150-1730, regulated such access pursuant to the authority of the Commonwealth Transportation Board in § 33.1-12. The relationship between VDOT and DGIF was established in 1983 when the Land Use Permit Manual was adopted.
Timothy Davey, Greater Richmond Assoc. for Commercial Real Estate and Philip Abraham, VA Assoc. for Commercial Real Estate	<p>GRACRE members and others making a living in the commercial real estate business are concerned with some of the technical requirements being proposed.</p> <p>Of greater concern to our members is the worry that VDOT's new guidelines may hinder development opportunities because of excessive delay in reviewing projects for compliance. We understand that limited resources are available to State Agencies during tough economic conditions. We also understand that commercial real estate projects can help fuel economic growth through the creation of jobs, investment, and increased taxes.</p> <p>One item that is paramount to this success is to assure a predictable and efficient plan review and approval process. Assigning these guidelines to collector roads and local streets creates an excessive review and approval process.</p>
VDOT Response	Workshops were conducted in each VDOT District to provide education and training to VDOT and local government land development review staff as well as transportation consultants and the development community on the access management regulations and standards for principal arterials that took effect July of last year. To date we have not received any complaints that the regulations and standards have adversely affected the timeliness of VDOT's commercial site plan review. Similar workshops will be conducted prior to the effective date of these regulations and standards. As long as everyone is aware of the expectations and consideration is given to applying the access management regulations and standards in the site design of commercial real estate projects, there should be no excessive delay on VDOT's part in reviewing projects for compliance.

VDOT Response	<p>Based on our understanding of the regulations, we ask VDOT to consider the following changes:</p> <p>1. In localities with adequate Traffic and Transportation staff resources (qualified localities), allow the locality to assess whether the access management guidelines should apply to a specific project, minor arterial, collector, or local street based on their experience with development in the corridor.</p>
VDOT Response	<p>The proposed regulations (24VAC30-73-120 C) offers localities the opportunity to work with VDOT to develop access management corridor management plans with entrance/intersection spacing standards unique to the characteristics of the specific highway corridor.</p>
VDOT Response	<p>2. Allow VDOT District offices and qualified localities to waive the access management guidelines for re-development projects that utilize existing entrances. Re-development along existing infrastructure is one of the best ways to manage congestion. This approach needs to be incentive by all reviewing agencies. Our members worry that a project that is viable for all these reasons may be excessively burdened by the new guidelines.</p> <p>To provide flexibility in the application of the regulations, a variety of exceptions are identified in section 24VAC30-73-120 that recognizes there will be situations where a rule or standard cannot be met. For example, on older, established business corridors of a locality where existing entrances/intersections did not meet the spacing standards as of the regulation's effective date, VDOT can approve spacing distances that are consistent with the established spacing on the corridor. This exception could apply to redevelopment projects along such a corridor. Also if the locality is promoting redevelopment along a corridor, an access management corridor plan can be prepared by the locality and VDOT in which the use of existing entrances can be evaluated; provided that the public interests in a safe and efficient flow of traffic is protected.</p>
VDOT Response	<p>3. We understand that VDOT has been cooperative in their efforts to streamline the Traffic Impact Analysis Regulations. As we understand the access management guidelines, a new entrance will be required to meet these guidelines regardless of whether a new Traffic Impact Analysis is required. We ask VDOT to consider waiving the new access management guidelines for locations/projects not generating sufficient traffic to necessitate a TIA.</p> <p>The thresholds for when a TIA is needed are based on projects of a size that their trip generation may impact the highway network in a wide area. A proposed entrance to any project, regardless of trip generation, still needs to be evaluated in terms of its location and design to assure that entrance radii, turn lane length, and separation from adjacent entrances are adequate so entrance turning movements do not impact through traffic and traffic safety. Applying the guidelines to all commercial entrances is necessary for the reasons stated in the § 33.1-198.1 enabling legislation: reduce traffic congestion, traffic crashes, and the need for new or wider highways. Access management promotes economic development by improving highway operation. The efficient movement of people (customers) benefits businesses by increasing their market area.</p>
