



SECRETARY of TRANSPORTATION



Nick Donohue September 17, 2008













Secondary Street Acceptance Requirements

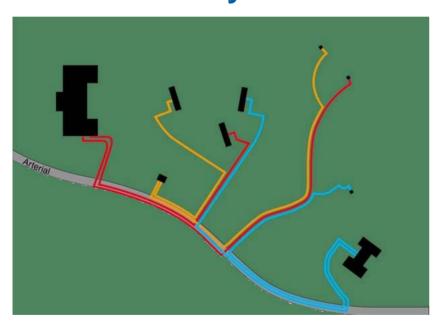
- New regulation result of 2007 legislation and will replace current Subdivision Street Requirements (24VAC30-91)
- Intended to ensure streets accepted into state system for perpetual public maintenance provide adequate public benefit
- Legislation mandates that the new regulation:
 - Ensure connectivity of road and pedestrian networks with existing and future transportation network
 - Minimize storm water run-off
 - Minimize impervious surface area through reduced streets widths
 - Address performance bonding and cost recovery

Why Update Secondary Street Acceptance Requirements?

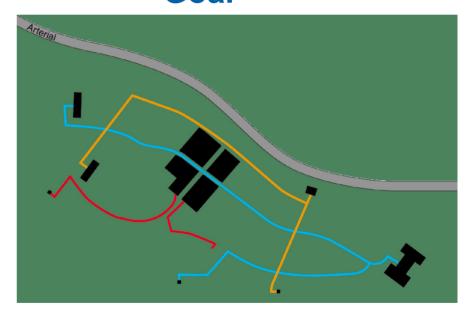
- Isolated developments cause additional strain on the regional transportation network by forcing local trips onto major roads
 - Requiring all trips local and regional to rely on major roads is not sustainable
- Increased connectivity will allow for context sensitive design neighborhood streets
 - Will help encourage friendly environments for pedestrians and bicyclists, and discourage speeding in neighborhoods

Why Update Secondary Street Acceptance Requirements?

Today



Goal



Public Comments

Proposed regulation was published for public comment for 75 days this spring and four public hearings were held

There were four major themes:

- Support for connectivity between neighborhoods
- Concern regarding ability to make external connections and potential impact on internal design
- Support for enhanced pedestrian and bicycle accommodations with concern over proposed requirements
- Concern over potential for a result of increased stormwater runoff and environmental impacts

Connectivity

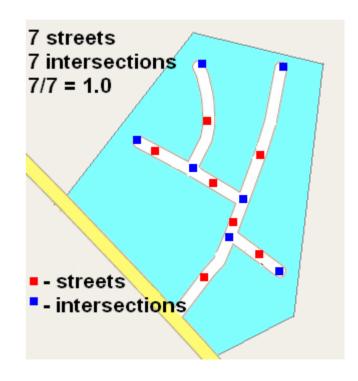
- Support expressed for increasing connectivity between neighborhoods
- Concern regarding ability to make external connections and potential impact on internal design
- Concern is based on:
 - Interpretation of connectivity index concept
 - Local governments may reject external connections
 - Uncertainty in exception process

Secondary Street Acceptance Requirements - Connectivity Index

Goal is for new subdivisions to meet connectivity requirement through additional connectivity

Today conventional neighborhoods often have a connectivity index of 1.0

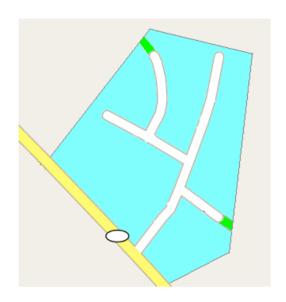
- this is the *lowest* possible index

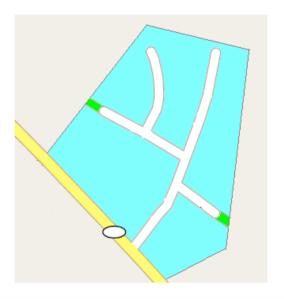


Secondary Street Acceptance Requirements - Connectivity Index

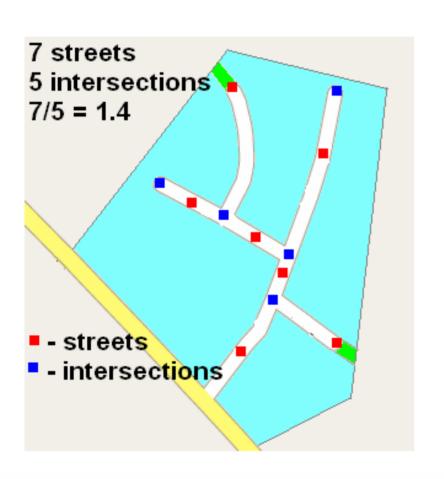
Developers have various options to meet connectivity index goal

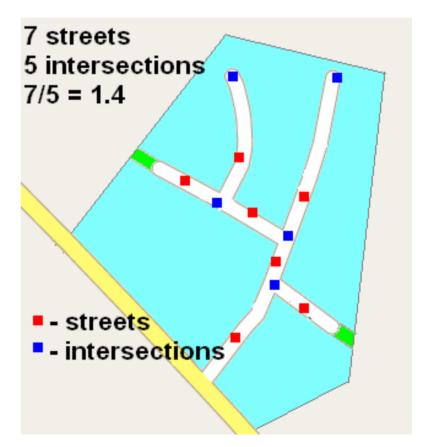
The goal is to have multiple connections to adjacent neighborhoods





