

Washington, D.C. Zoning Regulations Reengineering Study

Discussion of Enhancements

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Executive Summary

The District of Columbia’s Zoning Regulations are its principal tool for controlling land use. The District has not substantially updated the Zoning Regulations since 1958. Over the years, new tools and practices have emerged to make regulations clearer and easier to use. This Report addresses the ways that the public, administrators, and stakeholders can interact with the Zoning Regulations in a more efficient, user-friendly way.

This Report describes how the current Zoning Regulations are accessed and organized, and suggests a number of enhancements to its technical and legal infrastructure. These include better document design, improved layout, graphics, and technologies that link documents together. The Report discusses a number of tools to improve the technical and legal infrastructure. These “enhancements” range from embedded graphics and commentary, to external aids such as a handbook and web-based regulations.

The Report assesses the District’s Zoning Regulations with regard to the enhancements. This includes a discussion of the types of enhancements found in the Zoning Regulations today, as well as how the District could incorporate new enhancements.

Introduction

The District of Columbia's land use and zoning framework is in the midst of a transition. The primary catalyst for this transition is a new Comprehensive Plan. The Office of Planning is preparing to review and revise the Zoning Regulations to ensure that the Zoning Regulations are not inconsistent with the new Comprehensive Plan. This will become the first comprehensive overhaul of the Zoning Regulations since 1958.

In response to these complementary developments, the Office of Zoning has initiated a multi-phase Zoning Regulations Reengineering (ZRR) project to design and build a modern technical and legal infrastructure for the District of Columbia's forthcoming revised Zoning Regulations. Phase I of the ZRR included interviews with appropriate District departments involved in the zoning process, discussions with informed stakeholder groups, a benchmarking study of three cities that represent various approaches to their technical and legal infrastructures, and a general analysis and assessment of the strengths and weaknesses of the technical and legal infrastructure of the District's current Zoning Regulations and their related precedent.

The Office of Zoning contracted the consultant team of White & Smith, LLC, HNTB Corporation, and Justice and Sustainability, LLC to conduct Phase I of the ZRR. The Office of Zoning is now briefing the public on these tools and techniques. This process will continue its ongoing dialogue with users of the Zoning Regulations to ensure that they are transparent, readable, and accessible to both professional and lay users.

What is the "technical and legal infrastructure"?

The phrase "technical and legal infrastructure" refers to how code users and the general public **access and use** Zoning Regulations. The phrase includes how Zoning Regulations are written, organized, illustrated, administered, codified and placed in the public domain in both print and electronic format. A technical and legal infrastructure involves a diverse number of techniques ranging from **best practices** for technical writing and regulatory drafting, to contemporary **E-government** strategies for Internet display and access.

Why do we need a new technical and legal infrastructure?

While the District has been a leader in planning initiatives, it has not comprehensively updated its Zoning Regulations in nearly 50 years. As a result, the document has become lengthy, complicated, and difficult to read. While its layout and design have some advantages, including familiarity, its layout is complex. In addition, a complete understanding of the Zoning Regulations requires references to outside sources. These include court decisions, statutes, and official interpretations of District staff and agencies. The official codified version of the Zoning Regulations was last republished in 2002.¹ To obtaining a current version of the regulations, the reader must supplement the 2002 Zoning Regulations with rulemakings that are published in the *D.C. Register*. This is a time-consuming process, especially for members of the general public or infrequent users.

As noted, an important recent development is the District's new Comprehensive Plan. The Comprehensive Plan is the District's long term vision for growth and development. As such, it requires appropriate regulations (along with capital improvements and other initiatives) to become reality. The Zoning Regulations are published at **11 DCMR**. The Comprehensive Plan is published at **10 DCMR**. The 2006 Comprehensive Plan introduces a number of new concepts and changes in land use policy. It also includes a state of the art layout, with graphics, tables, photographs, and other visual enhancements. While many of the new plan policies involve substantive development standards, others will require new ways to explain zoning techniques to the public and to applicants.

¹ See DCMR Basic Version online, at [http://www.amlegal.com/nxt/gateway.dll/Title%2011/chapter00001.htm?f=templates\\$fn=main-nf.htm\\$3.0#JD_Introduction](http://www.amlegal.com/nxt/gateway.dll/Title%2011/chapter00001.htm?f=templates$fn=main-nf.htm$3.0#JD_Introduction) (2002 certification by Office of Documents and Administrative Issuances).

Overall Goals of the Zoning Regulations Revision Phase I Study

This Report addresses how the Zoning Regulations are accessed and used. It does not address substantive issues, such as the content of the development standards, choices between regulating use and design, building height, and related issues. The Office of Planning will address those issues over the next several years.

Despite the age of the District's current Zoning Regulations, their organization has some internal logic, despite their awkward layout. It contains an index. The organization of district regulations has a consistent flow. However, it has the appearance of a legalistic document, and lacks modern document design enhancements that would dramatically improve its readability and usability.

This Report addresses the technical and legal infrastructure of the District's Zoning Regulations and suggests changes to that infrastructure. The goals of this Report are to:

- Review the **structure** of the Zoning Regulations. In particular, the Report will assess how the document affects the ability to find information, whether it flows logically, and how it can be improved. This involves an analysis of the Zoning Regulations, how they have worked from the vantage point of different users, and the case for reforming their structure.
- Assess how to improve linkages to **external sources**. Regulations are given meaning from sources beyond the language of the regulations themselves. Agency interpretations, staff construction, court cases, and external reference documents can interpret and, in some cases, change the meaning of the specific language used in the Zoning Regulations. Annotations and other techniques can improve the linkages between these references. This can avoid surprises for the public and administrative staff. In addition, where precedent and interpretation diverge from the Zoning Regulation's underlying purposes, this can signal the need for amendments.
- Review **best practices** from other local governments to demonstrate how state-of-the-art zoning codes are organized, illustrated, and published. Local governments throughout the nation have deployed a number of advanced document design techniques that improve the usability of Zoning Regulations. A benchmarking study of 3 jurisdictions (New York City, Milwaukee, and San Antonio) was completed as part of this study.

References to these and other jurisdictions are included throughout this Report. This provides an overview of the state of the practice nationally and enhancements that the District can consider as it updates its Zoning Regulations.

- Assess ways to make the Zoning Regulations **clearer** and more **user-friendly**. The Zoning Regulations are a legal document that must be enforced and maintained in a way that is consistent with constitutional, statutory and judicial mandates. Many aspects of Zoning Regulations are written primarily to ensure that they are enforceable. This is an important function of zoning. However, day to day readability and usability are also important. Legality and readability are not mutually exclusive goals. Techniques that improve readability include graphics, better document design, and page layout that are clearer to average readers. This Report describes those techniques and ways to build them into Zoning Regulations.
- Suggest enhancements that improve **information gathering** both inside and outside of the document. This includes search functions and online access alternatives that provide quick access to regulatory topics internal to the document. It also includes links to legislative history, the zoning map, court decisions and administrative rulings that interpret the meaning of regulatory language.
- Develop options to revise the technical and legal infrastructure that address the **diverse group of users** who currently need access to the Zoning Regulations. The Zoning Regulations are used by District staff, the general public, applicants, land investors; developers, land use attorneys, architects, elected officials, and appointed officials. Each of these users needs different information. Different users approach the document from different perspectives. Their needs should be addressed comprehensively, with a variety of enhancements. This Report suggests ways to enhance the code to meet the diverse needs of these groups.

Enhancements

The modern technical enhancements for the Zoning Regulations fall into several categories:

- **Official or Enhanced.** An “official” enhancement has the force and effect of law. It requires a rulemaking procedure by the Zoning Commission. An enhanced version does not have legal status. However, it can explain

the official content. In some instances, it can have persuasive effect on courts by demonstrating an official interpretation of the regulations.

- **Media.** In today’s climate, documents are increasingly available in digital form. This can include online documents or CD/DVD versions that are accessible from the Office of Zoning. However, many users lack computer hardware or skills, or simply prefer to read hard copies. Accordingly, many of the enhancements can include both an electronic and a print version.
- **Short-Term or Long-Term.** Some of the enhancements can be implemented in the near future. Others may take a longer term to put together and distribute. In addition, some can await the substantive revisions to the Zoning Regulations that are currently being undertaken by the Office of Planning.
- **Expense.** The enhancements involve various levels of expense for the District. The documents can require specialized expertise and technical writing skills, distribution and printing expenses, or additional staffing.

Summary of Enhancements

The technical enhancements are summarized in Table 1 Enhancements Comparative Table. Table 1 indicates whether the enhancements involve an official version, or whether it is an enhanced version that does not require formal rulemaking. The table indicates whether the version involves a print or an electronic copy, or both. Some of the tasks can be performed in the near term, while others will take several years, or longer, to complete.² Some of the tasks can also be performed partially in the near term, and added to over the long term – such as when the substantive rewrite of the Zoning Regulations is completed. These are indicated with check marks in both columns. The expense is also listed as low (L), medium (M) or high (H).

² This assessment assumes the current state of affairs, with the official version of the Zoning Regulations residing with the ODAI and D.C. Register. If this changes, some of the official changes might be completed in a shorter time frame.

Table 1 Enhancements Comparative Table

Technical and legal infrastructure enhancements

Definition

Codification

Print version

A print version of the Handbook or enhanced Zoning Regulations is distributed.

Electronic version

An electronic version of the Handbook or enhanced Zoning Regulations is distributed via CD or DVD.

Online version

A version of the Handbook or enhanced Zoning Regulations is posted online.

Updated enhanced version of Zoning Regulations

Enhanced version of Zoning Regulations that includes all post-codification rulemakings

Enhanced version

An enhanced version of the Zoning Regulations explains how the official version of the regulations works, but has no binding effect.

Rulemaking	Official	Enhanced	Print Copy	Electronic Copy	Short-term	Long-term	Expense ⁽¹⁾
Print version		✓	✓		✓	✓	H
Electronic version		✓		✓	✓	✓	M
Online version		✓		✓	✓	✓	L
Updated enhanced version of Zoning Regulations		✓	✓	✓	✓		L
Enhanced version		✓	✓	✓	✓		M

Technical and legal infrastructure enhancements

Definition

Organization

Modern organizational principles are used. This includes a strong executive summary/introduction, and the document flows from the most to the least interesting, most to least important, and general to the specific.

Document Design

Links (print)

Textual links are provided to codified sections of the Zoning Regulations.

Hyperlinks (web)

Electronic hyperlinks are provided to codified sections of the Zoning Regulations.

Demarcated text

Explanatory materials such as commentary and purpose statements are set off by italics, colored fonts, or icons.

Zoning Map

Linked to zoning text

Labels on the online GIS maps can be clicked, which take the reader directly to the applicable zoning text.

