

Secondary Street Acceptance Requirements (24 VAC 30-92)

The purpose of this document is to provide the Board with an overview of the modifications made to the regulation based on public comment and to review how with these modifications to the overall regulation will work.

The regulation outlines requirements for streets to be accepted into the state system for perpetual public maintenance. In the past streets have been accepted into the state system without consideration of the public benefit provided by such streets. Over the past several years the number of streets being accepted into the system and the levels of congestion has increased while state and federal transportation funding has decreased resulting in a situation where existing policy must be revisited.

In essence, this regulation creates a public-private partnership where the Commonwealth agrees to maintain streets built by developers to the benefit of the marketability of their developments in exchange for the developer building a street network that enhances the capacity of the overall transportation network.

The regulation establishes graduated requirements based on the location and density of the proposed development. The streets within a development or phase of a development will generally be considered for acceptance as a single network addition. Each network addition will need to provide:

- Public service. These requirements have been revised based on public comment. The modifications change the requirements for network additions to mirror the requirements for individual streets that exist today.
- Connectivity. These requirements have been revised based on public comment. More detail is provided below.
- Pedestrian accommodations. These requirements have been revised based on public comment. The requirements for pedestrian accommodation are based on the median density of the development instead of area type boundaries as was originally proposed.
 - Developments with lot sizes less than ½ acre would be required to provide accommodations along both sides of the street.
 - Developments with lot sizes between ½ acre and 2 acres would be required to provide pedestrian accommodation along one side of the street or within the development, such as a connecting trail system.
 - In both instances the accommodation may be a sidewalk, trail or other facility that provides equivalent pedestrian mobility.

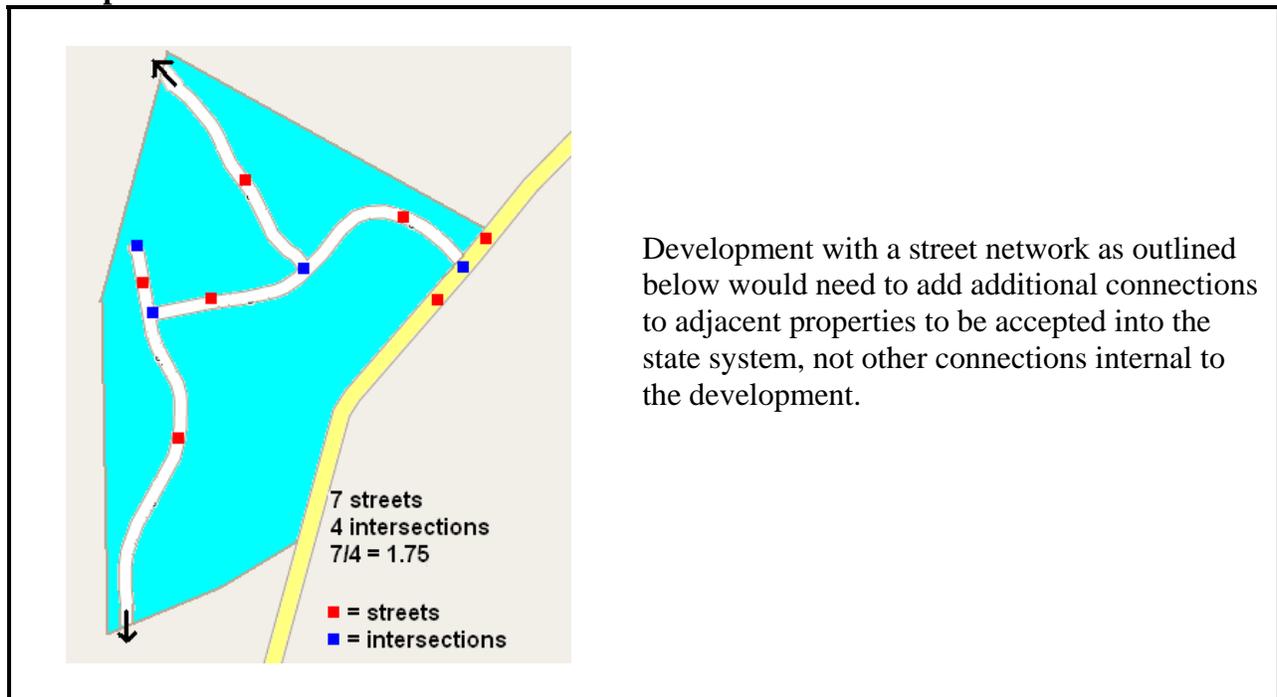
Connectivity requirements. The goal of the connectivity requirements is to ensure that the street networks of developments and phases of developments connect to existing communities and allow for future connections to adjacent property. The public comments on the proposed regulations published in April expressed concern that the connectivity requirements would require additional internal connections, and that the exception process was uncertain and potentially very time consuming. These requirements and the exception process has been revised to ensure that the implementation will result in additional connections between developments instead of requiring multiple new street connections internal to a development and to streamline

