

# **BOARD OF SUPERVISORS WORK SESSION**

## **GOVERNMENT CENTER BOARD ROOM**

**MARCH 23, 2010 - 4 P.M.**

**A. Call to Order**

**B. Roll Call**

**C. Board Discussions**

1. Joint Work Session with the Planning Commission – Zoning Ordinance Update Process (Attachment) (Attachment 1) (Attachment 2) (Attachment 3) (Memorandum)
2. Secondary Street Acceptance Requirements

**D. Break**

MEMORANDUM

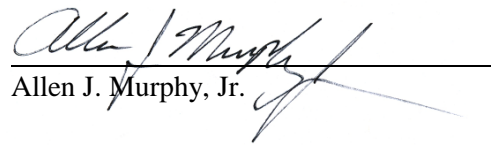
DATE: March 23, 2010  
TO: The Board of Supervisors  
FROM: Allen J. Murphy, Jr., Director of Planning/Assistant Development Manager  
SUBJECT: Zoning Ordinance Update Process

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In January, staff provided the Board of Supervisors with draft Zoning Ordinance update documents for FY 2011 budget guidance at the budget retreat. These documents contained three options that comprised a menu of possible items to be included in the scope and the associated consultant cost estimates. They also described a range of process approaches. The general guidance received during that process provided information about the scale of consultant assistance that could be expected as that factor affects the overall scope and process. The Board generally favored Option B as a guideline for budgeting purposes.

The draft update scope and process information were then provided to the Planning Commission at its March 3, 2010, meeting for feedback prior to developing a detailed draft methodology document and revised scope and process spreadsheets. The Policy Committee considered this feedback and the resulting draft methodology at its meeting on March 17, 2010. Staff anticipates that the Policy Committee input generated at the March 17 meeting will be provided in summary form at or prior to the joint work session.

Key discussion and decision points for the ordinance update are the update process scope, priorities, and community input. Going forward, should all of these key decision points reach resolution at or after this work session, staff will revise the final methodology for consideration at the Planning Commission and Board of Supervisors meetings in April and May, respectively.

  
Allen J. Murphy, Jr.

AJM/gb  
OrdUpdate\_mem

Attachments

cc: Planning Commission

# Draft Zoning and Subdivision Ordinance Update Methodology

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## Introduction

Following adoption of the 2009 Comprehensive Plan in late 2009, staff has moved into the implementation phase. One significant component of the Comprehensive Plan implementation process is updating the Zoning Ordinance and Subdivision Ordinance and related policies. Partial or complete updates of the ordinances were undertaken shortly after adoption of two of the last three Comprehensive Plans (1991, 1997). However, the ordinances were not updated in a comprehensive fashion after the most recent previous Comprehensive Plan update in 2003. Please note that this methodology focuses on Zoning and Subdivision Ordinance implementation actions to be achieved during approximately the next two fiscal years – work on additional implementation actions would continue beyond the two years. Ordinance update processes also provide an opportunity, as appropriate, to coordinate ordinances with amendments to State code, changes in related County documents, or reflect evolutions in development-related technologies, techniques, or best practices.

## Groundwork

This methodology was shaped by a number of factors. In terms of the scope of issues to be looked at during this update, much of the groundwork was laid through the extensive public comment and technical analysis that resulted in the 2009 Comprehensive Plan’s implementation actions (see “Scope of Work” below). In terms of process, staff analyzed past James City County ordinance update processes, talked with other Virginia localities about processes they have used, and consulted professional publications. Staff used the information gained through this research to help draft the methodology, which is presented for input and guidance from, and subsequent endorsement by, the Policy Committee, the Planning Commission, and the Board of Supervisors.

## Goals

Having an overall set of goals for the updated ordinance can help make sure expectations are met and inform the challenging decisions that will need to be made both about policy directions, and about the language of the ordinance text. Staff offers the following five goals for enhancing the updated ordinances:

- Reflect the Comprehensive Plan and community input (for example, address actions listed in the Plan’s goals, strategies, and actions);
- Organize in a logical and understandable manner (for example, consider consolidating all process language in one section, rather than in each district);
- Incorporate clear standards (for example, adding graphics if possible);
- Use best practices (for example, looking at a form based code for Toano); and

- Provide linkages with other relevant codes and ordinances (for example, referencing the building permit process where relevant).