Rulemaking	Official	Enhanced	Print Copy	Electronic Copy	Short-term	Long-term	Expense ⁽¹⁾
✓	✓	✓	✓	✓	✓		L
✓	✓	✓	✓		✓		L
✓	✓	✓		✓	✓	✓	L
✓	✓	✓	✓	✓	✓	✓	L
✓	✓	✓		✓	✓	✓	H

<p>Technical and legal infrastructure enhancements</p>	<p>Definition</p>	<p>Rulemaking</p>	<p>Official</p>	<p>Enhanced</p>	<p>Print Copy</p>	<p>Electronic Copy</p>	<p>Short-term</p>	<p>Long-term</p>	<p>Expense⁽¹⁾</p>
<p>Annotations Embedded in text or facing pages</p>	<p>Links to commentaries, external reference documents, forms, administrative orders or court decisions are displayed next to or under the text, or on a facing page. In digital or online formats, annotations can be placed in pop up windows or boxes that do not disrupt the flow of the text.</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>M</p>
<p>Definitions</p>	<p>Summaries and cross-references to and from existing definitions are included.</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>M</p>
<p>Other District regulations</p>	<p>Summary text explains the relationship to other code provisions.</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>M</p>
<p>Statutes</p>	<p>Cross-references and summaries of related statutes are provided.</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>H</p>
<p>Zoning Commission orders</p>	<p>Summaries of Zoning Commission contested case orders that apply the zoning provisions are included.</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>H</p>
<p>Board of Zoning Adjustment orders</p>	<p>Summaries of Board of Zoning Adjustment contested case orders that apply the zoning provisions are included.</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>H</p>
<p>Court decisions</p>	<p>Summaries of D.C. Court of Appeals and federal cases that apply the zoning provisions are included.</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>H</p>
<p>Legislative history</p>	<p>The legislative history is explained and summarized.</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>H</p>

Technical and legal infrastructure enhancements

Definition

Explanatory Materials

Handbooks or other references

Includes references to external documents.

Summaries

Summarize and explain regulations in “plain English.”

Tables

Summarize information in tables and charts.

Examples

Show examples of how projects are designed under the zoning standards.

Definitions

Consolidated definitions

This consolidates terms that are defined both within and outside of the Zoning Regulations. This would include a correspondence table that links older terms, obsolete terms, or terms used in particular permits but not the Zoning Regulations, to defined terms in the Zoning Regulations.

Indexing

Text indexing

An expanded index includes informal and modern terms, standards, uses, and related zoning concepts.

Use indexing

Existing permitted uses are compared to modern classification systems. This will result in a concordance of existing uses that is tied to modern nomenclature, and that can be used as an aid in administering the Zoning Regulations.

	Rulemaking	Official	Enhanced	Print Copy	Electronic Copy	Short-term	Long-term	Expense ⁽¹⁾
Handbooks or other references			✓	✓	✓	✓	✓	H
Summaries	✓	✓	✓	✓	✓	✓	✓	H
Tables	✓	✓	✓	✓	✓	✓	✓	M
Examples	✓	✓	✓	✓	✓	✓	✓	H
Consolidated definitions			✓	✓	✓	✓	✓	H
Text indexing	✓	✓	✓	✓	✓	✓	✓	M
Use indexing			✓	✓	✓	✓	✓	M

	Definition	Rulemaking	Official	Enhanced	Print Copy	Electronic Copy	Short-term	Long-term	Expense ⁽¹⁾
Technical and legal infrastructure enhancements									
Use matrix	The existing permitted uses are displayed in a tabular format.	✓	✓	✓	✓	✓	✓	✓	M
Use categories and matrix.	The table of permitted uses includes a column that cross-references the use to a modern classification system.	✓	✓	✓	✓	✓	✓		M
Categorize precedent	Contested case orders and court decisions are categorized by type of land use issue.	✓	✓	✓	✓	✓		✓	H
E-government enhancements									
Hyperlinks / Print Links	These are digital links that, when clicked, take the user directly to the external source or reference. Print materials can offset these with different font shading, size, or color. See discussion under Document Design, above.	✓	✓	✓	✓		✓		L
Searching	Includes advanced, electronic search capabilities such as Boolean searches.	✓	✓	✓		✓	✓		M
Comments	Code users can submit comments about individual Zoning Regulation chapters or sections online.			✓		✓	✓		L
Language Enhancements	Modern, plain English drafting principles apply.	✓	✓	✓	✓	✓	✓	✓	

Technical and legal infrastructure enhancements

Definition

Formatting Enhancements

- White space** Page are laid out with adequate white space, attractive and legible fonts, and similar enhancements.
- Sequential numbering** Pages are numbered sequentially rather than by chapter.
- Pinpoint cross-references** Cross-references to other Zoning Commission provisions or to statutes are pinpointed to the section level.

Procedures

- Procedures manual** A separate manual explains how the rulemaking, contested case and permitting processes work from beginning to end.
- Uniform procedures chapter** All chapters related to processing are assembled into a unified whole.
- Form book** A book of forms is prepared, along with summaries of how they apply.

	Rulemaking	Official	Enhanced	Print Copy	Electronic Copy	Short-term	Long-term	Expense ⁽¹⁾
White space	✓	✓	✓	✓	✓	✓		L
Sequential numbering	✓	✓	✓	✓	✓	✓		L
Pinpoint cross-references	✓	✓	✓	✓	✓	✓		L
Procedures manual			✓	✓	✓	✓		H
Uniform procedures chapter	✓	✓		✓	✓		✓	H
Form book			✓	✓	✓	✓		H

Technical and legal infrastructure enhancements

Definition

Graphic Options

Integrated

Graphics are included with the text, rather than as an external document.

✓

✓

✓

Photographs

Photos illustrate uses, building forms, setbacks, design, and other standards.

✓

✓

✓

Digital re-imaging

"Before" and "after" photos show how projects or buildings look under alternative regulatory approaches.

✓

✓

✓

Plan view

Displays lots, setbacks and other standards as through looking directly from above.

✓

✓

✓

Cutaways

Displays one-dimensional views of building planes.

✓

✓

✓

Cross-sections

Displays ground level views of various dimensional elements.

✓

✓

✓

3-dimensional drawings

An "axonometric" or "oblique" drawing shows horizontal planes without angular distortions

✓

✓

✓

Process flowcharts

Flowcharts diagram the steps involved in a decision-making process.

✓

✓

✓

Discussion of Enhancements

Codification

Codification is the process of assembling adopted laws into an official body of legislation. A codifier places the Zoning Regulations in the appropriate section of the Municipal Regulations. The codifier can also periodically update and distribute the codes. Codes can be distributed in either electronic or hard copy format, and posted on the codifier's website.

Before computers became widespread, codes were distributed only in print format. With the ready availability of computers and Internet access, it is now common to distribute codes electronically through a CD or DVD, or by posting them on the Internet. A number of national codifiers now specialize in posting web-based codes. Several companies – including Kendig/Keast and the VIC Group – specialize in posting planning-based regulations such as zoning codes.

Comments: While the Zoning Commission adopts zoning laws for the District, they are not effective until they are published in the District of Columbia Register or Title 11 of the District of Columbia Municipal Regulations (D.C. Official Code § 2-602). The Administrator of the District of Columbia Office of Documents and Administrative Issuances (ODAI) supervises, manages, and directs the preparation, editing, printing and public distribution of all legal publications of the District of Columbia government (D.C. Official Code § 2-612; see ODAI website at os.dc.gov/os/cwp/view,a,1207,q,522504.asp). This includes the District of Columbia Municipal Regulations (DCMR). The ODAI has authority to promulgate rules of procedure, reject the publication of rules that do not meet legal requirements, establish editorial standards, and contract for preparing and publishing documents (*id.*).³

The District is unique in requiring payment for access to its advanced codification services. Amlegal, a national codifier,

³ The Council of the District of Columbia has more flexibility relating to its legislation. The Home Rule Charter gives the Council the authority to publish and codify any act as it may direct (District of Columbia Self-Government and Governmental Reorganization Act, Title IV, § 404(d)). While this provision has not been interpreted by the courts, it appears to apply only to acts of the Council rather than to the regulations promulgated by the Zoning Commission.

posts the DCMR online. On the Internet, the DCMR has a “Basic” and an “Advanced” version. The Basic version can be viewed chapter by chapter (see [http://www.amlegal.com/nxt/gateway.dll/Title%2011?fn=main-nf.htm&f=templates\\$3.0](http://www.amlegal.com/nxt/gateway.dll/Title%2011?fn=main-nf.htm&f=templates$3.0)). The Basic version is current only to September 2002 (see Certification at [http://www.amlegal.com/nxt/gateway.dll/Title%2011/chapter00003.htm?f=templates\\$fn=main-nf.htm\\$3.0#JD_Certification](http://www.amlegal.com/nxt/gateway.dll/Title%2011/chapter00003.htm?f=templates$fn=main-nf.htm$3.0#JD_Certification)). The DCMR Advanced Version is fully searchable, but requires a subscription fee and is difficult to access. In this author’s experience, credit cards to subscribe to the service were rejected, and repeated attempts to obtain a resolution from Amlegal and the ODAI were unsuccessful. Other cities have fully searchable codes available online, with no subscription required.

The Office of Zoning currently publishes a parallel version of the Zoning Regulations that is identical to the version that appears in 11 DCMR. This version is viewable and downloadable in individual chapters as Adobe pdf files, while the DCMR is in html format.

Organization

The Zoning Regulations should provide a logical organizational format. Many readers forget that Zoning Regulations are not meant to be read from cover to cover. In addition, most readers expect to find information quickly and with minimal effort. The format should place the most important and frequently used information to the front of the document. Less important information, reference information, and technical references (such as submittal requirements) should be assigned to the rear of the document.

Comments: The Zoning Regulations are divided into 24 Chapters⁴ and 60 districts . This includes 29 base districts and 31 overlay districts.⁵ The base districts cover most development in the District, including residential, commercial, and industrial districts. They also include districts that were established for a particular purpose. These include the Special Purpose districts that buffer commercial and residential areas, the Waterfront District, and Mixed Use District. Overlay districts apply an additional layer of regulations to the base districts. These regulations can serve a wide variety of purposes, ranging from design and scale restrictions in lower density residential neighborhoods (such as the DuPont Circle Overlay District), increased density or other development incentives (as in the Hotel-Residential Incentive Overlay District), to environmental protections or other standards (such as the Tree and Slope Protection Overlay District).

