

MEMORANDUM

April 16, 2010

TO: County Council

FROM: Jeffrey L. Zyontz,  Legislative Attorney

SUBJECT: Update – Zoning Ordinance Rewrite; Approach & Annotated Outline Report

On April 12, 2010 Planning Staff posted a report concerning the Zoning Ordinance Rewrite project entitled Zoning Montgomery – Approach & Annotated Outline Report (Report). In substance, it is the same as the draft report with the same title distributed in February. The report picks up where the Zoning Discovery document left off and provides a glimpse of what the new zoning code¹ could look like. It presents an approach based on best practices that should address problems in the current code. The report is in 4 sections: 1) Project Objectives; 2) Layout and Format; 3) Annotated Outline; and 4) Sustainability Audit. A new draft zoning code, ready for the public hearing process, is expected in the fall of 2011. The purpose of the Report is to reach agreement on critical elements to be included in the new code before beginning the drafting process. The 101 page Report is a thoughtful and thorough document well-suited for this purpose. Planning Staff and their consultant will present the report to the Council.

The Report will guide the drafting of a new code that will include:

- substantive changes to zoning classifications, land uses, development standards, and approvals processes;
- more standards, including a palette of building types, landscaping, outdoor lighting, and parking layouts;
- CR zones that would be allowed without the a specific recommendation by a master plan;
- density incentives in agricultural zones; and
- new zoning maps.

This memorandum parallels the sections in the Report. It repeats the outline in the section and summarizes the content of the section when necessary. Planning Staff asked the Council 9 questions concerning the Report. Those questions are repeated in this memorandum. The “observation” sections highlight possible implications and occasionally have specific recommendations for the Council’s

¹ A provision of the rewrite would use “zoning code” as the short title for the Zoning Ordinance. Article 28 refers to zoning provisions as the “zoning ordinance”. It is not a legal problem to change the name of the ordinance to a code.

consideration. Observations include comments on detailed aspects of the outline that may be particularly controversial.

Project Objectives

The Report states objectives of the Zoning Ordinance Rewrite as follows:

- 1) Shift emphases from green fields to infill.
- 2) Re-think the planning and zoning framework.
- 3) Match regulations to impacts.
- 4) Improve the quality of development.
- 5) Provide incentives for public benefits.
- 6) Simplify and streamline standards and process.
- 7) Match land use and development patterns.
- 8) Provide easy access and use of the code.
- 9) Modernize and consolidate.
- 10) Create an efficient and effective implementation strategy.

Planning Staff question:

There are ten objectives outlined, five general and five coding. Are these the right objectives for the ordinance? Are there any “big-picture” topics missing?

Observations

Implementing master plans is not a stated objective of the new code. The idea is included under “Re-thinking the Planning Zoning Framework”. Implementing master plans is noted in the purpose provision of the new zoning code, concept plans, identification of retail streets, and PD zoning. *An objective of the new code should be to implement the intensity of land uses recommended by master plans.*²

The objectives in the Report are far more ambitious than making the code more precise, concise, and decisive. Achieving the objectives will require substantive changes to the code. Planning Staff has said that they would track every substantive change from the current ordinance for the purpose of transparency.

In general, reducing the number of zones (and the number of footnotes) may lead to a more permissive code, particularly for land uses. This would be consistent with the nationwide trend for jurisdictions to be more concerned with the development form than land uses.

Improving the quality of development is one of the 10 objectives. Improving the quality of development may increase the cost of housing.

Simplifying standards may increase or decrease permitted density. For example, multi-family housing is generally limited by the number of units. If the standard is changed to a floor area ratio, a developer

² The Report recommends using the mixed-use zones to replace all commercial zones and some high-rise residential zones. This would create the potential for residential uses in commercial areas and commercial uses in residential areas that may not have been contemplated by the applicable master plan.

planning large apartments may be limited by the new code; however, neighbors will have a clearer understanding of the allowable building bulk.

Simplifying the development process, something the Planning Staff is currently reviewing, may result in fewer opportunities for public comment. The consultant has noted that most jurisdictions have more streamlined land use processes than those in the current code.