the exception process by giving the development community the discretion to automatically reduce requirements where appropriate.

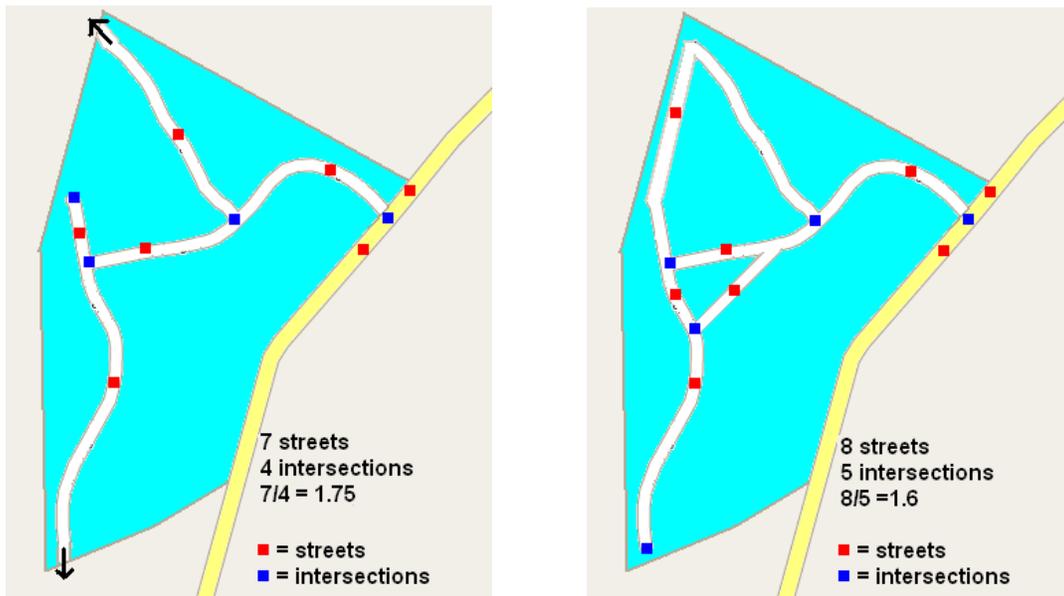
As noted in the public comments, additional streets internal to a development would significantly increase the cost for developers while providing little benefit to the Commonwealth. Accordingly the language has been revised to require that a development in the compact or suburban area type must have sufficient external connections to reach the applicable connectivity index requirements (1.6 and 1.4 respectively).

After follow up with stakeholders, the regulation has been further revised to modify the method by which the connectivity index is calculated. The new methodology will provide additional credit for external connections. Under the new methodology the intersections connected to streets within the network addition and the external streets connected to the intersection will be used when calculating a network addition's connectivity index. The new methodology will result in less connectivity than the previous proposed methodology but will still ensure that the future transportation network will have better connectivity than the network today.