Paul Trapp, Timmons Group, Richmond	<p>Currently there are few differences between the standards already established for principal arterials and those proposed for minor arterials, collectors and local streets. This includes minimum curb radii, corner clearance, and warrants for left and right turn lanes at entrances. With the exception of entrance and signal spacing, it appears that functional classification has no bearing on the design standards.</p>
VDOT Response	<p>The type of abutting highway is not relevant to many of the standards. Throat depth is based on the traffic generated by the land use. Turn lanes focus on the speed of the highway and the length of the auxiliary lane necessary to safely decelerate. Curb radii are designed to accommodate the design vehicle expected to use the entrance. Corner clearance provides a minimum separation distance between an entrance and an intersection to prevent queued vehicles from backing up into the highway. A footnote has been added to the spacing standards Table 2-2 in Appendix G to specify that the greater of the spacing standards and the corner clearance will apply.</p>

VDOT Response	<p>Most of the exhibits in the design standards depict a multi-lane, divided facility with a median. Separate exhibits for median-divided and undivided roadways, as well as two-lane roadways, should be developed so that the standards are not applied inappropriately by the designer or reviewing staff.</p> <p>Figures 2-10 and 3-25 through 3-29 do not depict a multilane highway.</p>
VDOT Response	<p>The regulations require accommodations for bicyclists and pedestrians; however, the design standards do not illustrate how this should be accomplished.</p> <p>Figure 3-25 illustrates accommodating sidewalks and bicycle lanes along highways. Figures 2-3, 2-4, 2-11, 3-22, and 3-26 to 3-29 have been revised to illustrate sidewalks, bike lanes, and/or accessible pedestrian crosswalks. A new section on accommodating bicyclists and pedestrians has been added to Appendix G.</p>
VDOT Response	<p>It is stated that the regulations only apply to new requests for access and that they do not apply to cities (or counties that maintain their own roads). Because the minimum entrance and signal spacing are dramatically larger than current standards, this seems to be anti-competitive and would put most counties at a disadvantage trying to recruit new businesses for development.</p> <p>On the other hand, the reduced congestion and traffic crashes associated with better access management can attract business interest in an area. The market areas of businesses can expand and the movement of goods improves when highways provide more efficient traffic flow at a higher level of service. There are examples throughout the Commonwealth where new highways have had to be built to allow traffic to bypass roads where greater site access led to excessive congestion and traffic crashes. Business development, then, migrated away from such roads to locations near the intersections along the bypass.</p>
VDOT Response	<p>Projects that are well underway should be grandfathered. Entrance locations shown on proffered plans of development, site plans, and subdivision plats that have received VDOT comments prior to the Oct. 1, 2009, effective date should be exempt from the spacing standards.</p> <p>The vesting provisions in the regulations (24VAC30-73-20 B, now 73-120 C 3) are based on the Code sections that establish the vesting of locality approved site plans and subdivision plats as well as state law that establishes the legal basis of a locality approved rezoning proffered condition. We have amended 24VAC30-73-20 B, now 73-120 C 3, to also grandfather entrance locations identified on site plans and subdivision plats that <i>VDOT has approved</i> prior to the October 1 effective date. However, such vesting would still be dependent on the locality approving the documents after this effective date.</p>
W. Ben Burton, Bay Design Group, Northern Neck Office	<p>In general, Bay Design Group (BDG) feels that the implementation of Access Management regulations and standards are a reasonable goal. However, we feel that there is going to be significant hardship in rural and "small" town situations unless substantive consideration is given to the following:</p> <p>VDOT should develop a definitive method to comply with the regulations and standards without undue hardship on the initial "developer." The entrance design should be determined by the project being developed. Any alterations to the entrance due to the development of adjacent parcels should be done/paid for by those owners. The permit applicant should not be forced to anticipate future development of adjacent parcels as a condition of their plan approval or permit issuance.</p>
VDOT Response	<p>24VAC30-73-70 B focuses entrance design on the characteristics of the proposed development. 24VAC30-73-70 A 4 states that the entrance design will need to take into account curb/gutter and sidewalks near the proposed entrance. Should the design of an entrance for a development on an adjacent parcel impact an existing entrance (such as the provision of a right turn lane), in most cases the costs of such improvements will be the responsibility of the adjacent landowner.</p>

VDOT Response	VDOT should develop a process of substantive and reliable preliminary review of design concepts for shared access features without the requirement that a fully complete, permit ready, final design document be prepared and submitted. This would help clarify the issues for the landowners, reduce design costs and eventually streamline the review process for towns, counties and VDOT.
VDOT Response	The preliminary design of an entrance can be submitted to the Residency or District land development section for review and comments.