Layout and Format

This section has the following sections:

- 1) Plain Language
- 2) Digital Enhancements
- 3) Page Layout
- 4) Software
- 5) Tables
- 6) Graphics
- 7) Footnotes
- 8) Code availability
- 9) New zoning code outline

Planning Staff question:

We have suggested significant changes to the layout and format of the ordinance. Will the suggested changes help citizens, designers, developers, and agencies use and understand the ordinance?

Observations

The proposed layout and format will improve the code.

The report suggests a Planning Staff maintained zoning code. The County Attorney's office is the only office authorized to publish the County's code. The wisdom of having a Planning Board version of the zoning code has been tested, and it failed. In the 1970's, the Planning Board started compiling its own Zoning Ordinance (called the beige book) that was supposed to more quickly keep up with changes than material available from the County Attorney's office. The problem was that the beige book did not accurately reflect the text amendments made by the Council. After a great deal of documentation, the beige book was abandoned. This history should not be repeated after the publication of a new ordinance; *the code available on the Planning Board's web site should be copies of the official ordinance.*

The Report recommended the use of a software program called InDesign by Adobe. The County Attorney's office uses WordPerfect. Sharon Gemperle is responsible for publishing the zoning code. She believes that the suggestion to use new software for publishing the zoning code is premature, without knowing the costs of new software, the training required to use it, and the effort required to update sections of code. *Staff believes that the County Attorney's office should decide the appropriate software platform.*

Annotated Outline

The new code would have the following articles:

- 1) General provisions
- 2) Zoning districts
- 3) Use and use standards
- 4) Zoning district regulations
- 5) General development standards
- 6) Administration and enforcement
- 7) Definitions

The new code would propose 7 major districts: 1) Agricultural; 2) Residential; 3) Mixed-use; 4) Mixed campus; 5) Industrial; 6) Planned Development; and 7) Overlay. Within each district would be several zones at various densities. The mixed-use districts would use the CR zone (amended to fit the format, organization, and standards of the new code) to replace the following zones: CR, C-Inn, R-20, R-20/TDR, C-T, R-H, R-10, R-10/TDR, all CBD zones, HM, TSR, TSM, TOMX-2, TOMX-2/TDR, all Commercial zones, MXTC, MXTC/TDR, MXPD. The lowest density of a CR zone would be lowered from .5 FAR to .25 FAR.

Planning Staff questions:

The General Provisions of the ordinance have outlined nine sections that apply universally.³ Do these sections cover the proper topics? Are they logically presented?

We have outlined the restructuring of the zones established by the ordinance. Are these suggestions a good foundation for further modeling, examination, and discussion?

We have outlined a simplified use table with new categories. Will a section organized this way provide a better understanding of uses and their allowed application in the various zones?

District regulations have been grouped together and reorganized around five subsections: zones, building types, dimensional standards, compatibility, and development patterns. Do these provide the proper level of detail and/or flexibility to implement the zones' purposes?

Observations

Generally, this section is particularly comprehensive and well thought-out.

There are no perfect answers to organizing a new zoning code, but the proposed structure of splitting the land use table for the development standards for each zone is sound. It will allow a single land use table in the code. An undesirable consequence of a single table for all zones is that the land use section and the regulation section will be split into different code chapters. The goal to combine land use categories (and to eliminate obsolete uses) is long overdue.

³ The 9 sections are: Short Title, Authority and Purpose, Jurisdiction and Applicability, Severability, Effective Date, Minimum Requirements, Conflicting Provisions, Annexed Land, and Transitional Provisions.

The idea to have conditional uses in addition to special exceptions will go a long way towards reducing the number of footnotes. Conditional uses may allow the elimination of many special exception uses. Footnotes also contain many grandfathering provisions that may be addressed in the general provisions article.

Accessory use standards include a recommendation that an accessory dwelling be a permitted use in some unspecified zones. The Report says, “where there is little tolerance for such units by right, the special exception process should be used.” *To the extent that accessory apartments are allowed as a permitted use, Staff suggests that accessory dwellings would be more appropriate as a conditional use.*

The Council’s adoption of the CR zone indicated that CR zones would only be used when the zone was specifically recommended by the applicable master plan. That condition is not recognized in Planning Staff’s zoning outline.⁴ A new mixed-use zone is needed if the Planning Staff recommends implementing the new zoning code by a district map amendment.⁵ If there is a new mixed-use zone, the Council should consider whether the CR zones should be incorporated into the new zone.