Example 1

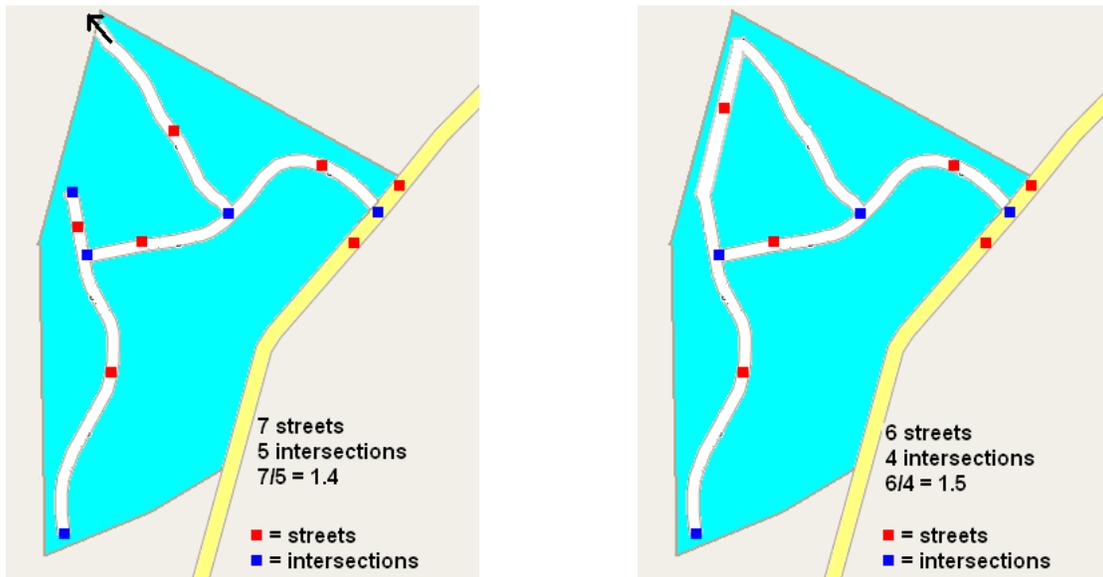


Example 2



In the compact area type, this development would need to extend two of the streets to allow for future connection with adjacent properties. The example on the left would meet with the requirements. However, the example on the right with additional connections internal to the development would not meet the revised requirements even though it has an index of 1.6.