VDOT Response	VDOT must define and publish objective levels to decide that an entrance permit applicant has tried to work with neighboring landowners to comply with the concept of creating "shared entrances" but has been unsuccessful, so that plans do not get arbitrarily disapproved for a perceived lack of "trying".
VDOT Response	Evidence that a reasonable agreement could not be reached to share an entrance would be in the form of correspondence from the adjacent property owner stating their unwillingness to participate in the sharing of an entrance. The intent of 24VAC30-73-120 A 2, now 73-120 C 2, and § 33.1-198 of the Code of Virginia is for the developer to try to reach a reasonable agreement with the neighbor. We have amended this section to make this clear.
VDOT Response	Certain statements in the regulations appear to say that VDOT will not approve a commercial entrance until the local government has approved it. Yet, in most cases, the local agency is depending on VDOT approval before they will act. Perhaps the statements need to be clarified that VDOT can approve a plan in advance of local actions, but that a land use permit for the entrance construction cannot be issued until the local agency approval is achieved.
VDOT Response	4VAC30-73-100 "Commercial entrances – coordination with local governments" states that VDOT will not approve an entrance permit until the site plan or subdivision plat for the development is approved by the locality. VDOT can review a plat or site plan and indicate that the entrances and other transportation related components meet VDOT regulations and standards so that the locality can proceed with formal approval of the site plan or plat. The entrance permit, though, will not be issued until the locality has taken action. The intent is to assure that VDOT's issuance of an entrance permit takes place at the end of the development review process.
Ann Rogers, Roanoke, VA	24VAC30-73-120 C says, "VDOT may work with a locality or localities on access management corridor plans. Such plans may allow for spacing standards that differ from and supersede the spacing standards for entrances and intersections in Appendix F of the Road Design Manual . . . subject to approval by the commissioner." If VDOT were to obtain funds to perform a retrofit of access management on a roadway and, after the construction of the access management improvements had been completed, a local government whose land abuts the improved corridor requested the addition of new access in the area that had been retrofitted, how would VDOT respond to the request?
VDOT Response	Any proposed commercial entrance will be required to meet the spacing standards of the approved corridor plan, or in the absence of one, the spacing standards in Appendix G, Table 2-2.
VDOT Response	24VAC30-73-120 C. Could there be a situation where an access management plan has standards that are less strict than what is described in Appendix F?
VDOT Response	Yes. The detailed analysis of the present pattern of entrance locations, topography, characteristics of the highway may suggest that less strict spacing standards can be achieved along a corridor without impacting efficient highway operation or public safety.
VDOT Response	Local governments still control land use on the land that abuts roads. If a local government approves a change in land use and, as a result of the change, requests new access which, in turn, puts the corridor in a situation of access density that exceeds what is allowed in Appendix G, will VDOT refuse the request for new access, or will the many opportunities for exceptions be available to the local government?

VDOT Response	VDOT is responsible for maintaining state highway operations and safety. As a result, any commercial entrance applicant will be expected to abide by the regulations and standards. The potential exceptions described in the regulations are available to any applicant.
VDOT Response	Is there a culture within VDOT that has, in the past, bowed to the wishes of local governments when it came to giving permission for new access to highways for new commercial and residential development? Do you see a movement toward re-educating district administrators so that they understand their role in access management?
VDOT Response	VDOT works with commercial entrance applicants to find solutions to potential problems while not violating state law and regulations. Prior to the adoption of access management VDOT did not have clear rules on access spacing. The regulations/standards will provide everyone including VDOT staff with more detailed guidance on what the expectations are for approving access to the highway. Training workshops on the regulations and standards will be conducted for VDOT field staff.
VDOT Response	Will district administrators' issuance of exceptions be monitored to ensure that they aren't allowing so many exceptions as to undermine the new access management regulations?
VDOT Response	We have prepared and distributed to the VDOT field offices a list of the exceptions and the documentation that will be needed to justify the request. We will be monitoring the approval/denial of exception requests.
VDOT Response	Will the intent of these regulations be undermined by all the allowable exceptions, such as: 24VAC30-73-50 B. Appeal and exception procedure. "The commissioner may grant an exception to the required sight distance [for commercial and private entrance permits] after a traffic engineering investigation has been performed." 24VAC30-73-90 Private entrances. "If the minimum intersection sight distance cannot be met, the entrance should be placed at the location with the best possible sight distance as determined by the district administrator's designee." 24VAC30-73-120 Commercial entrance access management. Item 2. "A permit applicant shall not be required to follow the procedures for an appeal set forth in 24VAC30-73-50 to receive an exception to [sharing of commercial entrances]."