The Planning Board recommended amendments to the LSC zone to help implement the Great Seneca Science Corridor Master Plan. The Department of Economic Development wanted the LSC zone to be separate as a marketing tool for life science businesses. The zoning outline would combine the LSC zone with other campus zones. *The Council may want to retain the LSC zone in a reformatted form.*

No zones were specifically identified as floating zones in the Report.⁶ It is difficult in the current code to identify floating zones. This situation should not be repeated in the new code. Some current floating zones will be changed to new equivalent zones (e.g., RT and PD). Other floating zones are combined in the mixed-use zone category (e.g., CT, OM). There is a current need for a floating zone that can be used in infill situations. *Floating zones should be clearly identified in the new code.*

The Report recommended significant changes to home occupation provisions. *The Executive’s ideas on this subject, submitted in ZTA 09-03, should be considered in the rewrite.*

A single means of determining height would be welcome. Consideration should be given to deleting the use of stories as a measure of height. *The new code should address density provisions for all uses; the overall density should include all structures including special exceptions uses.*

The new provision for building form would be a welcome addition. Provisions for garage placement on the side or the back of the house, as proposed in the Report, may require wider side yard setbacks or rear alleys and transition rules to avoid creating non-conforming structures.

The Report suggested density incentives in agricultural zones. The County has taken actions to reduce density in the agricultural zone. *Why should there be incentives to allow more density in agricultural zones?* Additional density in residential zones for public benefits may not be welcome, either.

The Report recommends provisions for encouraging cross-access between lots under access management provisions. The Supreme Court and the Maryland Court of Appeals found that public

⁴ In order to address the CR zones as approved, all of the zones recommended for CR zoning would have to be retained until new master plans are adopted.

⁵ The new zone could increase standard method of development density for enhanced general design standards as recommended by the Report.

⁶ The Report did discuss the need for master plan conformance to apply PD zones.

access requirements can result in a “taking” and require the payment of compensation. Caution is warranted. No caution is warranted in “right sizing” parking requirements. Excess parking is uneconomic and environmentally damaging. Insufficient parking can cause neighborhood problems.

Resource protection provisions, recommended in the Report, should not overlap forest conservation and subdivision law. Provisions in this section should be vetted to assure that the zoning code does not become the subdivision code.

Provision A.6, Minimum Requirements, will need to be carefully drafted to avoid an illegal delegation of zoning authority. The provision for zoning text amendments appears in the transition section of the outline, under A-9.4. It should be in the administrative section.

Sustainability Audit

The sustainability audit provides a comprehensive review of codes and regulations, to access them as they relate to sustainability.

Planning Staff question:

Is the focus on the nine topics: buildings and neighborhoods, stormwater, parking, tree canopy and heat island, water reuse and irrigation, energy, food production, lighting, and waste reduction a good start? Are there specific concerns with the suggestions presented? Are there other topics that should be included?

Observations:

Compact mixed-use development is not the intent of every community in every master plan; it is a principal component of sustainability. The vision for a neighborhood should be found in a master plan, not in the zoning code.

This chapter of the report was completed by a different consultant than the author of the first 3 chapters. There are a number of provisions in the first 3 chapters that address sustainability issues. The Sustainability Audit repeats some of those ideas (parking, lighting, accessory dwellings, home occupations), adds other ideas (impervious surface limits, livestock in residential zones, big box retail limits), and expands the subject matter to include the subdivision ordinance, stormwater management regulations, the road code, the building code, a tree ordinance, the Department of Permitting Services, and WSSC. It would have the zoning code regulate building materials (recycled and local) and stormwater infiltration.

Rewriting the zoning code is a very ambitious project. It is a job that should incorporate reasonable sustainability provisions.⁷ It is not a project that should be expanded to include the subdivision ordinance, stormwater management, the road code, the building code, a tree ordinance, the Department of Permitting Services, WSSC. The introduction to the sustainability chapter notes that these other

⁷ Zoning is allowed under a specific grant of power for the State; it does not include all powers related to sustainability. Some sustainability measures (e.g., the sources of building materials) are not within the scope of zoning powers. Some sustainability measures may not be reasonable for the County. The Council may determine that 3 chickens housed within 100 feet of a dwelling in any zone is not reasonable.

components are not included in the work program, but the work was conducted and included in the Report.

