

# CHAPTER 425 SECONDARY STREET ACCEPTANCE CONNECTIVITY STAKEHOLDER ADVISORY GROUP

 Kevin Gregg, Chief of Maintenance

September 23, 2022

# Agenda

- Welcome and Introductions
  - Name and Organization for each Advisory Group Member
- Group Chair Selection
- Electronic Meetings Policy
- Legislation (Chapter 425 of the 2022 Acts of Assembly)
  - What it says
  - What needs to be done
  - Deadlines
- SSAR Connectivity
  - History
  - Current requirements
  - Exceptions
- Connectivity Research
  - Block length
  - Intersection spacing

# Welcome, Introductions, and Committee Organization

- Required Stakeholder Advisory Group Membership
  - Virginia Department of Transportation
  - Local Government
  - Environmental Advocacy
  - Residential and Commercial Land Development and Construction Industry
- Committee Chair
- Electronic Meetings Policy

# CHAPTER 425 SECONDARY STREET ACCEPTANCE CONNECTIVITY

Robert W. Hofrichter  
Director, Office of Land Use

September 23, 2022

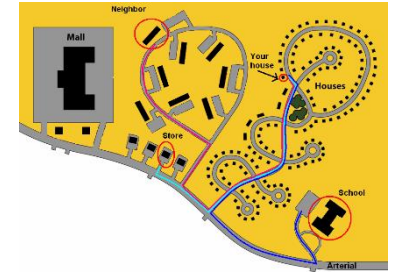
# Chapter 425

- Amends connectivity provision of § 33.2-334
  - ...the regulations shall include (i) requirements to ensure the connectivity of highway and pedestrian networks with the existing and future transportation network, provided that such provisions shall include flexibility to limit the number of connections to adjacent property or highway networks as deemed appropriate...
- Amendment of regulations
  - Stakeholder advisory group provides recommendations no later than January 1, 2023
  - Presented to Commonwealth Transportation Board for adoption prior to June 1, 2023
- Critical Item for Consideration by stakeholder advisory group
  - Flexibility to limit connections “as deemed appropriate”

# Secondary Street Acceptance Requirements Connectivity

- Purpose of Connectivity

- Redundant vehicle routes
- Alternate routes for emergency response vehicles
- More direct connections for pedestrians/bicyclists



- Original Connectivity Requirement (2009 version)

- Connect to existing publicly maintained road
- Connect to existing stub outs
- Multiple connections in multiple directions
- Reasonably direct pedestrian movement
- Connectivity index (link/node ratio) based on area type (1.6/1.4/none)



# Secondary Street Acceptance Requirements Connectivity

## Part 2

- **Current Connectivity Requirements (2011 version)**
  - Connect to existing publicly maintained road
    - No exceptions (but municipal street counts)
  - Connect to existing stub outs
    - Unsafe connection exception (approved by District Engineer)
  - Multiple connections in multiple directions (stub out or to another street)
    - Adjoining property built out and unlikely to redevelop in 20 years
    - Incompatible use (residential, retail, and office not incompatible)
    - No reasonable connection possible (terrain, conservation easement, federal property, etc)
  - Additional connections based upon trip generation volume (+1 every 2000 trips)
    - Adjoining property built out and unlikely to redevelop in 20 years
    - Incompatible use (residential, retail, and office not incompatible)
    - No reasonable connection possible (terrain, conservation easement, federal property, etc)
    - For FAR 0.4 or 8 DU/acre or higher, number of connections contrary to public interest
  - Other connectivity exception based on Access Management

# Connectivity Research

- Overall
  - No study on “how much connectivity is too much”
  - Most studies encourage more connectivity
- Potential Benefits of Increased Connectivity
  - Greater emergency response area
  - Distribute traffic across more streets
  - Promote active transportation (more direct routes)
  - Tie community together
- Potential Negatives of Increased Connectivity
  - Cut-through traffic
  - Cul-de-sac lots have greater consumer value
  - Impervious surface area (stormwater-related)



# Connectivity Research (part 2)

- **Block Length**
  - Shorter blocks tend to promote pedestrian activity
  - Block lengths greater than 600 ft tend to be unfriendly to pedestrians
- **Intersection Spacing (Access Management)**
  - Local streets can have fairly dense connection spacing (200 ft)
  - Dense network of signalized intersections can cause issues
- **Hybrid Layouts (Fused Grid, etc)**
  - Some connections bike/ped only
  - Does not provide as many alternative routes for motorized vehicles
    - Limits flexibility for emergency response
    - Concentrates traffic more than grid
  - Provide pedestrian connectivity
    - Encourages active transportation by providing links in and between neighborhoods

# CHAPTER 425, 2022 ACTS OF ASSEMBLY STAKEHOLDER ADVISORY GROUP