Example 3



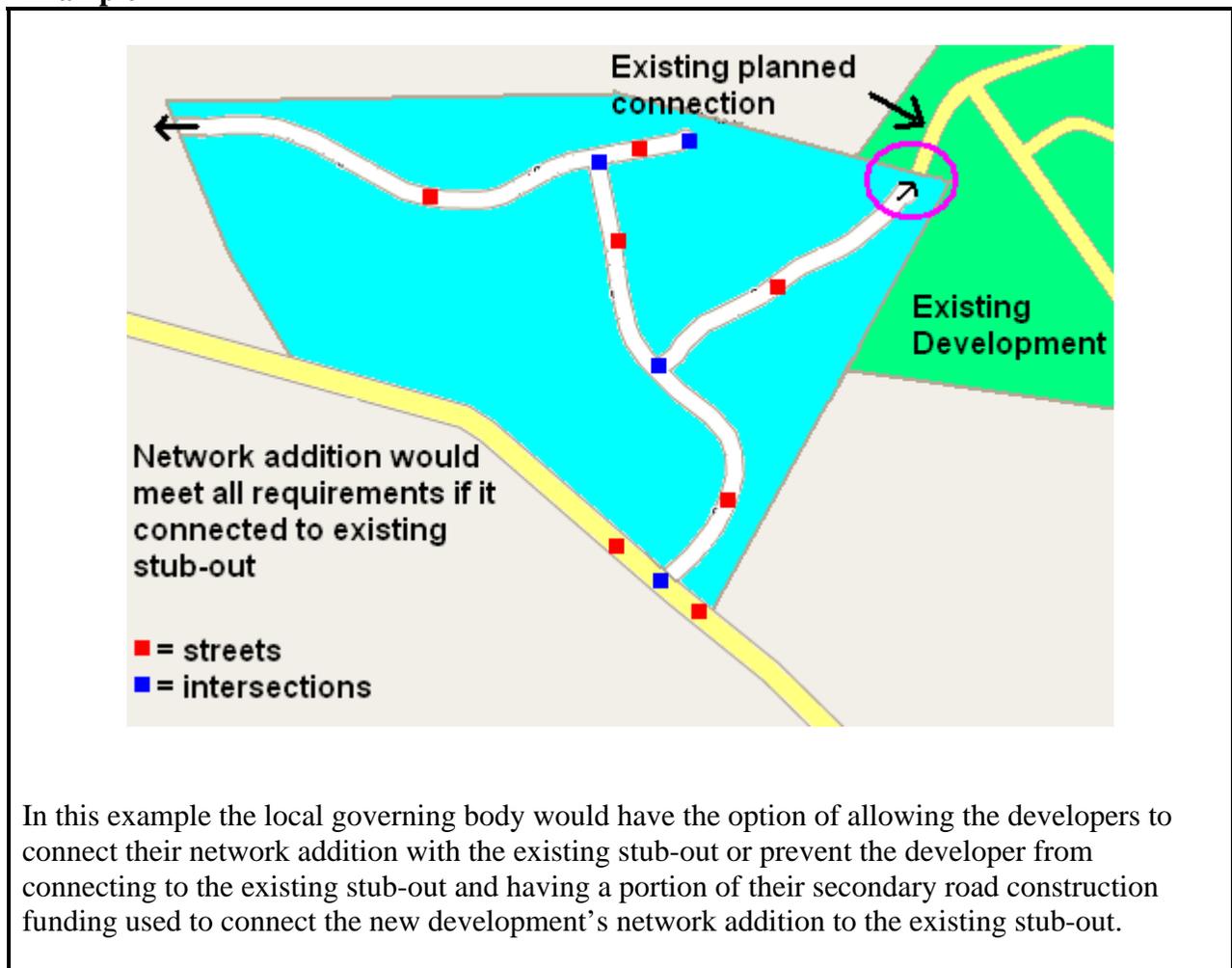
In suburban area types, this development would need to extend one of the streets to allow for future connection with adjacent properties. The example on the left would meet the requirements. Again, the example on the right with only one way and one way out would not meet the requirements for the suburban area type even though it has an index of 1.5.

In rural area types there is not a connectivity index requirement. Based on the revised requirements a development would need to have more than one connection or a connection and a stub-out, where possible.

The regulation has also been revised based on input from stakeholders to include a new provision to help ensure that connectivity is provided when it has been planned for in the past. The provision would apply when a new development is being built next to an existing development with a stub-out. The existing development was constructed with the intention that the stub-out would eventually be a site for future connection to adjacent parcels.

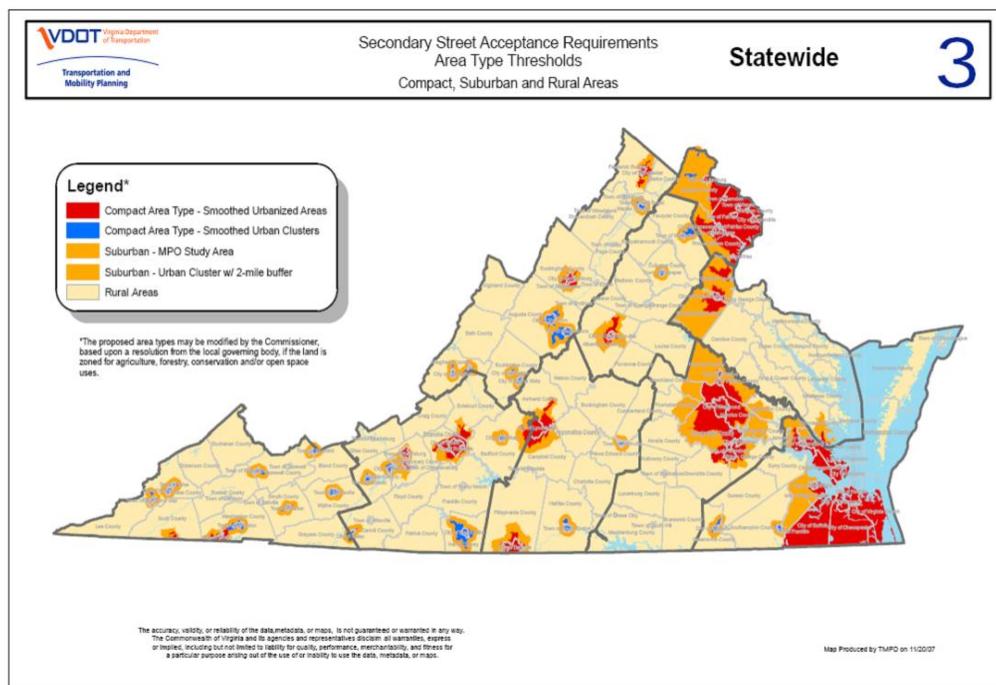
If the new development is built and the local governing body allows the new development to connect to the stub-out in the existing development then the streets would be accepted into the state system. If the local government does not allow the new development to connect to the stub-out in the existing development then the new development's network addition would be accepted into the state system and VDOT would use the locality's secondary road construction funding to construct the missing link between stub-outs.