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MONTGOMERY COUNTY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

MEMORANDUM

Date: April 14, 2010

To: Montgomery County Council

From: Montgomery County Planning Department

Re: Zoning Ordinance Rewrite Draft Approach & Outline

The Zoning Code Rewrite Project continues on schedule and on budget. An important milestone was achieved in February when we published and circulated the *Draft Approach and Outline* to your offices, stakeholders, and others. The report was also published for the general public on our web site and many responses have been submitted.

On April 20, 2010, our zoning consultants will be meeting with the full Council to engage in a discussion on the approach detailed in the report. In addition to the public forums already held, two more open houses are planned at that time.

The project is at an important juncture. Planning staff and the consultants are seeking a confirmation of direction from the Council on the general objectives of the *Approach and Outline*. This is critical, as the drafting of the Code is scheduled to begin in May and we need to be certain we are headed in a direction Council members are comfortable with. Otherwise the schedule and project budget could fall behind if unnecessary drafting occurs.

1. There are ten objectives outlined, five general and five coding. Are these the right objectives for the ordinance? Are there any "big-picture" topics missing?
2. We have suggested significant changes to the layout and format of the ordinance. Will the suggested changes help citizens, designers, developers, and agencies use and understand the ordinance?
3. The General Provisions of the ordinance have outlined nine sections that apply universally. Do these sections cover the proper topics? Are they logically presented?
4. We have outlined the restructuring of the zones established by the ordinance. Are these suggestions a good foundation for further modeling, examination, and discussion?
5. We have outlined a simplified use table with new categories. Will a section organized this way provide a better understanding of uses and their allowed application in the various zones?
6. District regulations have been grouped together and reorganized around five subsections: zones, building types, dimensional standards, compatibility, and development patterns. Do these provide the proper level of detail and/or flexibility to implement the zones' purposes?
7. We have outlined five general development requirement topics: streetscape standards, resource protection, parking and loading, landscaping and screening, and outdoor site lighting that will apply across the various zones. Does this section cover the appropriate topics? Is the level of detail discussed in each section suitable?

8. We have consolidated information about the review bodies and process in one section. Are they the right review bodies? Are the ideas on the simplified process a good foundation?
9. A special audit of sustainable practices has been drafted. Is the focus on the nine topics: buildings and neighborhoods, stormwater, parking, tree canopy and heat island, water reuse and irrigation, energy, food production, lighting, and waste reduction a good start? Are there specific concerns with the suggestions presented? Are there other topics that should be included?

Please review the *Approach* with these questions in mind so that we can give clear direction to the consultants. Based on your responses, we will begin drafting, testing, and discussing specific sections of the code and presenting them to you, stakeholders, and the general public in portions for further fine-tuning. As mentioned, this next phase will take the better part of the next 12 – 15 months and we will be asking various Committees or the full Council for guidance on these portions along the way.

ZONING
MONTGOMERY

**APPROACH & ANNOTATED
OUTLINE REPORT**

APRIL 12, 2010

prepared by

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with assistance from

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1. INTRODUCTION

The Montgomery County Planning Department has partnered with a nationally recognized team of consultants to assist in a comprehensive rewrite of its zoning code. Following years of patching the existing regulations, the county has determined that an overhaul is necessary. This overhaul is well-timed, coming on the heels of national changes in development practice, a new focus on sustainability, and the need to reinvent the suburbs.

The current zoning ordinance is far too complex given the present quality of development being generated in Montgomery County (translation—others are achieving similar end results with fewer words!). This complexity is primarily due to the underlying structure of the existing system. Additionally, the last time the county's zoning code was comprehensively revised was in 1977. Since that time, the county has relied on continual zoning text amendments, which have resulted in a disconnected patchwork feel in the code that is difficult to navigate and interpret.

In 2008, the county actively began a project to revise their zoning ordinance and carried out a public participation process that engaged stakeholders across Montgomery County. Staff compiled input from these sessions with additional research and analysis into a report called the *Zoning Discovery* that identifies many of the glaring issues with the current zoning code and lays out ideas for the revised code. The *Zoning Discovery* focuses on the complexity of the current zoning code, describing the code's poor organization, prevalence of outmoded regulations, and the need for modern regulatory tools to accommodate changing development patterns.