## Scope of Work

The scope of work for a project details the range of topics to be investigated and potentially incorporated. The draft scope of work in Attachment 2 for this ordinance update is drawn primarily from the 2009 Comprehensive Plan implementation guide. In particular, effort was made to include items identified as high priority and in the 0 – 5 year timeframe in the implementation guide. The final scope of work is based on projected resources (consultant funds, using existing staff levels, etc.), expectations about timeframe and process, and priority guidance from the Planning Commission and Board of Supervisors. While many of the Comprehensive Plan actions are addressed by this scope, not every relevant action item could be accommodated during this update process. Should the Policy Committee or Planning Commission require additional time to be comfortable with certain amended ordinances, the timeframe might need to expand or items might need to be dropped from the scope of work.

The scope of work includes elements to be completed in several stages: major research items to be completed by consultants and/or staff, smaller-scale technical review items compiled by staff (for example, looking at appropriate commercial uses in Rural Lands), and drafting and finalizing of the actual ordinance language. The research projects are an essential part of the process, as they will allow analysis of different options and assessments of feasibility before the detailed work of creating ordinance language starts.

The list of major research items in this scope of work includes:

- Review of sustainability and green building best practices for overall ordinance;
- Accommodation of new wireless technologies/section update;
- Affordable housing provisions;
- Cluster overlay update;
- Infill housing provisions;
- Review of rural lands narrative ordinance and update;
- Investigation of transfer of development rights;
- Form-based code analysis for Toano;
- Amendment of mixed use district or creation of new district for Economic Opportunity designation;
- Business Climate Task Force items;
- Sidewalk/trail inventory/ master plan/text update;
- Development of new submittal requirements for traffic impact analyses using VDOT regulations, and for environmental and fiscal impact analyses;
- Initial database work for cumulative impact modeling; and
- Review of subdivision ordinance amendments required for alternative onsite sewage systems.

More information about each of the major research items listed above can be found in Attachment #1 Explanation of Research Items and these items are also shown in Attachment #2 Scope of Work.

Completing the proposed research items and comprehensive ordinance drafting is an ambitious scope of work for the timeframe. Staff suggests that the Policy Committee, Planning Commission and Board of Supervisors identify a smaller number of priority items that would be the focus of the overall effort and could potentially move through the process in advance of other items, or at least continue on track if other items prove to be more difficult to work through in the allotted timeframes. Based on feedback we've heard so far, those priority items/groups of ordinances could be:

- Sign ordinance;
- Amendment of mixed use district or creation of new district for Economic Opportunity designation;
- Business/Industrial/Rural Lands-Commercial/Mixed Use Districts;
- Review of Green building best practices for overall ordinance;
- Development Standards

## Process Components

The Zoning Ordinance update process is divided between three stages: (1) identification of issues and evaluation of options, (2) preparation and revision of ordinances, and (3) adoption. These stages are described below, and are also shown in Attachment #3 Process and Timeframe. This process uses a mixture of consultant and staff work, and is anticipated to take approximately twenty months. The process is designed to be undertaken primarily by staff and the Policy Committee, with periodic Planning Commission and Board of Supervisors check-in points.

### *Stage 1: Identification of Issues and Evaluation of Options*

The first stage of the process will last approximately eight months. During this time, staff will retain and subsequently work with consultants on a variety of the research items. Staff will also work on non-consultant research items and will conduct a general technical review of the ordinance to catalogue known issues and identify any additional issues. The goal of this work is to come up with a list of possible needed amendments and to develop options for how those amendments could be accomplished. These options would then be brought forward to the Policy Committee, Planning Commission and Board of Supervisors for decisions and guidance before moving into the next stage, preparation of draft ordinance language.