Example 4



In this example the local governing body would have the option of allowing the developers to connect their network addition with the existing stub-out or prevent the developer from connecting to the existing stub-out and having a portion of their secondary road construction funding used to connect the new development's network addition to the existing stub-out.

Below is a map of the area type boundaries. These boundaries are based on local, regional and federal long-term planning boundaries such as locally designated urban development areas, regionally designated metropolitan planning organization boundaries and federally designated census urbanized area boundaries. In addition to the ability to modify planning boundaries which would automatically change the area type boundaries, local governments may request modifications to the area type boundaries when they do not match the local plan for development.

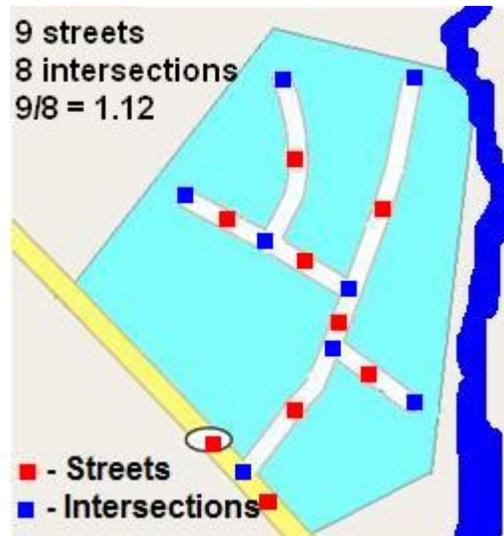


The exceptions process in the regulation has been revised significantly to create two processes, one that is automatic and another that is incorporated into the traffic impact analysis process.

There will be instances where all parties agree that connectivity cannot be met. These include railroad tracks, bodies of water, rivers, steep grades, mountains, federal lands, limited access highways and conservation easements. When one of these conditions exists a developer may automatically reduce the connectivity requirements that the development would need to meet.

Example 5

In the example below a river borders approximately 1/3 of the development's perimeter preventing connections to neighboring developments.