For the most part Montgomery County is built out. As a result, the fundamental goal is to create a zoning code that can guide the future growth of Montgomery County in a sustainable and contextually sensitive manner by strategically steering infill development in the right direction. The foundation of this strategy is the creation of a zoning code that is clearly written, intuitive to users, and organized around a framework that will allow the document to adapt to the changing needs of Montgomery County in the future. The new zoning code will provide the regulatory toolkit needed to implement Montgomery County's various plans and diverse design goals.

Purpose and Scope of this Report

In a comprehensive code rewrite, the first step is to establish a baseline of current conditions against which to mark success. The *Zoning Discovery* goes a long way toward serving this purpose, and it is the role of this approach and annotated outline report to pick up where the *Zoning Discovery* left off.

This report provides the stakeholders in Montgomery County with a glimpse of what the new zoning code could look like. Embedded in the outline are options for addressing many of the issues raised in the *Zoning Discovery*. The primary purpose of this document is to take the conversation to the next stage. It presents a model approach based on best practices, customized for Montgomery County, that addresses the litany of problems identified with the current zoning code - from the complexity of the current system, to modernizing regulations, to generally improving the quality of development

in Montgomery County. It is important to stress that the ideas and specific approaches outlined below represent only the beginning of this stage of the discussion. As more conversations take place and coding of the modules begins in the months ahead, it is likely that several of the ideas presented below will evolve during these continuing discussions.

There are four major sections in this report:

- 1 **Project Objectives** - A ten-point summary of the general and coding objectives for the project.
- 2 **Layout and Format** - A section that addresses the look, feel, structure and maintenance of the new zoning code and concludes with a proposed outline.
- 3 **Annotated Outline** - Making up the bulk of the document, this section provides a detailed explanation of the ideas and approaches to a model outline for the new zoning code.
- 4 **Sustainability Audit** - A comprehensive review of the existing zoning code, including tools that would improve sustainability.

Basis of Analysis

During the course of drafting this report and outline the consultant team pored over Montgomery County's existing zoning code as well as various reports, policy documents, plans and guidelines. These documents are accessible through the project web site (www.zoningmontgomery.com) maintained by planning staff.

The careful study of regulations, plans, and reports provided the facts, but it was the time on the ground in Montgomery County that provided the context-

DOCUMENTS REVIEWED AND MEETINGS HELD

RULES AND REGULATIONS

County Charter
Code of Ordinances (Chapter 59 Zoning, Chapter 49 Streets and Roads, etc.)

REPORTS, HANDBOOKS AND POLICY DOCUMENTS

Zoning Discovery
Everything you Always Wanted to Know About Planning Zoning and Subdivision in Montgomery County Maryland But Were Afraid to Ask.
Small Group Discussion and Online Survey Report (Justice and Sustainability)
Reducing Our Footprint, 2009-2011 Growth Policy

GREEN PAPERS

Allowed Land Uses: A Three-Tier System
Land Use Districts: Consolidation and Focused Integration
Definitions
Approval Procedures
Development Standards
Sustainability

SECTOR PLANS

Germantown Forward, February 2009
Takoma / Langley Crossroads Sector Plan, June 2009
Gaithersburg West Master Plan, The Life Sciences Center, July 2009
White Flint Sector Plan, Midtown on the Pike, July 2009
Kensington and Vicinity Sector Plan, October 2009

URBAN DESIGN GUIDELINES

Urban Design Guidelines for the White Flint Master Plan, April 2009
Urban Design Guidelines for the Germantown Employment Area Sector Plan, May 2009

STAKEHOLDER INTERVIEWS AND PUBLIC MEETINGS

Internal Planning Staff
Public Listening Sessions
Zoning Text Amendment Advisers
Aides to Council Members
Master Plan Area Team Leaders
Homebuilders Meeting
Zoning Advisory Panel
Planning Board