VDOT Response	During the drafting of the regulations and standards, the public/private sector committee identified possible impediments to their application, such as physical constraints to cross parcel access (wetlands, streams, hills) and refusal of a neighboring property owner to share an entrance. Certain exceptions require the submittal of a traffic engineering study which VDOT will evaluate to make sure approval of the exception, such as a reduced sight distance, will not compromise the safety, use, operation, or maintenance of the highway. Consequently, those exceptions that are approved should not undermine the regulatory intent to protect and enhance highway operation and public safety.
VDOT Response	Will the sharing of commercial entrances be on a voluntary basis rather than on a regulated basis?
VDOT Response	24VAC30-73-120 A 2, now 73-120 C 2, requires the commercial entrance applicant to contact the neighboring property owner about sharing an entrance.
VDOT Response	24VAC30-73-120. Commercial entrance access management. Item 3a. "On older established business corridors of a locality within an urban area where existing entrances and intersections did not meet the spacing standards prior to October 1, 2009, spacing for new entrances and intersections may be allowed by the district administrators designee that is consistent with the established spacing along the highway, provided that reasonable efforts are made to comply with the other access management requirements of this section including restricting entrances within the functional areas of intersections, sharing entrances with and providing vehicular and pedestrian connections between adjoining properties, and physically restricting entrances to right-in or right-out or both movements." If a road is not within an urban area, yet is an older, established business corridor where existing entrances and intersections did not meet the spacing standards prior to October 1, 2009, may spacing for new entrances and intersections be allowed by the district administrator that is consistent with the established spacing along the highway?

VDOT Response	We considered amending this provision of the regulations as suggested, but determined that the definition of 'urban area' in 24VAC30-73-10 was broad enough to cover any older business corridor within VDOT's jurisdiction (not towns and cities that maintain their roads).
David A. Edwards, Reston, VA	Your current study of access management as this relates to Virginia's "Principal Arterials" will have only somewhat limited relevance to the rapidly developing phenomena in Northern Virginia urban areas. Nevertheless, I feel that it is appropriate to once again stress the critical importance of assuring that major city downtown areas, including the highly urban portions of Fairfax County, must have significantly different thoroughfare design standards than are typically allowed for by VDOT. Because of quirks in Virginia laws that do not attribute the same standards to counties, even highly urban portions of counties, that would be given to cities such as Richmond and Norfolk, we continue to have sharp inconsistencies with respect to what VDOT standards should apply.
VDOT Response	In both the principal arterial and the minor arterial/collector spacing standards, the entrance, intersection, and traffic signal separation distances are significantly reduced for urban highways and for highways with lower speed limits. We have reduced the intersection spacing standards in Table 2-2 of Appendix G for urban collectors with speed limits 45 mph or less.
VDOT Response	As portions of Tysons Corner and Reston, among others in Fairfax County, take on a new highly urban form equivalent to that of the intensely developed portions of Richmond and Norfolk, it will be necessary for VDOT to consider these areas in a different light since the street system will continue to fall largely within VDOT's jurisdiction. The entire network of the urban streets system will require the same standards as would be found in a major city. Many of these are still designated as "secondary roads" but will carry daily traffic volumes well in excess of many of Virginia's "primary" or "principal" arterials. The purpose of this letter is to again put VDOT on notice that rapidly urbanizing counties will require a total re-evaluation of the VDOT standards that typically apply to Virginia's counties. Northern Virginia traffic and transportation engineering professionals look forward to the opportunity to work closely with VDOT as appropriate urban standards are developed for urban counties.
VDOT Response	On older established highway corridors in urban areas VDOT can allow spacing that is consistent with the existing spacing along the highway (24VAC30-73-120 A 3 a, now 73-120 C 3 c). Also, the spacing standards can be different within new urbanism, traditional neighborhood developments where the street network resembles that of a town or city (24VAC30-73-120 A 3 b, now 73-120 C 3 d). A locality can work with VDOT to prepare access management corridor plans for rapidly developing urban corridors such as in Northern Virginia that "allow for spacing standards that differ from and supersede the spacing standards" (24VAC30-73-120 C, now 73-120 C 3 b). The intent of these provisions is to provide flexibility in the application of the regulations and standards to meet special needs of different areas of the Commonwealth while still adhering to national engineering practices and policies.