Table 2 Zoning Regulations Organizational Structure

Chapter 1	This is an introductory chapter. It establishes the formal title of the Zoning Regulations, formally establishes the districts and zoning map, and lays out definitions and rules of interpretation.
Chapters 2 - 19	These chapters establish the district regulations. These include the permitted uses and dimensional standards for each district.
Chapter 20	This chapter addresses nonconformities. These are uses or situations that were lawful when established, but that are now prohibited by the Zoning Regulations or an amendment to the Zoning Regulations.
Chapter 21-22	These are the off-street parking and loading regulations.
Chapters 23 and 25	These are miscellaneous regulations. Chapter 23 regulates garages, carports, parking lots, and gasoline stations. Chapter 25 – titled “Miscellaneous Regulations” – addresses a potpourri of issues including specific types of uses (e.g., accessory uses, tenement houses, antennas), activities (e.g stripping topsoil), and dimensions (e.g. projections into required open spaces, permitted height next to public buildings).
Chapter 24	This establishes standards and procedures for Planned Unit Developments.
Chapter 30-32	These chapters govern zoning procedures. These include the Zoning Commission procedures, Board of Zoning Adjustment procedures and enforcement procedures.

⁴ The chapters are numbered 1 through 32. However, 8 of the chapters are reserved for future codification.

⁵ Chapter 15 of the Zoning Regulations codifies 11 separate overlay districts.

Document Design

Document design works in tandem with writing style to make regulations more user-friendly. The organization of the Zoning Regulations may appear to be a trivial concern, but it affects the readability of the document. Well-organized codes make it easier to find information, thereby enhancing the administration and increasing certainty in the approval process. Effective code organization also establishes a clearer linkage between the Comprehensive Plan and the regulations that implement the plan. Good document design improves a document's appearance and makes it less intimidating to use and read. It can also improve the process of finding information. This can improve public confidence in the Zoning Regulations and minimize the costs associated with using the Zoning Regulations.

Common principles that govern the design and layout of Zoning Regulations, along with their application to the DC Regulations, are described below. These principles are designed to maximize ease of use, as well as the enforceability, of the Zoning Regulations.

Comments: The Zoning Regulations have a conventional design and layout. Several features incorporate the state of the art regulatory drafting styles prescribed by the ODAI. This includes bold faced section numbers, indented sections and subsections, and in many places a concise writing style for individual sentences and phrases. The document even has an index – a feature missing from many Zoning Regulations in other jurisdictions.

The Zoning Regulations lack many enhancements found in contemporary Zoning Regulations. There is no explanatory handbook, no integrated graphics, no hyperlinks between sections, and limited use of tabular displays. In many places, the document organization does not flow logically. For example, Chapter 15 contains “miscellaneous overlay districts,” while Chapters 10-14 and 16-19 also include overlay district regulations. It is not clear why some overlays are codified in a single chapter, while others are part of a chapter devoted only to overlay districts.

Zoning Maps

Zoning maps are the most important graphic in any set of Zoning Regulations. A zoning map is needed to mark the various zoning district boundaries. This puts property owners on notice of the use, dimensional and other district regulations that apply to their property. Historically, most jurisdictions have maintained zoning maps on large paper maps, or on a series of paper zoning atlases. Many jurisdictions now have state of the art GIS maps that are viewable online.

Some jurisdictions employ direct links from online or electronic zoning maps to the corresponding Zoning Regulations. This allows property owners to quickly locate all of the permitted use and dimensional standards that apply to the property. An example is provided in Figure 1 Interactive Zoning Map (Nevada County, California), below.

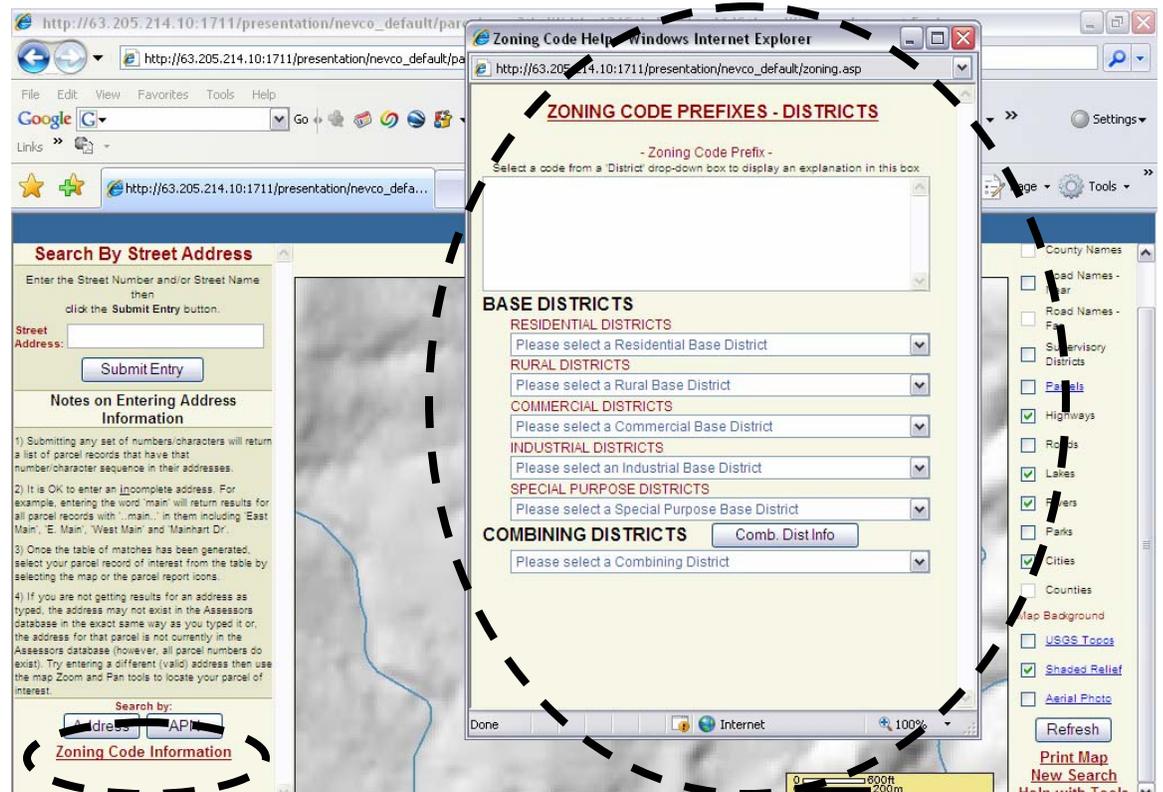
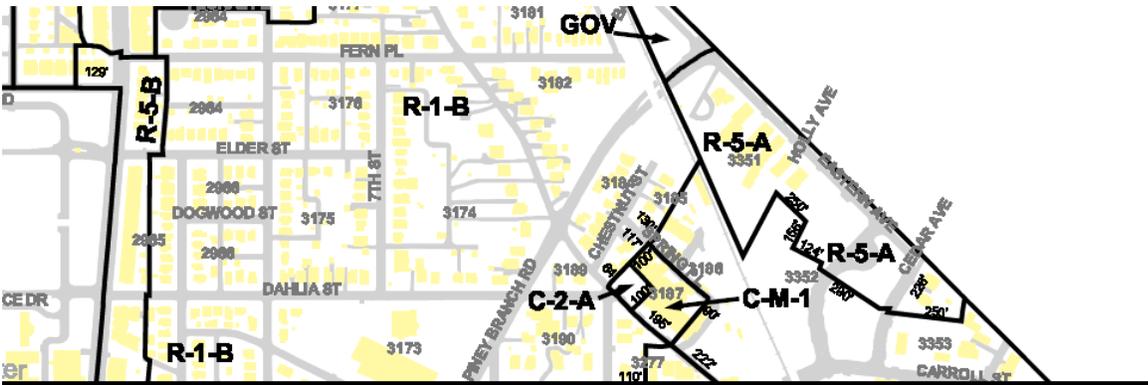


Figure 1 Interactive Zoning Map (Nevada County, California) online at <http://www.mynevadacounty.com/gis/index.cfm?ccs=628>)

Comments: In the District, the Baist Atlas is the official zoning map (*Russell v. District of Columbia Bd. of Zoning Adjustment*, 402 A.2d 1231, 1236 n. 9 (1979)). The Baist map was formerly updated on a decennial basis. The Office of Zoning is in the process of converting the Baist maps into vector property maps, which will eventually become the official zoning map (Telephone interview with Nyambi Nyambi, Office of Zoning Chief Technology Officer, September 10, 2007).

Interactive zoning maps are a useful way to assist users with tracking relevant zoning information. The District presently offers several ways to access the zoning maps online. The first is to download or view Adobe pdf maps from the Office of Zoning website. The second is to view the zoning maps on DC Geographic Information System (GIS) at the Office of Chief Technology Officer (OCTO) website. The “DC Atlas” component of the GIS provides layers for the Commission for the Fine Arts review areas, downtown development comprehensive plan, existing and planned land use, zoning districts, overlay districts, planned unit developments, and university campus zoning. The OCTO website has a logical sequence and layout, but loads slowly – even with broadband connections. This returns error messages and makes it time consuming to retrieve information.

The Office of Zoning is presently working with OCTO to build linkages between OCTO's GIS data and the Zoning Regulations.



tracted from the 1999 ortho photography.

Overlay	Description
HR	Hotel Residential
LO	Langdon
MW	Neighborhood Commercial-Macomb-Wisconsin
NO	Naval Observatory
RC	Reed Cooke
SSH	Sixteenth Street Heights
TSP	Tree and Slope Protection
WEI	Tree and Slope Protection-Wesley Heights
WP	Neighborhood Commercial-Woodley Park

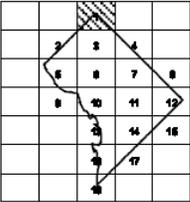


Figure 2 Excerpt of Zoning Map from Office of Zoning website

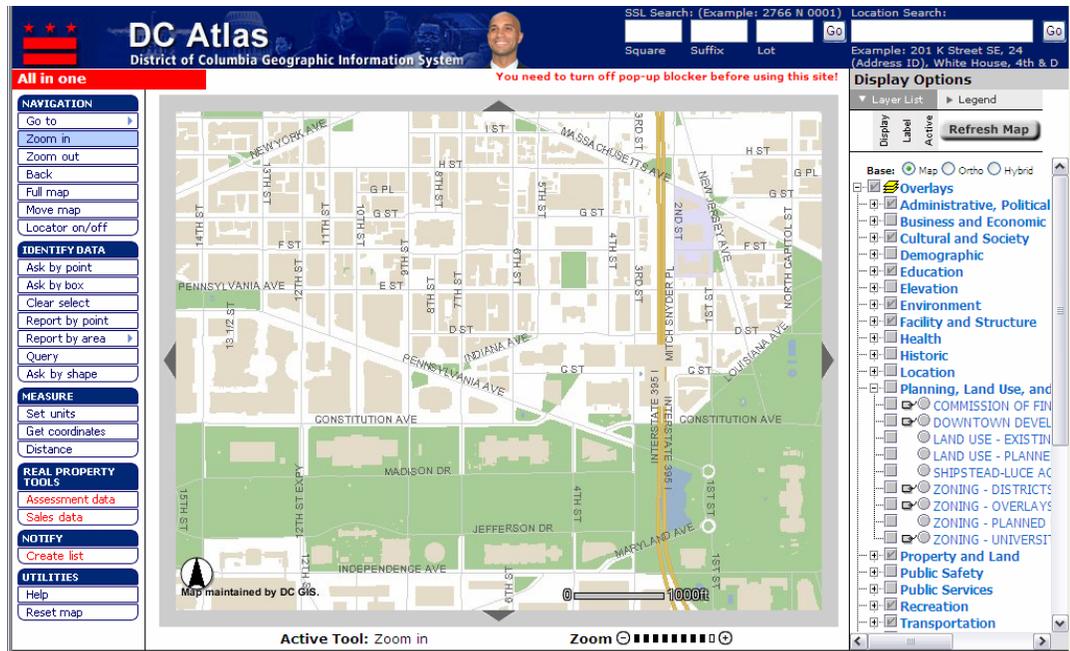


Figure 3 OCTO GIS screen shot

Annotations

The Zoning Regulations can provide links to legislative history, annotations to case law and value-added information. Annotations are normally included as a paragraph that follows the applicable code section. They can also include electronic hyperlinks and cross references. Annotations can provide the following information:

- Defined terms and terms of art. These can be accomplished through hyperlinks.
- References to other sections of the Zoning Regulations or to statutes.
- Summaries of court decisions.
- Commentary or other explanatory references.
- Legislative history.
- Links and references to handbooks or other references.

g. The construction of tikis.
h. The construction of swimming pools.
i. The installation of storm shutters.