Secondary Street Acceptance Requirements - Connectivity Index

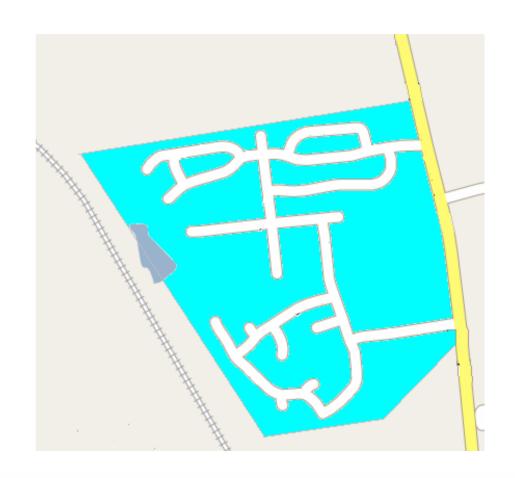




Secondary Street Acceptance Requirements – Connectivity Exceptions

Connectivity is not always feasible. Two types of exceptions are recommended.

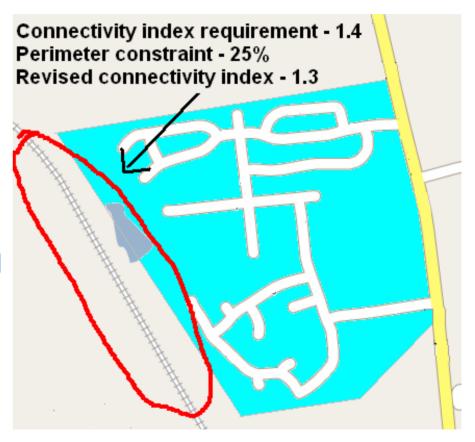
- Automatic exceptions
- Review related exceptions



Secondary Street Acceptance Requirements – Connectivity Exceptions

Automatic reductions would be given for perimeter constraints such as wetlands, existing development, rivers, terrain, railroad tracks, etc

In this example 25% of the perimeter is effectively eliminated for connections due to railroad tracks, so the connectivity index is automatically reduced from 1.4 to 1.3 or 25%



Secondary Street Acceptance Requirements – Connectivity Exceptions

- Review related exceptions
 - Incompatible land use
 - Unique characteristics of parcel
 - Access management regulations
- Consideration would be built into initial conceptual sketch review
 - VDOT would be required to respond within 45 calendar days

Secondary Street Acceptance Requirements

Public comments included concern regarding the impact of pedestrian accommodation requirements and street design requirements on impervious surface area and stormwater runoff

VDOT has reviewed its street design requirements and recommends modifications



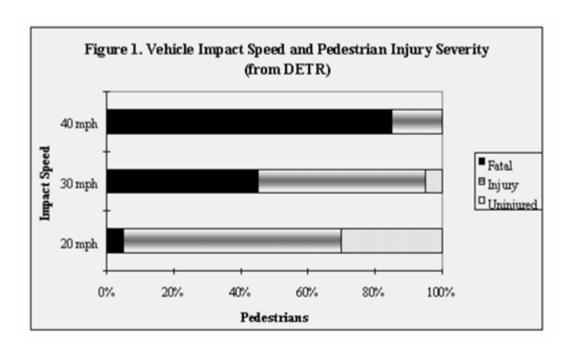




Lane widths of this size can encourage travel at high speeds and increase impervious surface area

This design and lane widths are necessary in many situations today due to emergency access needs and the lack of connectivity

Increased vehicle speeds increase pedestrian injuries and fatalities



Increased connectivity can allow the use of context sensitive street design which can:

- Promote safe environments for pedestrians, bicyclists and children
- Reduce stormwater runoff
- Discourage high travel speeds within neighborhoods





Connectivity allows design of local streets will result in lower vehicle speeds – built-in traffic calming

Recommended widths promote context sensitive solutions and are in compliance with engineering principles including AASHTO and Institute of Traffic Engineers

Based on understanding that local roads serve access to property and disperse traffic

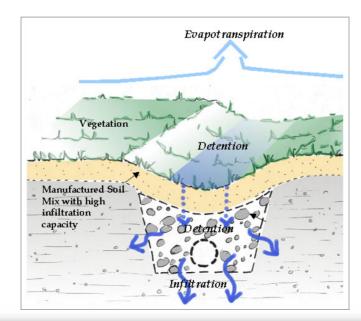
(curb and gutter)	Recommended Standards	Current Standards
Less than 2000 vehicles	29 ft	36 ft
2001 to 4000 vehicles	36 ft	40 ft

^{*} Widths assume on-street parking on both sides of the street

Stormwater Runoff

VDOT has worked with DCR and private sector to develop list of innovative stormwater facilities that can be placed within VDOT right of way

Today, stormwater facilities are not permitted within VDOT right of way







Outstanding Issues

Implementation Advisory Committee will continue to meet to discuss:

- Pedestrian accommodation requirements
- Connectivity index requirement
- Provisions to encourage local governments to approve connectivity between neighborhoods
- Other concerns identified in public comments