This first stage will include significant opportunities for early community input and Planning Commission and Board guidance. In terms of community input, this stage will include forum opportunities at two Policy Committee meetings at the very beginning of the process to assist in identifying issues (within the scope of work items), plus subsequent opportunities for the community to learn about and comment on the possible amendment options at additional Policy Committee meetings, a Planning Commission work

session and a Board work session. These same meetings will be opportunities for the Committee, Commission, and Board to evaluate, guide and make decisions. In order to organize the presentation of options, it is anticipated that options will be grouped in five categories as much as reasonably possible: (a) Commercial/Industrial/Rural Lands-Commercial/Mixed Use, (b) Residential/Subdivision Ordinance, (c) Development Standards, (d) Submittal Requirements/Process Regulations, and (e) Rural Lands.

### *Stage 2: Preparation and Revision of Ordinances*

The second stage of the process will last approximately nine months. During this time, staff and consultants will take forward the guidance from the first stage and use it to develop a set of draft ordinances. These draft ordinances will then be brought forward to the Policy Committee for a series of 8 – 12 meetings. These meetings will allow for Policy Committee review to make sure that the Stage 1 guidance is adequately reflected in the draft ordinances and to consider and make decisions about any specific policy questions that have come to light during the drafting process. Should additional Policy Committee meetings be needed, the timeframe for the process would likely need to be adjusted. After Policy Committee review, the draft ordinances will then be brought forward to the Planning Commission and Board of Supervisors. After this vetting, staff and consultants will work to finalize the ordinance language. During this time, the ordinances will also be carefully reviewed by the Zoning Administrator and County Attorney's Office to ensure that the ordinances are legal and enforceable. In the end, these final draft ordinances will be considered at two Policy Committee meetings to resolve any remaining issues. Opportunities for community input will be available at all of the Committee and Commission meetings listed above.

For both Stage 1 and Stage 2, while the attached Process and Timeframe spreadsheet shows periods of staff and consultant work prior to formal commencement of the sets of Policy Committee meetings, if research items or draft or final ordinances are ready prior to the end of those periods, staff could bring them forward for consideration. This would be particularly the case for any items designated as priorities (see "Scope of Work" above).

### *Stage 3: Adoption*

The final stage of the process is anticipated to take approximately four months. This time will concentrate on conducting any necessary advertising and written notifications, and preparation of final materials for Planning Commission and Board consideration and adoption. Community input opportunities will be available at each of the public hearings.

## **Other Community Information Resources**

As outlined above, the process includes many opportunities for community involvement and input. Staff anticipates that the Planning Commission and Planning Commission/Board work sessions will be televised, and that the Policy Committee meetings will be open for public comment and meeting agendas and meeting materials will be posted on the webpage. Staff can undertake notification of

potentially interested parties to make them aware of the upcoming ordinance process, and in consultation with the Policy Committee, could invite additional community input at meetings.

In addition, staff is in the process of outlining a communications plan that would include use of the *FYI* Newsletter, press releases, and the video center. Other avenues of publicity may include flyers, articles, editorials, direct mailings, and email subscription lists. In particular, staff anticipates that a significant amount of information will be posted on the Internet, which is a feature that was not present in past ordinance update processes.

### Staff's Role in the Process

Staff will participate in this process in several ways. Staff will draft option explanations and ordinances, provide advice on best practices, and make recommendations to the Policy Committee, Planning Commission and Board of Supervisors. Overall, staff will work to assist the Planning Commission in developing a product that the Commission can recommend approval of to the Board of Supervisors.

### Access to the Updated Text and Map

Once the Board has approved the amendments, the updated text will be posted on the Internet. Hard copies of the text will also be available for purchase upon request. Any amended Board policies or other associated guidance documents will also be posted on the Internet. The Zoning map will continue be available on the internet through the County's Property Information System or in hard copy through the County's Mapping Division.