(Ord. No. 33-1986, § 9-502; Ord. No. 40-1987, § 86; Ord. No. 19-1989, § 1(PD117), (PD119); Ord. No. 6-1990, § 2; Ord. No. 7-1992, § 1)

Editor's note: Ord. No. 19-1989, § 1(PD117), amended subsection (a)(1)a-c; and (PD119) amended subsection (b)(4). The remainder of the section is as amended by DCA Rule 28-20.023, and by Ord. No. 6-1990, § 2, which added a paragraph (6) included by the editor as part of subsection (b).

Annotation--The intent of amendment 86, amending subsection (b)(1), was to exempt from the permit allocation system minor improvements to existing uses such as accessory uses and remodeling where there is no increase in intensity of use.

Figure 4 Example of annotations to legislative history and commentary (Monroe County, FL, Land Development Regulations, reprinted at www.municode.com)

Zoning maps and GIS information can also include annotations. The Prince George’s County Planning Department defines an “annotation” as:

1. Descriptive text used to label coverage features. It is used for display, not for analysis.
2. One of the feature classes in a coverage used to label other features. Information stored for annotation includes a text string, the location at which it is displayed, and a text symbol (color, font, size, etc.) for display.⁶

The use of annotations to court cases and administrative decisions in local Zoning Regulations is rare. A computerized search of the White & Smith, LLC electronic code library uncovered only 4 codes that had case law annotations.⁷ Even fewer jurisdictions maintain linkages to administrative decisions.⁸ Legal research services, such as Westlaw, provide annotations for state and federal statutes.

⁶ Prince George’s County Planning Board, “Geographic Information Systems (GIS) Terminology,” at <http://www.mncppc.org/html/glossary2.htm>.

⁷ These include Baltimore County, Detroit, Raleigh, and Lake Worth, FL. The Detroit annotation was formerly maintained by Municode, a national codifier. The City’s new zoning code does not include annotations. See http://www3.ci.detroit.mi.us/legislative/BoardsCommissions/CityPlanningCommission/planning_main_frame.htm.

⁸ The Miami-Dade County Code maintained by municode.com contains annotations to “CAO” and “AO” references. There is no explanation of these references in the code. Other County documents refer to the “CAO” as the County Attorney’s Office. Miami-Dade County, FY 2006 - 07 Adopted Budget and Multi-Year Capital Plan, at 14.

Where a municipal civil infraction violation notice is issued and an admission of responsibility is made for the violation at the City of Detroit Municipal Ordinance Violations Bureau:

- (i) A civil fine that is paid before the appearance date shall be reduced by ten (10) percent;
- (ii) A civil fine that is paid after the appearance date shall be increased by ten (10) percent; and
- (iii) A civil fine that is paid on the appearance date shall be neither reduced nor increased.

Each day that a violation continues shall constitute a separate offense. The imposition of a civil fine under this section shall not be construed to excuse or to permit the continuation of any violation.

(Ord. No. 34-6, § 1, 10-27-70; Ord. No. 33-97, § 1, 9-10-97)

Case law annotation-- Zoning spacing requirements upheld; *Young v. American Mini Theatre*, 427 U.S. 50, 96 S.Ct. 2440, 49 L.ED.2d 310 (1976).

Figure 5 Example of case law annotation (Detroit, MI)

Comments: The D.C. Official Code expressly authorizes the ODAI to include annotations of judicial decisions and other explanatory material to any document published in the District of Columbia Municipal Regulations,⁹ which would include the Zoning Regulations.

While the District could break ground in this area, starting up the annotation service would be very time-consuming. This task involves searching relevant opinions, analyzing and summarizing the opinions, assigning the opinions to the appropriate place in the Zoning Regulations, and reporting the opinions in language that is comprehensible to laypersons in addition to attorneys, architects, engineers and other professional users. Over time, the annotator must track the decisions in the event that they are reversed or overruled. In addition, as with preparing an index, key concepts must be indexed, and orders and decisions assigned to the applicable section of the Zoning Regulations.

Maintaining the annotation service over time would require some dedicated staff time. The annotator must translate complex legal decisions into plain English. The persons compiling and maintaining the annotations should be experienced in land use law.

Individual elements of the annotations will require less time than building the entire system. For example, annotating reported court decisions would take significant time to create, but far less time to maintain over time. From 2000-2006, there were 32 reported zoning decisions in the District of Columbia Court of Appeals, the United States Court of Appeals - District of

⁹ D.C. Official Code § 2-552(e).

Columbia Circuit, and the United States District Court - District of Columbia.¹⁰ This averages 4.6 cases per year. If 5 hours are needed per annotation, this would require only 23 hours per year for court annotations.

Administrative annotations would be more time consuming. There are currently 1,800 Zoning Commission and Board of Zoning Appeals orders on the Office of Zoning website.¹¹ These are word searchable. Approximately 190 orders have been filed by the Zoning Commission and Board of Zoning Adjustment this year.¹² On an annualized basis, this equates to around 250 orders per year. Assuming 5 hours to annotate each of these orders, this equates to 1,266 hours per year. It would require an additional 9,000 hours to summarize each opinion presently in the online electronic database. Additional work would be required to track and to categorize this large number of orders. Annotating current orders alone would require close to a full FTE.

Many codes repeat standards or procedures from state law in their ordinances. One example is the Board of Zoning Adjustment's variance standards at 11 DCMR § 3103.2. This section repeats the statutory variance criteria from D.C. Official Code § 6-641.07(g)(3), in quotation marks. This has the advantage of placing the standards before the reader without having to look up the statute. The disadvantages are that: (1) a change in the statute will require a change in the ordinance, and (2) it adds to the length of the ordinance. A “commentary” could repeat or summarize the statute, but this still adds to the length of the ordinance. The Office of Zoning or DCRA could

¹⁰ The author searched the zoning topic (414) on Westlaw from the years 2000-2006 on the “dc-cs-all” database, which covers the D.C. Court of Appeals and all federal cases in the United States Supreme Court and the District of Columbia Circuit and District Courts. This returned 34 cases. The 2 United States Supreme Court cases were excluded from the count.

¹¹ This was determined by searching the Office of Zoning website at http://search.dcoz.dc.gov/search?filter=0&access=p&output=xml_no_dtd&sort=date%3AD%3A%3Ad1&site=orders&ie=UTF-8&client=dcoz_web_frontend&oe=UTF-8&proxystylesheet=dcoz_web_frontend&ip=66.105.67.194&proxycustom=%3CADVANCED/%3E.

¹² The author ran the term “2007” on the Office of Zoning’s searchable database at http://search.dcoz.dc.gov/search?q=2007&sort=date%3AD%3A%3Ad1&output=xml_no_dtd&oe=UTF-8&ie=UTF-8&client=dcoz_web_frontend&proxystylesheet=dcoz_web_frontend&site=orders&filter=0. This returned 197 orders. Several orders from other years contained stray references to the term, for addressees or related matters. Without scrolling through each page individually, it appears safe to estimate from the first pages that were returned – all of which were decided in 2007 – that the stray references are a limited number of orders.

also include external references in pamphlets or manuals available online or at their offices.

Explanatory Materials / Zoning Handbook

Explanatory materials can be embedded in the Zoning Regulations, or in external materials such as handbooks, manuals, pamphlets, and other interpretive documents. They can be set off with changes in font style, bold or italics, colors, borders, or other materials. The materials can also be set off with icons (e.g., ) that provide visual cues as to what the applicant is reading. Explanatory materials can:

- Summarize the Zoning Regulations and explain them in “plain English.”
- Include illustrations, diagrams, and other graphic materials.
- Refer to other, complementary materials and regulations.
- Summarize information in tables and charts.
- Offer alternative methods for document layout. For example, if the zoning districts provide lists of permitted uses in each district regulation, a manual could provide a table of uses.
- Show examples of how projects are designed under the zoning standards.

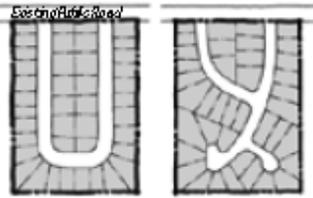
A zoning handbook is an example of a external, explanatory document. A handbook is a user-friendly document that explains how the Zoning Regulations and procedures work in plain English. A handbook is normally about 100-150 pages and is illustrated with graphics and diagrams. It includes a two page, consolidated summary of the standards for each zoning district. One example is the “Zoning Manual” published by New York City and the Fort Collins, Colorado Design Manual (see Figure 6). These documents explain the zoning rules in plain English, summarize the rules for a lay audience, and offer a rich palette of illustration to assist the reader. The Fort Collins manual shows examples of how to piece together the various provisions of its land development standards to develop a community.

A handbook or a manual is usually included as a separate document. Some model codes embed explanatory matter with the regulatory text. The “Smartcode” – a national form-based model code – uses this technique by displaying annotations on facing pages across from the regulatory text. Other model codes place explanatory material in columns next to the regulatory text. The annotations can be offset with italics in order to distinguish it from the binding regulations.

One important advantage of a handbook or manual is that it does not require formal rulemaking procedures. This saves the District time and expense in developing the manual because it does not require formal notice and public hearings. It also allows the document to be revised as needed, without requiring the delay associated with legal proceedings. Unlike code language, a handbook lacks the formal status of law. However, it can provide the official interpretation of the Office of Zoning or other departments that administer the Zoning Regulations. Courts normally accord deference to the interpretation of regulations by the agencies that administer the regulations.