PROJECT TIMELINE

September 2008	January 2009	March 2009	July 2009	September 2009	January 2010	April 2010	May 2010 – June 2011	Fall 2011
<ul style="list-style-type: none"> Stakeholder Meetings 	<ul style="list-style-type: none"> In house diagnosis published: Zoning Discovery 	<ul style="list-style-type: none"> Planning Board appoints Zoning Advisory Panel (ZAP) 	<ul style="list-style-type: none"> Consultant team led by Code Studio begins work 	<ul style="list-style-type: none"> Consultant orientation Public listening sessions County bus tour ZAP meeting Planning Board meeting Code rewrite web site launched: zoningmontgomery.org 	<ul style="list-style-type: none"> Draft Approach & Annotated Outline report released 	<ul style="list-style-type: none"> Council and Planning Board briefings Public open houses Final Approach & Annotated Outline report 	<ul style="list-style-type: none"> Code drafting Schedule to be announced Public outreach 	<ul style="list-style-type: none"> New draft zoning code completed ready for public hearing process

tual understanding. The consultant team spent days meeting with stakeholders, conducting interviews, holding public listening sessions, and touring the county. Each of these activities helped the team develop a feel for the existing conditions and observe ongoing development projects. The tour led us across the county from the DC line to the outer edges of the agricultural reserve area and included stops in Takoma Park, Gaithersburg, Olney, Clarksburg, Kentlands, Potomac and Bethesda.

Commitment to Sustainability

The *Zoning Discovery* observes that zoning should be used to encourage more sustainable environments and lists specific goals such as compact development in new subdivisions and on infill sites. To address this challenge, team members from Farr Associates prepared a Sustainability Audit, encompassing issues such as parking, stormwater, and energy. The audit lists objectives, references them to specific sections of the existing code, and proposes code language which could be used to promote more sustainable choices. This audit

will be used as a starting point for rethinking sections of the existing zoning code that could enhance the County's commitment to sustainability.

Next Steps

In addition to starting the discussion on a number of important issues, this report will help the county and the consultant team reach agreement on the critical elements to be included in the new code before beginning the drafting process. Establishing this road map early on is important because major changes in direction during the drafting process will result in wasted time and effort. Clear policy direction will enable the drafting process to occur efficiently and result in a better finished product.

Ideas in this document may be revised through conversations with citizens, stakeholders, and public agencies and will be presented to the County Council and to the general public.

2. PROJECT OBJECTIVES

The *Zoning Discovery* analyzed the existing zoning code, best practices, and stakeholder input to explore the direction for the new zoning code. The synthesis of this research established several objectives that the new zoning code should consider as a foundation for smarter, more sustainable growth in the county.

General Objectives

1. SHIFT EMPHASIS FROM GREENFIELDS TO INFILL

Approximately 47% of the county is dedicated to agricultural and park purposes and another 49% is already developed. This means that about 4% of land in the county is currently vacant and available for new greenfield development.

Historically, residential growth in the county has come in the form of one-unit greenfield development between the urban centers and farmland. Opportunities in these areas are disappearing and this pattern must change. Future redevelopment will require creative reuse of under utilized areas such as the approximately 8,000 acres of surface parking lots and strip shopping centers that currently exist in the county. The majority of redevelopment will be built on surface parking and as infill development for houses, multi-unit and mixed-use development. As a result, the rules controlling development must recognize and appropriately respond to the need for infill and redevelopment. The new zoning code must do a better job of accommodating infill and redevelopment while reducing the impact on established residential areas.



THE ZONING CODE MUST DO A BETTER JOB AT ACCOMMODATING INFILL AND REDEVELOPMENT.

2. RE-THINK THE PLANNING AND ZONING FRAMEWORK

The zoning code is the county's primary tool for implementing master plans. As such, the zoning code must contain the full spectrum of regulatory tools needed to guide development in a way consistent with adopted and future master plans and design guidelines. The master plan provides the vision and the zoning code implements that vision. Ideally, the new zoning code will become a "toolkit" for implementing existing and future master plans. In many cases, design guidelines supplement the master plans and will be used by decision makers to enhance the quality of development. The county has developed a unfortunate habit of creating complex, one-of-a-kind zones for

each master plan. Often these zones vary little from existing zones and are created simply to implement a particular goal on a limited area in a specific master plan and are never used again. The new zoning code should establish a set of versatile zones with appropriate building typologies, land patterns, and streetscape options. The new zoning code should be predictable enough to provide citizens a sense of what might be developed around them, while remaining versatile enough to be implemented in different contexts and meet fluctuating development trends.

3. MATCH REGULATIONS TO IMPACTS

Refocusing on infill and redevelopment means an increased emphasis on getting the right rules for the right places, ensuring that the character, intensity and form of infill and redevelopment fits within the existing or proposed context of an area.