#### Attachments:

1. Explanation of Research Items
2. Scope of Work Spreadsheet
3. Process and Timeframe Spreadsheet

**Attachment 1: Explanation of Research Items**

Zoning Ordinance Update Category	Potential Large Research Item	Explanation of Research Item
Overall Ordinance	Sustainability Audit	The product would be a report that identifies provisions of the Zoning Ordinance that may create obstacles to sustainability and an outline of recommended changes to meet specific sustainability goals. The sustainability audit will include specific recommendations on changes that can be made to the Zoning Ordinance, including model language.
	Green Building Standards Investigation	Inclusion of regulations regarding green building standards, such as LEED or EarthCraft, for new construction.
	Density/Intensity Recommendations for Residential and Commercial Districts	Analysis of existing ordinances and policies against Comp Plan and best practice documents – including a review of the Zoning ordinance and policy documents to evaluate current densities and intensities in existing districts, as well as best practices for emerging techniques to better plan for a range of commercial and residential densities and intensities, i.e. how well do our ordinances describe what we want to see in terms of density and design. This also includes the preparation of a Memorandum that summarizes the basic concepts, research findings and identifies opportunities and an outline of options for the County to implement these practices, e.g. references to model ordinances, suggested language
Wireless Communications Ordinance and Performance Standards Policy	Wireless Communications Master Plan	The scope could vary depending on JCC's needs, but typical elements include: an inventory of existing antenna-supporting structures and buildings, upon which wireless antennas are currently mounted; analysis of reasonably anticipated wireless facility growth over the next ten years; engineering analysis of potential coverage based on existing height restrictions and other locations and design criteria; and recommendations for managing the development of wireless structures for the next 10 years.
Residential Districts (R-1, R-2, R-4, R-5, R-6), Cluster Overlay, and Manufactured Home Parks	Affordable Dwelling unit ordinance or affordable housing overlay district investigation	(Discussed in detail in the Comprehensive Plan Housing Section)
	Cluster Overlay update	This was a recommendation that emerged from the Better Site Design process and subsequent implementation committee. At a Board work session on September 25, 2007, the Board provided guidance that this should be looked at during the Zoning Ordinance update process.
	Infill Residential Provisions Investigation	(Discussed in detail in the Comprehensive Plan Housing Section)
Rural Lands Districts (R-8, A-1)	Facilitated Session with BOS to discuss the 2007 draft ordinance (with preparation of an update memo as well)	The staff would prepare and facilitate a BOS work session, and technical assistance (consultant) to get direction on whether to proceed with old narrative or work on something new.
	Transfer of Development Rights Investigation	This would be a detailed review, to include (among many other things) an evaluation of potential challenges and opportunities of a TDR program in James City County, to include a discussion of the current proffer system, existing density incentive programs, and a review of the zoning ordinance to determine the relationship of density to development. It would also explore the idea that higher density development is necessary in order to make density increases in potential “receiving areas” marketable, and whether sufficient market demand for higher density development exists? What are basic characteristics of the residential development market in the county relative to a market for transferring of densities?
Multiple Use Districts (Mixed use, R-4, PUD)	Investigate improvements to the Mixed Use District standards, and creation of Form Based Code For Economic Opportunity, investigate possible amended mixed use district or creation of a new district. Also, Urban Development Area (UDA) investigation.	This includes review of the Zoning ordinance and policy documents to evaluate their performance in relation to best practices for emerging Form Based Code zoning and Mixed Use zoning and land use policies. It also includes the preparation of a Memorandum that summarizes the basic concepts, research findings and identifies opportunities and an outline of options for the County to implement these practices, e.g. references to model ordinances, suggested language.
		Due to the creation of the new Economic Opportunity designation, this investigation would seek to determine whether the existing Mixed Use district would be appropriate or whether a new or modified district might be advisable.
Commercial Districts (LB, B-1, M-1, M-2)	BCTF items	These items are listed in the Business Climate Task Force recommendations.
Development Standards (Landscaping, Parking, Lighting, Signs, Streets, Sidewalks and Paths, Utilities, Outdoor	Community Character Overlay Investigation	This item originates from the Community Character section of the Comprehensive Plan, and would include assessing what areas and standards would be appropriate.
	Sidewalk/Trail Inventory, Master Planning, and Text update	Update the existing and outdated Sidewalk Master Plan which is referenced in the zoning ordinance. This item originates from the Transportation and Parks and Recreation sections and would create an up-to-date baseline for where we have sidewalks, multi-use paths, etc in order to make administration of the ordinance more effective.