Town-Like Pattern

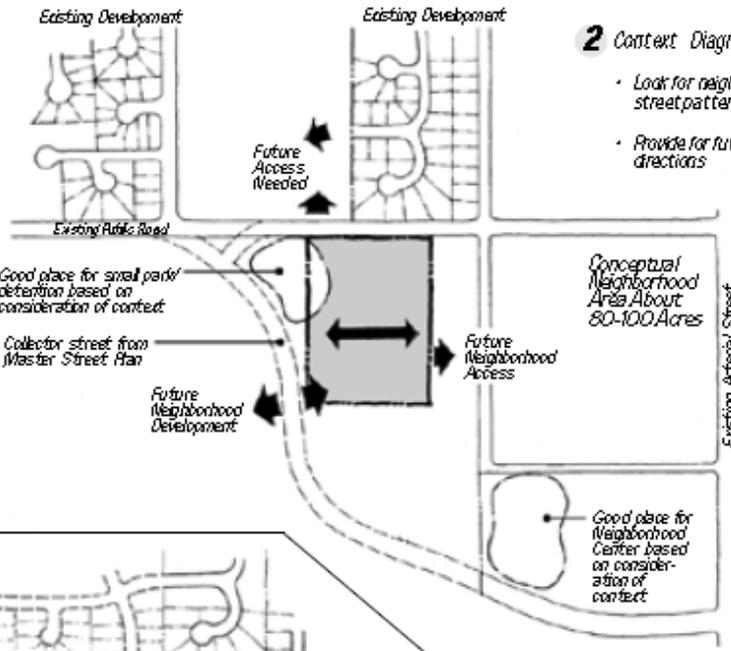
**Example Context Diagram For a Residential Development
Subdividing a Piece of Land vs. Building Up a Neighborhood or District**



Typical Lotting Approaches - Land parcel about 10 acres in a growth area (hypothetically). Assume north is up.

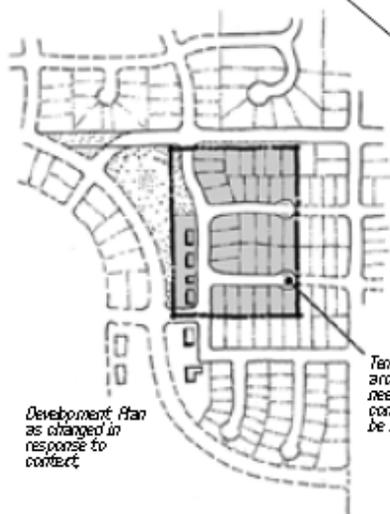
1 Subdividing an Individual Parcel in Isolation

- Minimum access as required for emergencies.
- No neighborhood interconnections; street pattern forms barriers in the larger neighborhood.
- Solar orientation of lots is not addressed.
- This approach is expedient; little is thought or design work required.



2 Context Diagram

- Look for neighborhood relationships – street patterns, parks, center.
- Provide for future accessibility in all directions



3 Response to Context Diagram

- Coordinate with neighbors if possible
- Provide connections in all needed directions
- Address solar orientation
- Provide a mix of housing types.
- Form an integral part of a functional neighborhood and district consistent with City Plan
- This approach is more difficult; more work required than #1 above.

Figure 6 Fort Collins, Colorado, Community Planning and Environmental Services, *Fort Collins Design Manual: Explanations of Fort Collins' Land Use Code Standards* (May 2000)

Enhanced Codification

Code users can access the official version of the Zoning Regulations by viewing the official version online or buying a hard copy from ODAI. This is the official "codification." The codification pulls together the official rulemakings as of the codification date, and compiles them into a document called the "code." To make sure that the Code is current, the user must pull together rulemakings from the D.C. Register since the codification date. Otherwise, the reader could spend valuable time - or money - based on rules that have been changed or repealed. However, the process of pulling together rules from the D.C. Register is very time-consuming. Only professional users have the time and expertise to maintain these types of files.

To level the playing field, the Office of Zoning currently publishes a companion, electronic version of the Zoning Regulations. This could be updated with rulemakings adopted after the official version, with text amendments highlighted, offset with a different font, or otherwise distinguished. As OP's text amendments for implementing the Comprehensive Plan are approved and published in the D.C. Register, these future changes can be added to the enhanced version.

Enhanced Definitions

Chapter 1 of the Zoning Regulations defines key terms of art. Definitions are important for several reasons. First, they provide meaning to particular terms or phrases that do not otherwise have a commonly understood meaning. Second, they can abbreviate text by collapsing long lists into a single terms (White, 2005). Older codes often have the following problems with their definitions (see Kendig/Keast, June 2006):

- **Definitions that Include Standards (Embedded Standards).** Definitions can include standards or an excessive number of qualifications. This tends to "bury" the standards because most readers look to the substantive provisions of a regulation for rules. In addition, these standards are rarely indexed. This is one of the most common problems in Zoning Regulations. A better practice is to move the standards to the regulatory sections. Reserve definitions for statements that describe a thing or a concept.
- **Conflicting definitions.** A term is sometimes defined in different ways in different regulations. This can create confusion and inconsistencies. If both sets of regulations affect development and the development process, a better practice is to use the same term throughout. However, where the zoning rules address a concept in greater detail – such as with permitted uses

– a more refined definition is appropriate. However, the code should address the differences in order to avoid confusion.

- **Unused Definitions.** This includes terms or phrases that are not used in the body of the regulations. This practice adds unnecessary length and potential confusion.
- **Unnecessary Definitions.** Some definitions are identical to their generally understood meaning. Providing a definition for these terms adds no value, while unnecessarily expanding the length of the Zoning Regulations. Courts normally give words their commonly understood meaning. If necessary, they resort to dictionaries to interpret words or phrases. If the dictionary definition suffices, avoid defining the term.
- **Ambiguous Definitions.** Definitions that are vague can create more problems than they solve, while taking up unnecessary space.
- **Terms that are Not Defined.** The Zoning Regulations contain many specialized words and phrases that require a specialized definition. Where the dictionary does not supply a precise meaning, or where the meaning differs from its ordinary use, the term should be defined.
- **Outdated Definitions.** Terms that are no longer in common use should either be discarded or replaced with more contemporary language. Defining these terms can avoid legal issues such as vagueness challenges. However, their use causes confusion and makes the Zoning Regulations difficult to read.
- **Placement of Definitions.** Some codes include all definitions in a common definitions section. Definitions that relate only to a particular section, such as signs or floodplain regulations, are sometimes placed in that section rather than the common definitions section. This has several advantages. First, it avoids having to flip around the document to find the definition. Second, where the same term has a different meaning in that section, it avoids confusion by placing the precise term in the section that applies to it.

Comments: The definitions in the Zoning Regulations have been criticized more for their substance than their failings in the area of drafting. The existing definitions do an exemplary job of avoiding embedded standards, unnecessary definitions, and similar problems found in many regulations. However, some of the threshold criteria might be addressed better in supplementary regulations. For example, the term “cellar” is

presently defined as “that portion of a story, the ceiling of which is less than four feet (4 ft.) above the adjacent finished grade.” A cellar is then, in turn, excluded from the definition of “gross floor area.” The connection between the definition of “cellar” and the resulting development potential of a lot is lost on many members of the general public. As an alternative, the relationship between cellars and permitted floor area could be addressed through a general standard relating to how permitted floor area is determined.

While the Zoning Regulations largely avoid the problem of embedded standards or substance, there is at least one instance of this. The definition of “party” for contested cases in Chapters 30 and 31 (11 DCMR §§ 3099, 3199) lists ANC’s as having automatic party status in the definitions. However, the contested case rules (e.g., 11 DCMR § 3022, 3106) appear to qualify party status. The ANC must file a written report to participate in the proceedings (11 DCMR § 3012.5). A consolidated section establishing who has party status and what must be submitted and shown to obtain it, with a cross-reference in the definitions, might clarify this issue.

Defining terms between different versions of the Zoning Regulations, and between permits and the Zoning Regulations, has posed a difficult enforcement issue. In *Kuri Bros., Inc. v. District of Columbia Bd. of Zoning Adjustment*, 891 A.2d 241 (D.C. 2006), for example, a certificate of occupancy was granted to operate an “automobile service center” in the C-3-A district. The term “automobile service center” was not defined in the Zoning Regulations.¹³ The DCRA brought an enforcement action when it determined that the property owner was operating an “automobile repair garage.” An automobile repair garage was a defined term, and was only permitted as a special exception. The applicant had not obtained a special exception to operate an automobile repair garage. The court upheld DCRA’s interpretation, finding that the application fell within the “automobile repair garage” definition.

One enhancement that was suggested early in this study is

¹³ According to their revocation notice, DCRA “created the category of ‘Automobile Service Center’ to allow the applicant “to sell small automotive parts and make installations of same.” The notice stated that “[t]his facilitation did not include or permit any major automotive engine, body work or other automotive garage functions.”

replacing jargon with "Plain English" terms. Outmoded terms include "bachelor apartment" and "tenement." These terms are no longer in wide use, and have negative connotations. The definitions should be updated with contemporary terms and an expanded list of uses. In the residential context, this could include apartments, townhouses, and related uses.

Indexing Text

Text indexes are a very useful tool to assist readers in finding regulatory materials. Word processing, indexing and text mining software is available to quickly prepare indexes for modern codes. However, professional technical writers consider indexing an art form that requires considerable professional judgment (Clive Pyne Books, 2007). A professionally designed index contains the following types of enhancements (see Chicago Manual of Style, at 756-801; Back Words Indexing):

- Relationships between concepts, terms and phrases, especially terms that do not appear in the regulatory text. This captures readers who use different terms and phrases to refer to different regulatory materials. For example, the legal term of art for a lawfully established use that is no longer permitted in district is a "nonconforming use." However, the informal term is "grandfathering." A good index would contain an entry for "grandfathering" that refers to "nonconforming use."
- Include only references that are relevant. An excessively long index can clutter a document, and important concepts can be lost in a maze of unnecessary or infrequently used words. Similarly, an intelligent indexer will limit references to those that are relevant.
- Detect terms that are misspelled. A computer mechanically searches for each occurrence of a word exactly as it is entered.
- Detect terms that have more than one meaning.

An index must be distinguished from a concordance. A concordance is a simple list of key words, while an index sifts for relevance and distinguishes terms and concepts (Chicago Manual of Style, at 757).

Comments: The Zoning Regulations include an index. The index is placed at the rear of the document, consistent with customary practice. An index is a useful way to find information that is not apparent from the table of contents or other navigational aids. It also cross-references other terms that are not found in the text of the Zoning Regulations, but that are used by persons who read them.