Trip Pollard & Morgan Butler, Southern Environmental Law Center	<p>We strongly support the efforts to improve access management in this set of proposed regulations as well as the set of regulations and standards approved for principal arterials that took effect in July.</p> <p><u>Promoting Shared Entrances and Cross-Parcel Access</u></p> <p>We are pleased to see the inclusion of authority in 24VAC30-73-120 A.2 to require shared commercial entrances for adjacent properties, and we support the . . . grant of authority in 24VAC 30-73-120 A.4 to require that easements be dedicated for future vehicular and pedestrian connections between adjoining undeveloped properties on minor arterials and collectors. Limiting entrances onto highways by requiring shared entrances and cross-parcel access is a critical component of a successful access management program. However, we are concerned that the exemptions that are</p>

	<p>built into the regulations (separate and apart from seeking an “exception”) are expansive and could effectively reverse the presumptions in favor of shared entrances and cross-parcel access.</p> <p>In particular both requirements can be excused if there are “physical constraints... including but not limited to topography, environmentally sensitive areas, and hazardous uses.” 24VAC30-73-120 A.2 & A.4.a. While we strongly support the rationale for this exemption, the broadly worded illustrative examples make clear that a considerable amount of discretion will be available in determining what qualifies as a “physical constraint”.</p> <p>We understand that VDOT cannot realistically spell out every site specific condition that should qualify as an excusable “physical constraint.” One way to strengthen the presumption would be to give more weight to local access management plans that have been approved both by the relevant locality and VDOT. These plans are the result of much site specific analysis by the local and state officials who are in the best position to determine where shared entrances and cross parcel connections will be most beneficial with the least adverse impacts and should therefore be required.</p> <p>24VAC30-73-120 C states: “VDOT may work with a locality or localities on access management corridor plans. Such plans may allow for spacing requirements that supersede the spacing standards for entrances and intersections in Appendix G of the Road Design Manual subject to approval by the commissioner.”</p> <p>We suggest adding the following sentence to the end of this paragraph: <i>Such plans may also set forth the locations of the “physical constraints” that will excuse the shared entrance requirement set forth in paragraph (A)(2) and the requirement for cross parcel vehicular and pedestrian connections set forth in paragraph (A)(4)(a).</i></p>
VDOT Response	<p>We added such a statement to what is now 24VAC30-120 C.3.b. to provide more detail on the potential scope of access management corridor plans which, as suggested, could help promote local interest in working with VDOT to develop a plan that can address the unique characteristics of a highway corridor.</p>
VDOT Response	<p>The shared entrance requirement may also be exempted if “the permit applicant submits compelling evidence that a reasonable agreement cannot be reached with adjoining property owners.” 24VAC30-73-120 A.2. This exemption seems less appropriate when the adjoining property that would share the entrance is undeveloped, and we recommend limiting the exemption’s availability to only those cases in which the adjoining parcel is already developed</p>
VDOT Response	<p>The intent of this provision is to limit the number of new entrances along a road. So any time landowners agree to share an entrance that promotes the goals of access management. The owner of adjacent undeveloped property accrues certain advantages by agreeing to share use, maintenance and construction of an entrance including the certainty of having an entrance that meets the spacing standards. Otherwise the owner may be faced with having to seek an exception at a future date.</p>
VDOT Response	<p>We are also concerned that 24VAC30-73-120 A.4.c does not adequately discourage entrance permit applicants from refusing to comply with the cross parcel requirements. That subsection limits a permit applicant’s entrance to right-in and right-out movements (or similar restrictions) if the applicant “does not wish to comply” with the cross access requirement. In those cases in which applicants simply wish to avoid the requirement but are otherwise able to comply, we feel that the district administrator’s designee should also have the discretion to deny the entrance permit.</p>
VDOT Response	<p>The main purpose of the requirement is to channel internal site traffic away from the highway, not to deny an entrance to a property. 24VAC30-73-60 B reflects the General Assembly’s declaration in the access management Code section § 33.1-198.1 that “private property is entitled to reasonable access” to the highway. To deny an entrance permit because an applicant refuses to provide a cross access connection via private property would likely be considered unreasonable. The provision of a right-in/right-out entrance offers the safest means of access by preventing left turn movements.</p>