**Attachment 1: Explanation of Research Items**

<p>Operations and Storage, and Timbering) &amp; Overlay Districts</p>	<p>Bikeway Standards from Greenway Master Plan</p>	<p>This originates from the Parks and Recreation section. Currently there is no mention of bikeways in the ordinance but the Greenways Master Plan did include some ideas as a baseline for bikeway standards. This item would include reviewing the existing standards in the Greenway Master Plan to make sure they're consistent with current best practices and researching adjacent localities to determine the best way to include the standards into the ordinance.</p>
<p>Procedural Descriptions, Submittal Requirements, and Administrative Items (including definitions, fees, SUP and Rezoning submittal requirements and procedure, site plan requirements and procedure, enforcement, nonconformities, and BZA)</p>	<p>Submittal Requirement Guidelines - for Traffic Studies. Scope of work could include Level of Service (LOS) criteria</p>	<p>The first possibility, developing guidelines, would involve setting down a specific list of items that should be included in traffic studies so that studies are comprehensive and consistent - this would build on VDOT's new traffic study regulations, but put in place items that are expected in James City County. The second possibility, level of service (LOS) criteria, would be an investigation of policy options related to establishing LOS standards that are based on the particular road and location in the County. This investigation would look at policy options, but does not include in its scope the analysis necessary to craft the actual policies or ordinances - putting a specific policy or ordinance in place would be a second task that would likely require additional consultant funds.</p>
	<p>Submittal Requirement Guidelines - for Environmental</p>	<p>Preparation of a guidance document that outlines information needed to evaluate the environmental impact of a development.</p>
	<p>Submittal Requirement Guidelines - Fiscal Impact Statement</p>	<p>The first possibility, developing guidelines, would involve setting down a specific list of items that should be included in fiscal impact studies so that studies are comprehensive and consistent. It would focus fiscal impact studies on the fiscal picture of the development once it is built (rather than on revenues associated with the construction phase). The second possibility, developing a software model, would allow for comparison of scenarios, such as the worst case fiscal picture of a development.</p>
	<p>Cumulative Impact Modeling - Database Set-up Investigation (to allow tracking of approved units in relation to public facilities, traffic, etc.)</p>	<p>This item would involve investigating software to model the cumulative impacts of development (tracking approved units in relation to public facilities, traffic, etc.)</p>
<p>Subdivision Ordinance</p>	<p>Alternative Onsite Sewage Systems Investigation</p>	<p>New regulations were put in place during the 2009 General Assembly session that should be investigated by staff.</p>