The current Zoning Regulations index focuses principally on types of land uses. The index should be expanded to include a wider range of substantive and procedural issues, such as "party status." Preparing a useful index can be time consuming, requiring up to 3 weeks of effort for a 300 page document (Chicago Manual of Style, at 786).

Indexing by use

The District provides a separate list of uses for each zoning district. This creates some duplication, because individual uses must be repeated in each district regulation. Most modern ordinances have consolidated use regulations into a single matrix of uses. A "Use Matrix" allows the location of uses to be compared across districts, and abridges the ordinance by avoiding the need to repeat use listings. A disadvantage is that all of the regulations pertaining to a specific district are not consolidated in one place, requiring the reader to look in two different places for the district regulations and use regulations.

In addition to codifying the list of permitted uses in a single section, a use matrix can categorize permitted uses by reference to an external source, such as the North American Industrial Classification System (NAICS) and the American Planning Association's (APA) Land-Based Classification Standards (LBCS). This provides a succinct reference to a list of uses and a basis for rendering interpretations, without requiring a massive list of definitions. It also addresses the issue of under inclusiveness in use lists. Zoning districts can be under inclusive in that numerous types of uses are not listed. This typically involves new uses, residential living environments or businesses that are common today, but were not in existence when the Zoning Regulations were drafted. While it is impossible to contemplate every possibility existing either today or in the future, it is possible to develop a comprehensive list of uses.

The NAICS and LBCS are useful resources for building a comprehensive index of permitted uses. The NAICS is a comprehensive industry classification system that replaces that Standard Industrial Classification (SIC) system. It is thorough, but the classifications do not always make sense for zoning purposes (e.g. tattoo parlors are in the same industry classification as personal services). The LBCS consists of five classification systems: Activity, Function, Structure, Site, and

Ownership. The Function classification works as an industry classification, although at a much less detailed scale than NAICS. The Structure classification is best for design-based codes in communities or situations where the concern is more about the form and massing of buildings, rather than how they are used. In practice, most communities we have worked in prefer a combination of the Function and Structure classifications. The Activity, Site and Ownership classifications tend to be more adaptable to mapping than to zoning district regulations. Most states prohibit regulation of forms of ownership through zoning, eliminating this classification for zoning.

A second issue is over inclusiveness. Listing each and every possible use inflates the size of the list of permitted uses. This makes it daunting to read, and can create the potential for inconsistencies. Some code writers prefer a more condensed list of uses, with broad categories, such as retail sales, replacing the names of individual types of establishments. This streamlined approach makes the document easier to read, but not necessarily easier to use. Broad categories can mask individual uses that may have more intensive operations than others within the same category. For example, the Retail Sales or Service category in LBCS Function category includes both car dealers (Function Code 2111) and book stores (Function Code 2135). Both of these uses have different operational characteristics and impacts that are relevant to zoning issues. In addition, some zoning administrators and applicants like to have individual uses listed in express terms, without having to interpret which broad category they fall under.

Finally, all zoning ordinances with comprehensive use listings fail to define all of the listed uses. Developing a complete list of definitions would take years, and consume hundreds of pages. Fortunately, the use classification systems described above define many uses and industries. Specific definitions should be provided where state or federal law, local policies, or other factors require a unique definition. In addition, the definitions found in the external references must be reviewed to determine whether they are consistent with District land use policy.

Table 3 American Planning Association’s Land Based Classification Standards

Activity	<i>An observable characteristic of land based on actual use.</i>	Activity refers to the actual use of land based on its observable characteristics. It describes what actually takes place in physical or observable terms (e.g., farming, shopping, manufacturing, vehicular movement, etc.). An office activity, for example, refers only to the physical activity on the premises, which could apply equally to a law firm, a nonprofit institution, a court house, a corporate office, or any other office use. Similarly, residential uses in single-family dwellings, multifamily structures, manufactured houses, or any other type of building, would all be classified as residential activity.
Function	<i>The economic use or type of establishment using the land.</i>	Function refers to the economic function or type of establishment using the land. Every land-use can be characterized by the type of establishment it serves. Land-use terms, such as agricultural, commercial, industrial, relate to establishments. The type of economic function served by the land-use gets classified in this dimension; it is independent of actual activity on the land. Establishments can have a variety of activities on their premises, yet serve a single function. For example, two parcels are said to be in the same functional category if they serve the same establishment, even if one is an office building and the other is a factory.
Structure	<i>Type of structure or building type on the land.</i>	Structure refers to the type of structure or building on the land. Land-use terms embody a structural or building characteristic, which indicates the utility of the space (in a building) or land (when there is no building). Land-use terms, such as single-family house, office building, warehouse, hospital building, or highway, also describe structural characteristics. Although many activities and functions are closely associated with certain structures, it is not always so. Many buildings are often adapted for uses other than their original use. For instance, a single-family residential structure may be used as an office.
Site	<i>The overall physical site development character of the land.</i>	Site development character refers to the overall physical development character of the land. It describes "what is on the land" in general physical terms. For most land uses, it is simply expressed in terms of whether the site is developed or not. But not all sites without observable development can be treated as undeveloped. Land uses, such as parks and open spaces, which often have a complex mix of activities, functions, and structures on them, need categories independent of other dimensions. This dimension uses categories that describe the overall site development characteristics.

Ownership *Legal and quasi-legal ownership constraints of the land.*

Ownership refers to the relationship between the use and its land rights. Since the function of most land uses is either public or private and not both, distinguishing ownership characteristics seems obvious. However, relying solely on the functional character may obscure such uses as private parks, public theaters, private stadiums, private prisons, and mixed public and private ownership. Moreover, easements and similar legal devices also limit or constrain land-use activities and functions. This dimension allows classifying such ownership characteristics more accurately.

Source: American Planning Association, *Land-Based Classification Standards, LBCS Tables*, at www.planning.org/LBCS/2PUBS/Standards/InOneFile.pdf.

The engine that drives conventional Zoning Regulations is the separation of uses by district. Conventional zoning is often criticized on the basis that it is inflexible for property owners, and inconsistent with the goal of creating more compact, pedestrian-friendly neighborhoods. Some planners believe that rigid use segregation creates sprawling development patterns, with uses separated beyond walking distance because of the need to locate in different districts. Some advocate the use of “form based zoning,” which divides districts by physical design characteristics rather than use. The District is currently debating whether and how to use this concept. If the District chooses to use form based zoning, the district regulations will need to place a greater emphasis on building design and deemphasize use based regulations. The Structure classification in APA’s Land-Based Classification Standards can be built into the matrix to substitute for some use restrictions.

A design-based code or a district that uses form based zoning could refer to building form, rather than simply uses, in each zoning district. This focuses more on how buildings are designed in each district, rather than on the type of business occupying the building. One example is the Hillsborough County, Florida Traditional Neighborhood Development (TND) Code. This Code divides new planned developments into 4 subareas – Greenspace, Residential Neighborhoods, Commercial, and Core area. Within each subarea, a zoning matrix using the LBCS structure classification controls building form.

The advantages and disadvantages of different approaches to use indexing are described below:

Table 4 Use Indexing Alternatives

Regulatory Alternative	Advantages	Disadvantages
Consolidate uses into a matrix	Abbreviates text, and reader may compare uses among districts	Scatters district regulations.
Use NAICS/LBCS to expand uses	Improves thoroughness, and allows City to tailor districts more effectively to different situations.	Complicates the ordinance.
Use LBCS structure classification to replace use classification	Allows zoning to focus on building form rather than uses. This issue is currently being debated in the District.	Not likely to be acceptable to some neighborhood groups.
Use LBCS Structure to supplement use classification	Preserves ability to regulate building form, while providing control over uses	More complicated than regulating by building type alone
Expand list of uses permitted by special exception	Promotes mixed use by permitting wider range of uses, while preserving discretionary control	Lengthens the ordinance. Some mixing of uses consistent with plan policies could be discouraged by discretionary review or thwarted by political opposition.
Expand list of uses permitted by right in each district, but subject to criteria prescribed in the ordinance.	Preserves control over potential adverse impacts through the use of standards, while permitting streamlined permitting.	Eliminates case-by-case review at public hearings.

An index of uses can either be codified as part of the Zoning Regulations (as in San Antonio, Texas and Frederick, Maryland) or as an external reference. Alexandria, Virginia, provides a “Zoning Use Index” on its planning department’s website for 3 different categories of uses: (1) residential zones; (2) commercial, office and industrial zones; and (3) mixed use, public open space and waterfront park and recreation zones (see Zoning Use Index at http://alexandriava.gov/city/zoningdigest/zd_zuseidx.html). This is shown in Figure 7 Alexandria, Virginia Zoning Use Index, below.¹⁴ Unlike the San Antonio

¹⁴ Alexandria’s planning department website was ranked one of the top 10 planning, design, and development websites by Planetizen.com in 2006. Planetizen is a popular website that consolidates news, current events, and commentary on planning issues..

and Frederick Indexes, the Alexandria table does not contain a reference to a resource that defines the use.

ZONING USE INDEX
 COMMERCIAL, OFFICE AND INDUSTRIAL ZONES

KEY: P=Permitted S=Special Use Permit required *=Refer to Zoning Ordinance for Specific Limitations

	<u>CL</u>	<u>CC</u>	<u>CSL</u>	<u>CG</u>	<u>CD</u>	<u>CD-X</u>	<u>CR</u>	<u>OC</u>	<u>OCM(50)</u>	<u>OCM(100)</u>	<u>OCH</u>	<u>I</u>	<u>UT</u>
Amusement Enterprise				S	S	S	P	S	S	S	S		
Apartment Hotel				S	S	S	S	S	S	S	S		
Asphalt Plant												S	
Auto Repair (General)												S	
Auto Repair (Light)		S	S	S			P*/S	S	S	S	S	P	
Auto and Trailer Rental or Sales			S	S								S	
Auto Service Station		S	S	S			S	S	S	S	S	P	

Figure 7 Alexandria, Virginia Zoning Use Index

Comments: The Zoning Regulations list the permitted uses in a numbered text list in each of the zoning district regulations. Uses are divided into those that are permitted by right, accessory uses, and then specific standards for particular uses (e.g., Home Occupations in R-1). A matrix of permitted uses would streamline the viewing of this section by avoiding the need to repeat the lists for different districts. In addition, the supplemental use regulations could be consolidated into a single chapter or a separate, explanatory document that explains how the Zoning Regulations apply in different districts. At present, many of these regulations are repeated for different districts.

Incorporating Precedent

Precedent adds meaning to the written terms of the Zoning Regulations. The meaning of specific uses, definitions, and standards is constantly tested through appeals of administrative decisions, special use permit applications, variance cases, and related permitting actions. In applying generalized language, or specific terms that are tested by new types of uses or issues, the Zoning Commission, Board of Zoning Adjustment and Zoning Administrator must interpret the Zoning Regulations. These proceedings may proceed to the courts, where a final interpretation is rendered. The orders and decisions may create precedent for future applicants.