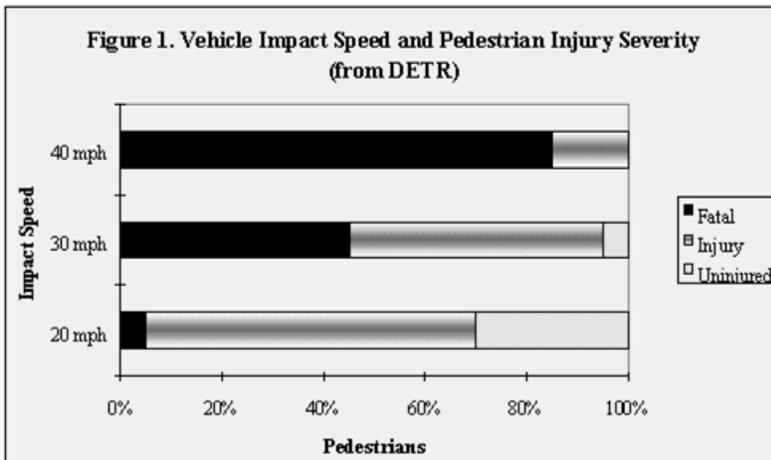
The developer would be able to automatically reduce the connectivity requirements by the proportion of the development bordered by a constraint. The connectivity requirement for this development, located in the compact area type, would be revised from 1.6 to 1.4 or 33% because 33% of the perimeter is constrained and connections are not feasible. This process will likely apply to the majority of exceptions.

Some situations are not as easily defined and will require that requests for exceptions to the connectivity requirements be reviewed on a case-by-case basis. To streamline this process, these reviews have been incorporated into the VDOT traffic impact analysis review at the beginning of the development process. This will allow developers to move forward with design of their projects with a full understanding of the applicable rules and requirements. The Department will be required to respond to those who request an exception within 45 calendar days. For developments that do not meet the thresholds to require a traffic impact analysis requests for exceptions will be considered as part of the review of the initial conceptual sketch of the development, again at the beginning of the development process.

The surety bonding requirements have also been revised based on public comment. The length of surety in the revised regulations is the same as it is today for streets inspected using the normal VDOT staff inspection process, a one year period. However, the regulation provides additional flexibility to local governments and developers to use alternative means of inspection that do not rely on VDOT staff. A local government may initiate a local certification process where, if desired by the local government, the locality would take on the role of street inspection. Currently Prince William County and Fairfax have set up such programs. Also, developers will have the option of hiring a third party to inspect the streets for VDOT. In both of these situations the surety bonding requirement would be waived.

The revised regulation also contains additional flexibility regarding parking requirements and placement of stormwater best management practices (also known as low impact development techniques) within the right-of-way. Today stormwater best management practices are not allowed within the VDOT right-of-way. These facilities can help improve the quality of stormwater runoff and reduce the amount of stormwater runoff.

Street design standards. As a part of this initiative revisions are underway to the VDOT street design standards for local roadways. Today due to emergency response and school bus needs, and the lack of connectivity and alternative routes local streets must be designed to be 36 to 40 feet wide. These widths combined with the off-street parking requirements of many local ordinances and the existing subdivision street requirements often results in a local roadway with lane widths that are effectively 18 feet in width. This design can encourage excessive vehicular speeds which are inappropriate for residential areas. Increased vehicle travel speeds greatly increases the severity of pedestrian and vehicle accidents.



Through increased connectivity of the local street network resulting in alternative routes for emergency responders, these widths can be reduced to 24 to 29 feet depending on whether or not parking is allowed on one or both sides of the street. This design can help reduce stormwater runoff, costs to construct the streets and will help slow down traffic on local streets.

Other benefits. In addition to the benefits for the efficiency and overall capacity of the transportation system, increased connectivity can have other benefits for local governments. These benefits include reduced local service costs.

Please see the example on the next page.

Example 6

A Charlotte-Mecklenburg County study examined the cost of providing fire service in areas with a connected street network versus areas without. The study concluded that a connected street network could reduce the cost of providing fire service and increase the area served by individual stations. In particular, the study found that the annualized life cycle costs per capita for a fire station located within an area with a connectivity index of 1.3 was \$206, while the same costs for another station located in an area with an index of 1.09 was \$740.

- Station 15

- Located at Eastway/Shamrock intersection (E Charlotte)
- Area developed in 1950's – 1960's ~ older suburbs
- Connectivity ratio of 1.30
- 2½-mile response area: 13.4 mi²

- Station 31

- Located on Ridge Road near Highland Creek (NE Charlotte)
- Area developed in 1980's – 1990's ~ recent suburbs
- Connectivity ratio of 1.09
- 2½-mile response area: 8.0 mi²