Attachment 2: Option B Scope

Zoning Ordinance Update Category	Potential Large Research Item	Research Item Consultant Cost / Staff work hours*	Comp Plan Priority/Timeframe	Ordinance Text Drafting Consultant Cost / Staff work hours*	Total Consultant Cost / Staff Work Hours*
Miscellaneous Items	Sustainability Audit	Approx. \$8,000 / 200 hours	High/0-5 (LU 1.7.1)	(Staff work hours incorporated in time estimates below)	\$8,000 / 400 hours
	Green Building Standards Investigation	na / 200 hours	High/0-5 (ENV 1.4.3, H 1.1.1)		
Wireless Communications Ordinance and Performance Standards Policy	Determine options for the ordinance to be adjusted to accommodate new technologies	Approx. \$6,000 / 600 hours	High/0-5 (CC 1.7.1)	na / 1200 hours	\$6,000 / 1800 hours
Residential Districts (R-1, R-2, R-4, R-5, R-6), Cluster Overlay, and Manufactured Home Parks	Affordable Dwelling unit ordinance or affordable housing overlay district investigation	na / 450 hours	High/0-5 (H 1.3.7)	na / 1200 hours	na / 2,700 hours
	Cluster Overlay update	na / 600 hours	n/a specific (Better Site Design)		
	Infill Residential Provisions Investigation	na / 450 hours	High/0-5 (H 1.1.6)		
Rural Lands Districts (R-8, A-1)	Staff/BOS meetings to discuss the 2007 draft ordinance (with preparation of an update memo as well as consultant assistance)	\$5,812 / 100 hours	High/0-5 (LU 1.6.2)	To take the narrative ordinance to final ordinance= \$12,368 / 1200 hours	\$57,000 / 1900 hours
	Transfer of Development Rights Investigation	Approx. \$38,822 / 600 hours	Moderate/0-5 (LU 1.6.1.2(d))		
Multiple Use Districts (Mixed use, R-4, PUD)	Investigate Form Based Code for Toano	na / 600 hours	Moderate/0-5 (LU 1.4.5.3)	na / 1200 hours	na / 2520 hours
	For Economic Opportunity, investigate possible amended mixed use district or creation of a new district. Also, Urban Development Area (UDA) investigation.	na / 720 hours	n/a specific		
Commercial Districts (LB, B-1, M-1, M-2)	BCTF items	na / 450 hours	High/0-5(ECON 1.1.6), High/On-going (ECON 1.1.5)	na/ 1000 hours	na / 1450 hours
Development Standards (Landscaping, Parking, Lighting, Signs, Streets, Sidewalks and Paths, Utilities, Outdoor Operations and Storage, and Timbering) & Overlay Districts (Cluster, Floodplain, Airport)	Sidewalk/Trail Inventory, Master Planning, and Text update	na / 450 hours	Moderate/0-5 (P&R 1.5.5), overall Sidewalk MP update not in Comp Plan	na/ 1200 hours	na / 1650 hours
Procedural Descriptions, Submittal Requirements, and Administrative Items (including definitions, fees, SUP and Rezoning submittal requirements and procedure, site plan requirements and procedure, enforcement, nonconformities, and BZA)	Submittal Requirement Guidelines - for Traffic Studies (LOS criteria not included in the scope of work)	na / 320 hours	Moderate/0-5 (LU 1.5.2.1)	na / 1200 hours	Up to approx. \$45,000 / 2890 hours
	Submittal Requirement Guidelines - for Environmental	na / 320 hours	Moderate/0-5 (LU 1.5.2.1)		
	Submittal Requirement Guidelines - Fiscal Impact Statement	Development of impact statement data guidelines - approx \$2,000 - \$5,000 / 450 hours	Moderate/0-5 (LU 1.5.2.1)		
	Cumulative Impact Modeling - Database Set-up Investigation (to allow tracking of approved units in relation to public facilities, traffic, etc.)	\$30,000 - \$40,000 / 600 hours	High/0-5 (LU 1.5.1.1)		
Subdivision Ordinance	Alternative Onsite Sewage Systems Investigation	na / 200 hours	n/a specific (very recent state code issue)	na / 1000 hours	na / 1200 hours

\* Staff work hours is an estimate only. The estimate includes Planning/Zoning staff, front desk staff support and supervisory review. The estimate does not include time spent by other divisions or agencies, such as the County Attorney's office, Environmental Division, etc.. These estimates may not be reflective of the total number of hours if an item proves to be controversial, has heavy public interest, or has a higher amount of time spent on it by the Planning Commission or Board. The staff work hours for the Zoning Ordinance review represent the following percentages of total staff hours: 34% for Option A, 36% for Option B, and 30% for Option C.