Unless the precedent is a court decision that is based on organic law, it can be memorialized as an amendment to the Zoning Regulations. This requires rulemaking by the Zoning Commission.

Precedent can be divided into several categories:

- **Settled law.** This involves very predictable areas of the law, where the outcome is based on federal constitutional principles, longstanding provisions of the D.C. Official Code, or a majority rule that is followed by the courts in the District. An example would be that the mere purchase of property does not create the right to rely on existing zoning. *Speyer v. Barry*, 588 A.2d 1147 (D.C. 1991).
- **Precedent where law is worth retaining.** This involves precedent that is longstanding, and that now has a widespread influence on land development patterns or community expectations.
- **Precedent where law is difficult to modify.** This involves precedent that could be overruled by statute, but that would require a change to the D.C. Official Code, Home Rule Act, or federal law. This usually involves court decisions. Regardless of community or property owner perceptions, this type of precedent is unlikely to change.
- **Modifiable Precedent.** This involves precedent that is unpopular with the general public or that creates a public policy issue of its own, and is based on the interpretation of the Zoning Regulations or other sources of regulatory authority that can be changed through rulemaking. One example would be interpretations that create wide differences in permitted development potential. In a 1985 case, the C-2-C district had a maximum permissible FAR of 6.0 for an apartment house or other residential use, but only a 2.0 FAR for “other permitted use.” The Zoning Administrator found that a clinic was

considered a residential use, which was upheld on appeal. *Wallick v. District of Columbia Bd. of Zoning Adjustment*, 486 A.2d 1183 (D.C. 1985). This interpretation allowed 3 times the development potential of an alternative interpretation. Whether or not this was appropriate for the site, the outcome should be more apparent from the terms of the Zoning Regulations. Clarifying language and better organization can resolve this issue so that the public can rely on the zoning text to determine what is permitted. Whether the standard itself remains valid or is good public policy is beyond the scope of this task, as it involves substantive issues that will be addressed by other agencies.

- **Precedent that amplifies definitions or the meaning of zoning standards.** Court or agency decisions can interpret language that is susceptible to more than one interpretation, or that clarifies the scope of the language. See, e.g., *Georgetown Residents Alliance v. District of Columbia Board of Zoning Adjustment*, 802 A.2d 359, 366 (D.C. 2002) (distinguishing between “lot” and “lot of record”). This type of precedent is the most useful source for annotations.
- **Precedent that amplifies the meaning of particular uses.** Some decisions test the parameters of how particular uses are defined. See, e.g., *Bannum, Inc. v. District of Columbia Bd. of Zoning Adjustment*, 894 A.2d 423 (D.C. 2006)(community correctional center not a “temporary detention or correctional institution” where its lease had a potential duration exceeding 3 years, the facility would be unsecured, and it was not designed to handle a temporary overflow from the District of Columbia Jail); *Kuri Bros., Inc. v. District of Columbia Bd. of Zoning Adjustment*, 891 A.2d 241 (D.C. 2006)(auto repair garage not considered an automobile service center). These decisions could be annotated as part of a separate, master list of defined uses that includes examples of situations that fall within the described use and those that do not.
- **Precedent that sets the boundaries of administrative authority.** The Zoning Act and the Zoning Regulations are not always clear about the parameters of administrative authority. For example, a least one decision has determined that defined uses cannot be interpreted to include other, functionally compatible uses. *Chagnon v. Board of Zoning Adjustment*, 844 A.2d 345 (D.C. 2004). Because many ordinances allow this type of interpretation, it is important for the District’s Zoning Administrator to know that the Zoning Regulations do not permit this. It could also be changed by revising the Zoning Regulations.

Comments: A major difficulty with precedent is that it is not readily accessible to the general public. Attorneys have the skills and resources to obtain and update case law, but lay citizens often lack the time or the skills to do this. Decisions at the administrative level are even more problematic. The Office of Zoning has done an exemplary job of compiling and maintaining the transcripts and final decisions of administrative proceedings. Zoning Commission and Board of Zoning Adjustment orders and transcripts are online at http://dcoz.dcgov.org/search/search_orders.asp. Few local governments provide this service for local zoning agencies. However, these decisions are not categorized, and website users must formulate word searches to retrieve orders. This type of searching can be very time consuming, depending on the task. Annotating the decisions or creating a categorized list of decisions would assist the general public in finding orders and decisions that interest them.

A comprehensive examination and codification of Zoning Commission and Board of Zoning Adjustment precedent would be a useful exercise. Identifying this precedent would provide a tool for consistent decision making. However, violation of precedent for contested cases is not a fatal flaw. The courts defer to Board of Zoning Adjustment or Zoning Commission interpretations that are not plainly erroneous or inconsistent with the regulatory purpose. This can apply even where an interpretation might contradict the Board's or Commission's own precedents (*Bernstein v. District of Columbia Board of Zoning Adjustment*, 376 A.2d 816 (D.C.App. 1977)).

E-Governance and Internet Use

Beyond good document design, it is important to consider how the document is accessed and viewed online. Over 172 million adults in the United States now have Internet access.¹⁵ For many professional persons, the Internet is now the primary vehicle for accessing and viewing documents. Therefore, the technical and legal infrastructure should incorporate tools to make viewing and using the document online easier.

Enhancements that use Internet technology include:

¹⁵ United States Department of Census, *Statistical Abstract of the United States* (2007), at 723.

- **Hyperlinks.** Computerized ordinances, handbooks, or other materials can cross-reference terms through “hyperlinks.” These are electronic links that take a user directly from one document to another. This is a very useful, and easily implemented, technique to link multiple documents together. Hyperlinks can link not only text, but also objects such as an online GIS map. Through GIS technology, it is possible to create computerized zoning maps that allow the user to go directly from a mapped zone to the regulations for that zone. The Chief Technology Officer of the Office of Zoning is presently working with the District's Office of Chief Technology Officer (OCTO) on a parcel based vector map system that would enable this type of linkage.
- **Search capability.** Modern, computerized ordinances enable the user to search words and terms. Readers can search word processing and Adobe PDF files by searching individual words or exact phrases. Some word processing programs, such as Microsoft Word, enable search limitations by style, highlighting, capitalization, and similar features.

More advanced, Internet based search engines allow “Boolean” searches. Boolean codes enable “wildcard” searches, searching for words within a designated distance from each other, and other customized features.

Web documents can provide the ability to search using terms and “Boolean” expressions. Boolean expressions are terms - or "operators" - that enable the document user to narrow the scope of their search. For example, the Boolean phrase "zoning AND administrator" finds all documents that contain both the words zoning and administrator. This makes it easier to find information, especially when the organization, table of contents and index do not answer the question.

- **Graphics.** Web-based documents can link graphics and text in multiple ways. For example, clicking on an image could change the display from a plan view to an elevation view, photograph, or other visuals that explain a zoning standard or that illustrate a use.
- **Comments.** The Zoning Regulations are a living document that evolves over time. Applicants and citizens have many useful insights to share that can improve both the usability and performance of the technical and legal infrastructure. Providing ways to obtain public comments online, at the user’s convenience, can generate ideas for improvement. This is especially useful for persons who cannot provide their comments during business hours.

The use of **E-governance** is becoming the standard in which municipalities interact with the general public on a daily basis. A properly run online system

allows the public to remain informed about zoning, new developments and current and proposed regulations. Key planning objectives such as encouraging citizen participation, reducing operating costs by having all items accessible online, and promoting local events are a few of the benefits of using an E-governance based system (Cowley, 2004).

Recent studies on the subject of E-governance have found that the use of government web sites to participate in local politics has a positive influence and experience. Implementing requires providing complete information and a visually coherent presentation. In an online age, visual concepts are becoming more important than written ones in grabbing attention and keeping people focused. An example of this is an interactive GIS online system. Using an interactive GIS allows the user to specify what they wish to search and can lead to better retention of knowledge by the public user (Conroy 78).

Online enhancements also increase efficiency. For example, some municipalities have their entire building application process online. Interactive mapping using GIS software is becoming a more popular E-government tool. Some communities have opted for a more inexpensive route and provided their maps in PDF form to the general public online. Interactive GIS is an innovation that has been used since the late 1990's. While it can be expensive to implement this type of system, its benefits come with excellent viewership. For example, the interactive GIS system used by Honolulu receives around 10,000 hits a month (Cowley, 2007).

Comments: The Office of Zoning's website provides good information for the general public. It provides not only a downloadable version of the official Zoning Regulations, but also access to administrative decisions and zoning maps. However, the Zoning Regulations are out of date, and the site lacks advanced search features or categories that would make them a better tool for research and public access.

Language Enhancements & Format

Older codes often feature legalistic phrases, contain an excessively lengthy drafting style, and lack modern writing enhancements. Typical problems with older codes such as the DC Zoning Regulations include:

- **Clarity.** Ambiguities are a common regulatory problem. The law requires that the Zoning Regulations be sufficiently clear that a reasonable person can read them and understand what they require (*Murray v. District of Columbia Bd. of Zoning Adjustment*, 572 A.2d 1055, 1057 (1990); *Nova Univ. v. Educational Inst. Licensure Comm'n*, 483 A.2d 1172, 1188 (D.C.1984), *cert. denied*, 470 U.S. 1054, 105 S.Ct. 1759, 84 L.Ed.2d 822 (1985); *Grayned v. City of Rockford*, 408 U.S. 104, 108-09, 92 S.Ct. 2294, 2298-99, 33 L.Ed.2d 222 (1972)). Clarity in land development regulations is also good public policy. Clear regulations save the public time and money by minimizing enforcement and litigation. They give neighborhoods certainty as to development that will occur around them, and applicants certainty as to what is expected of them.
- **Inconsistencies.** Inconsistencies arise where a regulation gives conflicting direction. Inconsistencies also result from terms or phrases that are used differently in different places. These typically result when regulations are written inexpertly, hurriedly, or in different eras. Not all inconsistencies are drafting flaws. Where different situations require different treatment to further a valid purpose, different rules are expected. However, inconsistencies that result from sloppy drafting or outdated rules cause confusion.
- **Completeness and Gaps.** Regulatory gaps arise in several ways. First, some regulations are incomplete. They fail to address the range of issues required by a plan, or that are needed to have a comprehensive, legally defensible zoning ordinance. Second, gaps can arise from bad cross references, references to provisions that do not exist, or from incomplete regulatory solutions. Form-based zoning is an example of a regulatory approach that can leave many gaps. These codes typically fail to address procedures, nonconformities, and a variety of uses that cannot exist within a narrowly defined urban design framework (such as large car dealerships).
- **Redundant Language.** Language or concepts that are repeated throughout a regulation add unnecessary length. It can also raise the risk of creating internal inconsistencies. Some repetition can avoid having to flip back and forth throughout a document. Older zoning districts that list permitted uses for each district have this advantage.