The most effective way to get the right rules for the right place is to incorporate compatibility provisions into the new zoning code. New zones will ensure compatibility through regulation of building types, dimensional standards, parking provisions, open space provisions, context standards, and landscaping requirements. This allows for more fine-grained control over the subtle differences between the county's rural areas, suburban neighborhoods and urban centers.



THE MOST EFFECTIVE WAY TO ENSURE THAT THE CHARACTER, INTENSITY AND FORM OF INFILL AND REDEVELOPMENT FITS WITHIN THE EXISTING OR PROPOSED CONTEXT OF AN AREA IS TO INCORPORATE COMPATIBILITY PROVISIONS INTO THE NEW ZONING CODE.

4. IMPROVE THE QUALITY OF DEVELOPMENT

A gap exists between the county's recent efforts to promote quality development and the implementing regulations. The current zoning code does not "broadcast" the county's intentions. Thus, the clarity and direction of the master plans and countywide planning efforts are often lost within the existing regulatory framework. The county has completed an impressive amount of planning and visioning work; however, this foundation has not led to the caliber of development that elected leaders, stakeholders, citizens, or staff expect or deserve.



A GAP EXISTS BETWEEN THE COUNTY'S RECENT EFFORTS TO PROMOTE QUALITY DEVELOPMENT AND THE IMPLEMENTING REGULATIONS. THE CURRENT ZONING CODE DOES NOT "BROADCAST" THE COUNTY'S INTENTIONS.

Projects that emulate the county's vision should be the easiest to approve, while projects that fail to advance the vision should be the hardest to approve. The county deserves a high-quality built environment and there are a number of improvements that can be made to the current zoning framework to help realize it.

One feature that contributes to the lack of quality outcomes is the multiple methods of development permitted under each zone. In some residential zones, there may be up to four different methods of development allowed: standard, MPDU, TDR, or cluster. The new zoning code should retain a base level of development and create a more effective way to incorporate

connectivity, diversity, environmental, and design goals through alternative methods. This would leave the residential zones with one primary method of development and one subset of additional rules for limited areas to develop at higher densities on smaller footprints in exchange for specified public benefits.

The current zoning code does a poor job of regulating the types of buildings that may be constructed on a given site. The bulk and mass of buildings should be standardized using a combination of allowed building type, floor area ratios (FAR), minimum building setbacks, and height. For example, a mixed use zone may permit various types of buildings and regulate how each use relates to the public realm. These specific development standards for each building type ensure that the variety of building types all work well together to create the character desired. A complete range of building types will allow the county to subtly control how new development addresses the public realm through a flexible and intuitive set of rules.

Improving the overall quality of development depends on more than just use and building form. The impact that a site has on the public realm also includes issues such as the streetscape, site lighting, outdoor storage and display, landscaping, and use of signs. The new zoning code will update the county's standards in each of these areas to enhance the overall quality of development.

5. PROVIDE INCENTIVES FOR PUBLIC BENEFITS

The new zoning code should strive to establish a pre-approved set of building forms and development patterns that:

- Replace or supplement the existing optional development methods;
- Create incentives for particular developments that exceed base standards and provide public benefits;
- Enable implementation of environmental, social, and economic policy objectives;
- Further master plan goals;
- Strengthen the predictability of outcomes from the alternative development method; and
- Provide a fast-track process for projects that meet specific performance and prescriptive criteria.

These pre-approved building forms and development patterns could offer additional intensity in exchange for increased public benefits, which may vary based on the character of surrounding development. The developer of a more urban place may be asked to pull buildings up to the street, provide large storefront windows, build wider sidewalks, and place parking behind the buildings while a developer in a more rural place may be asked to preserve views, additional open space, and tree cover. The intent is to replace or supplement a wide variety of optional methods with a set of pre-approved building forms and development patterns that could be pulled "off the shelf" and used as an alternative to the current optional methods. This approach would lead to swifter approvals and increased predictability in outcome and



quality. Planning staff are currently developing a series of draft building forms and development patterns that address such things as conservation subdivisions, cottage housing, neighborhood mixed use centers, and commercial strip retrofits. As the building forms and development patterns are developed they will be incorporated into drafts of the new zoning code and made available for review and comment.

Coding Objectives

6. SIMPLIFY AND STREAMLINE STANDARDS AND PROCESS

The charge to simplify the zoning code was a major theme of the *Zoning Discovery* and was repeatedly echoed by the project stakeholders. An habitual focus on the minutia of development that is applicable to only limited circumstances has led to a code that zones for the extremes rather than the middle ground.