Up to \$116,000 / 16,510 hours

Attachment 3: Option B Process and Timeframe

		Month																			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	15	17	18	19	20
Stage 1 : ID of Issues & Eval. Of Options	Joint Planning Commission/Board of Supervisors Work Session	█																			
	2 Policy Committee Meetings/Forums	█	█																		
	Staff review of the ordinance sections and ID of problems	█	█	█																	
	Staff work on options for non-consultant items		█	█	█	█	█	█													
	Work to get consultants under contract for pre-cursor items	█	█																		
	Consultant work on pre-cursor items, preparation of reports and options		█	█	█	█	█	█													
	4 - 8 Policy Committee meetings/Public comment				←*	←	←	█	█												
	1 Planning Commission Work Session/Public comment				←*	←	←	←	█												
	1 Board Check-In Work Session/Public comment								█												
Stage 2 : Prep & Revision of Ordinances	Preparation of the draft ordinances								█	█	█	█	█								
	8 - 12 Policy Committee meetings/Public comment										←*	←	█	█	█						
	1 Planning Commission Work Session/Public comment										←*	←	←	←	█						
	1 Board Check-In Work Session/Public comment														█						
	Ordinance Finalization & Vetting of draft ordinances through zoning administrator and attorney's office													█	█	█	█				
	2 Policy Committee meetings/Public comment																█				
Stage 3 : Adoption	Advertisements & Written Notice - Prep and publication or mailing												←*	←	←	←	←	←	█	█	
	Planning Commission consideration												←*	←	←	←	←	←	←	█	█
	BOS consideration												←*	←	←	←	←	←	←	←	█

\* Priority items or other more straightforward items may be moved through the process more quickly

# Secondary Street Acceptance Requirements

Steven Hicks, Development Manager

Allen Murphy, Planning Director

Board of Supervisor's Work Session  
March 23, 2010



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## Development of Secondary Street Acceptance Requirements

- 2007 § 33.1-70.3 directed Commonwealth Transportation Board (CTB) to develop regulations
- Development of regulations
  - Public comments in 2007
  - Stakeholder committee included developers, localities, smart growth advocates
  - CTB oversight (10 briefings at CTB meetings)
  - 21 regional stakeholder meetings
  - CTB adopted February 2009
  - In full effect July 2009



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## Previous Requirements

2005 Subdivision Street Requirements (24 VAC 30-91)

Problems under previous practice

- Increased congestion
- Wider streets
- Discourages other modes of transportation
- Impacts on neighborhoods
- Unsustainable burden on major roadways



3 3

## Secondary Street Acceptance Requirements

- Essential Changes from Previous Requirements
  - Area types (Compact, Suburban, Rural)
    - Based upon regional and local planning boundaries
  - Connectivity requirements
    - Connectivity index (varies with area type)
    - Multiple connections in multiple directions
    - Connection to state maintained streets
    - “Stub out” constructed to the property line to provide for a future connection



4 4

## Secondary Street Acceptance Requirements

- Essential Changes from Previous Requirements
  - Network additions
    - Creates flexibility in applying connectivity requirements
  - Pedestrian facility requirements
    - Based upon density, area type, and street functional classification
  - Option for third party (consultant) inspection



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## Connectivity Index

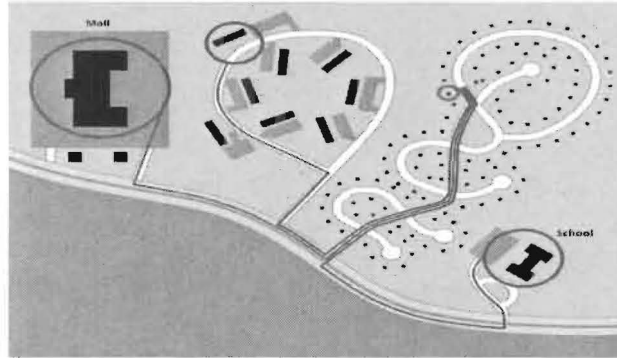
$\frac{\text{Street Segments}}{\text{Intersections}} = \text{Connectivity Index}$

- **Compact Area Type** at least 1.6 (inside PSA)
- **Suburban Area Type** at least 1.4 (outside PSA)
- **Rural Area Type** not required