- **Writing Style.** The Zoning Regulations should incorporate good writing practices. Writers often assume that long sentences and legalistic language is required for regulatory drafting. This is simply not the case. The use of "plain English," short sentences, and common language makes regulations easier to use and understand. Drafters should avoid long, complicated sentences and unnecessary jargon. Some technical writers recommend a 25-word limit for sentences (Lindsell-Roberts, at 57). The bibliography refers to many leading references for writers of regulations and technical documents. In addition, the Council's General Counsel and the ODAI have several excellent sources on writing style (Council of the District of Columbia, Sept. 2005; Splitt, 1983).

Format

The Zoning Regulations, and in particular older ones, typically have a legalistic format. Paragraphs tend to be long and are jumbled together, pages appear crowded, and there are few visual cues that help the reader navigate the document. Format recommendations include:

- Using standard 8" x 11" paper with a portrait orientation, which is the most widely used.
- Using serif type fonts (i.e., fonts with tails) for text, and limiting sans-serif to headings and tables.
- Use headers and footers to create a stylistic theme, and to provide information as to the Chapter and section associated with the page. This avoids having to flip back and forth between the text and heading, especially when a section is particularly long.
- Use margins that are wide enough for binding without cramping the text. Wide margins can provide room for integrating graphics with text.
- Line spacing should balance the need to economize space, while allowing for white space. Leave white space between paragraphs and headings. White space is restful to the eyes, provides a more inviting layout, and creates the appearance that the document is easy to read (Lindsell-Roberts, at 56). However, white space also increases document length.
- Number pages sequentially. Some technical writers recommend against chapter numbering, while some code drafters recommend it as a way to insert new pages as amendments are made. With Internet access and computerized word processing the prevalent method of producing and

accessing documents today, sequential numbering is more convenient to produce.

- For section numbering, use Arabic rather than roman numerals. Use a simple system that allows for future amendments. Indent subsections for easy reference.

Content and Length

User-friendliness is often perceived to be a function of the document’s length. Many persons believe that a shorter ordinance is more user-friendly. This may make the ordinance quicker to review, but not necessarily easier to use during the development review process. The ordinance will become part of the development process after it is adopted. A longer ordinance will tend to answer many of the questions that inevitably arise during development review; a shorter ordinance typically leaves questions unanswered – leading to frustration for the applicant and the reviewer. There is also the temptation to use vague, “sound-bite” language that is not legally enforceable.

The Zoning Regulations should include only the minimum information that is needed to address the District’s regulatory needs. Unnecessary information should be discarded. Conversely, the Zoning Regulations should not omit information that is critical to understanding them and ensuring that they are enforceable.

Cross-Referencing

Cross-referencing minimizes text length and document useability by tying together related sections without having to repeat the entire rule. Cross-referencing sections minimizes the need to repeat standards throughout the ordinance, but also requires readers to look in different places for information. To address this issue, information about specific items can be placed together. This lengthens the text in each section, requires most readers to wade through material that they are not interested in (e.g., submittal requirements), and requires information to be repeated. The District uses this option in its district regulations.

Options to incorporate cross-referencing include:

- Pinpoint cross-references to specific section or subsections where possible, unless the referenced sections or subsections are frequently amended.
- Italicize or set off cross-references with distinct type to stand out from surrounding text.

- Restrict cross-references to items that appear at least 3-4 times in the Zoning Regulations. If they appear less than this, they can be repeated without adding excessive length to the text.

Tables and Matrices

The Zoning Regulations can be trimmed by consolidating long, repetitive lists of standards into matrices. For example, older ordinances typically have long “laundry lists” of uses and the setback and height standards in each set of district regulations. This is not exciting reading, and it adds to the length of the ordinance. Also, some readers like to compare standards across districts. The alternative is a matrix of permitted uses and/or dimensional standards (see example below). Use tables condense text and to allow for comparisons between different types of provisions across districts.

Comments: The ODAI style manual has imposed a useful discipline on the Zoning Regulations. However, its format presents challenges to finding information. In addition, some information – such as how height measurement occurs – could be presented in a more transparent format.

Graphics

Graphics should be used to illustrate the text language. Graphics can be very time-consuming and expensive to produce. Photo-editing technology can use local examples to illustrate how a design standard works or what a particular use looks like. Graphics also add to the length of the ordinance.

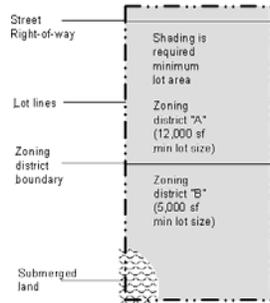
Some code users believe that graphics can replace text. Because a code is a legal document, text must accompany a graphic to explain its applicability and how the graphic works in different situations. Graphics should normally provide an aid to interpret the text, rather than replace text.

A wide variety of graphics can be used in a code, including electronic photographs, vector (CAD-based) drawings, plan view drawings, cutaway images, cross-sections, plan view or orthographic drawings, and flowcharts. Graphic typologies are show in Table 5 Graphic Typologies), below.

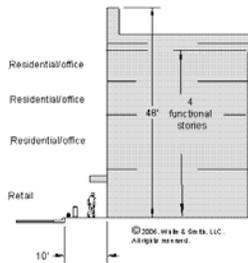
Table 5 Graphic Typologies



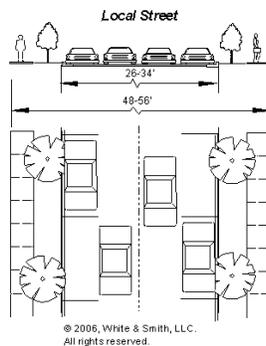
Photographs are a cost-effective way to illustrate codes. Electronic or scanned photographs are cost-effective, and can be manipulated to show changes in development standards (Price, 2004). They can also show a live example of development standards. However, they do not always have the appropriate angles or all of the information needed to illustrate a standard.



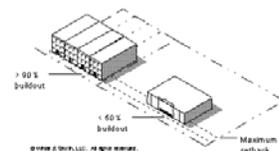
Plan view is a projection of the top or section of an object, structure or space on a horizontal plane (Town of Amherst, 2000). Plan view drawings are useful for showing relationships, such as a scaled setback. However, they provide less information about how development looks from a human perspective.



Cutaway drawings one-dimensional views of a building plane. These are useful for illustrating building height and depth, in addition to the disposition of different floor levels.



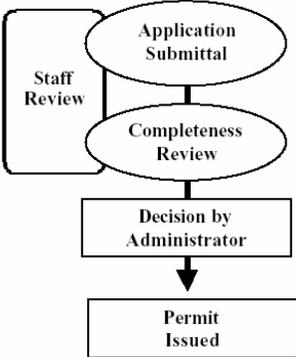
Cross-sections are ground level views of various dimensional elements. These are useful for showing dimensions and relationships, and scale. They are a customary method for displaying street cross-sections, including the carriageway or pavement, curbs, sidewalks, streetscaping, utilities, and right of way (Dery, 2005).



3-dimensional drawings are useful for showing relationships, and also for illustrating the relative scale of buildings, streets, and other site features. An "axonometric" or "oblique" drawing shows horizontal planes without angular distortions (Adeoye, 2001). These are a useful way to present real-life outcomes from a more global perspective than is possible from a ground view photograph or elevation.

Flowcharts diagram the steps involved in a decision-making process.

Figure 3.6-1 – MINOR SITE PLAN REVIEW PROCESS



Source: City of Concord, NC Unified Development Ordinance

Images of photographs, plan view, cutaway drawings, cross-section, and 3-dimensional drawing © 2006, White & Smith, LLC. All rights reserved.

Comments: The current, official version of the Zoning Regulations has few graphic enhancements. One example of graphics is a diagram that was prepared for the Mt. Vernon lighting standards (to be codified at 12 DCMR § 1723.3, case no. 04-18, 53 DCR 7680 (September 29, 2006)).

The Zoning Regulations can include a wider variety of visual enhancements, such as photographs, plan and ortho view images. These could serve a variety of purposes, from providing visual cues to illustrating how the current design and setback requirements work. In the short term, the Office of Zoning can incorporate graphics into external handbooks and electronic documents that amplify or clarify the existing regulations. Over the long term, a more dynamic, visually enhanced document could become part of the official, codified regulations. The new Comprehensive Plan will provide one example of how a graphically enhanced document can be removed from the normal codification system and employ a more user-friendly format.

1723.3 As illustrated in the following table, each of the four corners within the PIA has four (4) thirty-six-foot by thirty-six-foot (36 ft. by 36 ft.) modules.

Square 483	Square 483		5th Street	Square 515		Square 515
	<u>D</u>	<u>B</u>		<u>B</u>	<u>D</u>	
	<u>C</u>	<u>A</u> (NW)		<u>A</u> (NE)	<u>C</u>	
K Street			Intersection 5 th & K Streets	K Street		
Square 484	<u>C</u>	<u>A</u> (SW)	5th Street	<u>A</u> (SE)	<u>C</u>	Square 516
	<u>D</u>	<u>B</u>		<u>B</u>	<u>D</u>	
	Square 484			Square 516		

1723.4 In the table, "K Street" defines the east and west directions; "5th Street" defines the north and south directions. The northwest corner is Square 483; the northeast corner is Square 515; the southwest corner is Square 484; the southeast corner is Square 516.

1723.5 At each corner there are four modules labeled A, B, C and D. Each block in the chart labeled A, B, C, or D represents a thirty-six-foot by thirty-six-foot (36 ft. by 36 ft.) area within the respective seventy-two-foot by seventy-two-foot (72 ft. by 72 ft.) PIA corner.

Figure 8 Mt. Vernon Lighting Standards Graphic

Conclusion

Good technical writing in the area of the zoning and land use regulations has always presented a unique challenge. Zoning regulations have a wide audience. This audience consists not only of design and legal professionals, but also members of the general public. Persons who do not use the Zoning Regulations on a daily basis can find the task of updating and reading them a formidable challenge. On the other hand, the District is a unique, complicated entity. It contains multiple layers of government institutions, an active and sophisticated population, and a complex physical and built environment. The growth of the regulatory infrastructure needed to accommodate these needs has made the task of writing the Zoning Regulations and making them accessible to the public a complicated effort.

Fortunately, there are many tools available to streamline this process. Modern technical writing principles can employ language that is clear without losing its legal status. Graphics and display options make regulatory language easier to understand. Indexing text and uses can help the public find information quickly, cost effectively, and easily. External documents, such as handbooks, can explain concepts in ways that are not otherwise clear some of the intended audience, or to those who prefer a different writing style.

This report presents tools for building a technical and legal infrastructure for the Zoning Regulations that facilitates public access. Each has costs, advantages, and disadvantages. We hope that this report provides a useful focus of discussion as the District continues its dialogue on these important issues.