VDOT Response	<p>24VAC30-73-120 A.4.d requires “a unified access and circulation” between two development sites under the same ownership or consolidated for the purposes of development. We recommend adding the words “vehicular and pedestrian” before the word “access” in this sentence to make clear that the unified access and circulation system should be designed for pedestrians as well as automobiles.</p>
	<p>We have amended the regulation as recommended.</p>
VDOT Response	<p><u>Spacing for Unsignalized Intersections and Full Access Entrances on Urban Collectors</u></p> <p>It is critical that access management improvements be consistent with other efforts to better coordinate transportation and land use. These efforts include the promotion of compact development patterns, and greater street and pedestrian connectivity, in urban settings. We are concerned that some of the spacing requirements in the proposed standards set forth for urban collectors may be so large that they undermine these other goals. The spacing requirements seem especially onerous in cases where the intersections are designed as roundabouts, which lessen the need for large spacing intervals because they reduce the approach speed and decrease accidents.</p>
VDOT Response	<p>The spacing standards do offer advantages to roundabouts. A roundabout design can substitute for a signalized intersection such that the unsignalized spacing standards would apply. We have amended the regulations and standards to emphasize this advantage to using a roundabout design. 24VAC30-73-120 C 5 now requires a request for an exception to the traffic signal spacing regulation to include an evaluation of the suitability of the proposed entrance location for a roundabout design. Also, a section has been added to Appendix G that provides a thorough discussion on roundabouts: their benefits, VDOT policy and approval process, design criteria, illustrations, and links to additional resources.</p>
VDOT Response	<p>Specifically, Table 2-2 on page 25 of the Standards requires 660 feet between un-signalized intersections, as well as full access entrances, along urban collectors. This distance would effectively require blocks much larger than what typically foster compact, walkable developments.</p> <p>24VAC30-73-120 A.3.b may alleviate this concern to some degree. It allows the district administrator’s designee to approve reduced spacing standards for “entrances and intersections internal to” new urban and traditional neighborhood developments within urban development areas.</p> <p>However, it is not clear whether the language as written would apply to “external” entrances into the proposed development from an adjoining highway. We recommend modifying the language to make clear that entrances into such a development from adjoining highways (as well as entrances and intersections internal to the development itself) are eligible for reduced spacing requirements.</p> <p>If this change is unacceptable than we recommend that you at least reduce the 660 foot spacing requirement for un-signalized intersections and full access entrances along urban collectors.</p>
VDOT Response	<p>24VAC30-73-120 A.3.c, now 73-120 C.3.d, allows the District Administrator’s designee to approve reduced spacing standards for a development’s second or additional entrances to the highway so the internal streets will be eligible to be accepted for state maintenance. However, we have lowered the unsignalized intersection/full access entrance 660 ft spacing standard for urban collectors with speeds 45 mph or less to 440 ft.</p>
	<p><u>Review of Existing Commercial Entrances</u></p> <p>24VAC30-73-110 C list four instances in which an existing commercial entrance may be “reviewed” by the district administrator’s designee. However, review by itself may have little effect. We therefore suggest amending the first sentence of 24 VAC 30-73-110 to read: “Commercial entrances may be reviewed by the district administrator’s designee, <i>and reconstruction, relocation, consolidation, or upgrading, or a combination of these, may be required,</i> when any of the following occur:” This would make the authority to require necessary improvements after conducting such a review consistent with the similar review authority discussed in 24VAC30-73-110 A.</p>

VDOT Response	We have made this change to the regulations.
	<p><u>Additional Comments</u></p> <p>We strongly support the inclusion of requirements in 24VAC30-73-70 A.2, 3 that commercial entrance design and construction accommodate pedestrian, bicycle and transit users of the abutting highway.</p>
VDOT Response	No response needed.
	<p>To limit unnecessary environmental degradation in the siting of private entrances, we suggest inserting the word “necessary” into the third sentence of 24VAC30-73-90 A to read: “The district administrator’s designee may require the property owner to grade slopes, clear brush, remove trees, or conduct other similar efforts, or any combination of these, <i>necessary</i> to provide the safest possible means of ingress and egress that can be reasonably achieved.”</p>
VDOT Response	We have made this change to the regulations.
	<p>Although we are aware that funding for access management is beyond the scope of this document, we hope that adopting improved regulations and standards will help create momentum for increased funding for access management projects, including corridor-wide projects. The authority for access management is clear; the will and the funding to use it are critical.</p>
VDOT Response	No response needed.