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## Problem Today

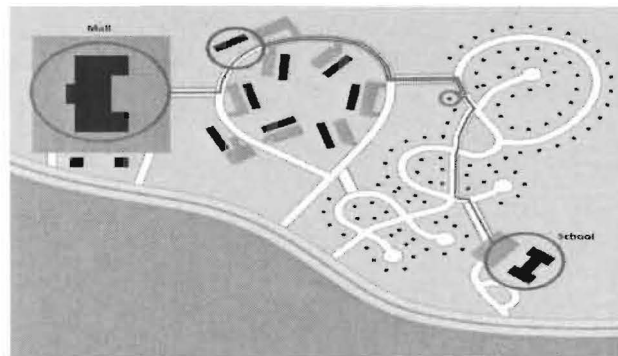


In the example above, any local trip would require access to the major highway to arrive at the destination. This design requires that all trips rely on these highways.



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## Benefits of Connectivity

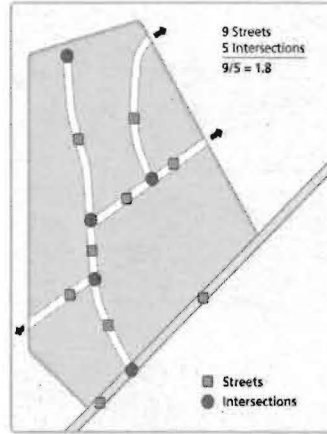
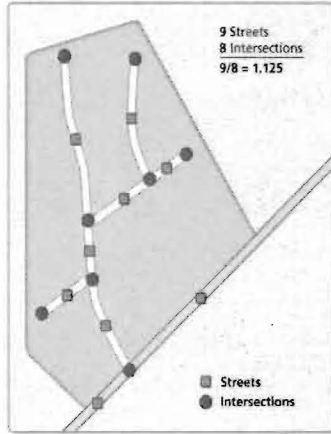


The goal is to provide additional connections between adjacent developments and undeveloped parcels to allow local trips to use local streets.



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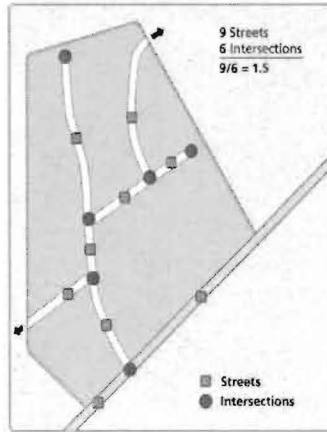
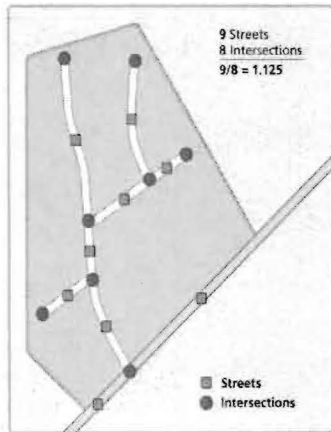
## Connectivity and Compact Area ( $\geq 1.6$ )



The left example has only one ingress and egress point. The right example meets the connectivity requirements with four connection points located in multiple directions.

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## Connectivity and Suburban Area ( $\geq 1.4$ )



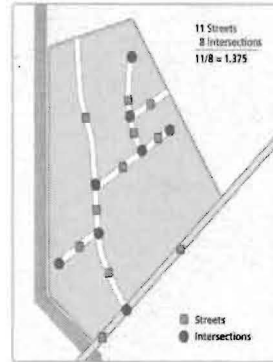
The left example has only one ingress and egress point. The right example meets the connectivity requirements with three connection points located in multiple directions.

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## Connectivity Exceptions Due to Physical Constraints

- Railroad tracks
- Limited access highway
- Navigable river or body of water greater than 4 feet
- Grades greater than 20%
- Government owned property
- Land under conservation easements accepted by the Virginia Outdoors Foundation

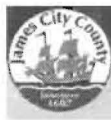


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## Secondary Street Acceptance Requirements

### Questions

Board of Supervisor's Work Session  
March 23, 2010



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