The development review process is consistently viewed as an intense process for almost any project of significance. If a project requires new zoning for example, the public may see the project as many as three times, as the applicant works through zoning, preliminary plan, and site plan phases.

Recently, planning staff proposed an approach for a single, unified plan review. The most significant change proposed is a new “concept plan” that will help applicants figure out where their significant issues lie— forest conservation, stormwater and master plan consistency will all be considered concurrently. This new single track system would substantially shorten the required development review period, while retaining significant public participation, resulting in a better process for all involved.

A major effort will be made in the new zoning code to consolidate as many zones as possible and to eliminate obsolete or rarely used zones. This report sets out an approach to significantly reduce the overall number of zones.

“Legalese” permeates the current zoning code. While this language may be both legally and grammatically correct, it makes the document hard to read and understand. The new zoning code will take a plain language approach to drafting, eliminating the often verbose and convoluted legal phraseology and replacing it with clear and succinct text. Remember—the target of the new zoning code is the general public as well as design professionals and attorneys.

The current zoning code is laden with regulatory footnotes. Some tables contain more than 50 footnotes that one might have to wade through before understanding the rules for their property. Many of these footnotes are a result of the years of text amendments that have resulted in an unwieldy document. Planning staff is working to review the existing footnotes and incorporate their intent into the body of the document.

Much of the confusion with the current zoning code is due to how information is presented. With the exception of permitted uses and site standards, the majority of the code is pure text. Without the assistance of graphical explanations, many of the regulations can be confusing to understand, comply with or enforce.

7. MATCH LAND USE AND DEVELOPMENT PATTERNS

Conventional zoning is fundamentally about keeping things apart, but in order to create healthy neighborhoods, towns, and cities, zoning must work to integrate different aspects of daily life. If a community were to approach

mixed use by simply permitting a broad range of uses from single-family to light industrial in a zone without any sort of additional regulation, then the odds of getting a high-quality, walkable, mixed use place would be slim. Allowing a broader range of uses in urban and neighborhood centers must be balanced with design regulations to succeed. In a vibrant, mixed use area, buildings are pulled up to the street, ground floor windows are transparent, parking is structured or to the rear of buildings, sidewalks are wide, and streets are narrow. These fundamental design elements are what contribute to the sense of place and the charm of a mixed use, walkable environment.

Mixed use comes in many forms and at many levels of intensity. It may be in the form of a corner store in the neighborhood; in the form of a neighborhood work center for people who sometimes telecommute during the week; in the form of a vertically mixed use building with restaurants and retail on the ground floor with residential units above.

Regulating mixed use means placing the primary emphasis not on use, but on the physical form of the built environment with the end goal of producing a particular sense of "place"—whether it is big city or small town, a main street or a neighborhood. To

enable this, simple and clear graphic prescriptions for height, siting, building elements, and use are applied to control future development. More specifically, zoning should regulate things that directly affect the way a building and street function to encourage pedestrian activity and mixing of uses. The focus is placed on building mass, building placement on lots, the form and creation of streets and other public spaces, building heights, transparency of windows and doors, and location of entrances. With proper urban form, a greater mix of uses can become natural and comfortable. Land use is not ignored, but more loosely regulated using broader parameters that can respond to market economics, while also prohibiting socially or environmentally undesirable uses. In short, this approach to zoning will become an ef-



fective way to translate desired outcomes into regulatory language that helps create the physical place envisioned by a community.

8. PROVIDE EASY ACCESS AND USE OF THE CODE

Chapter 59 and all of its related materials should be easily available in a variety of ways. While the growing use of the internet has made digital versions a requirement for the general public, the development and design professional may be more likely to obtain a paper copy.

The county's code publisher (American Legal) maintains the digital version of Chapter 59, which means that digital users must fumble through American Legal's awkward interface to get to necessary materials. Further, this digital interface does not handle graphics or tables very well. Finally, updates must wait until American Legal has included the new materials in the digital version of the zoning code, which is at least weeks and often months, after their adoption. While the online version tracks new or revised ordinances, it seems important that an up-to-date copy of any amendments to the zoning code be generally available as quickly as possible after the adoption of changes.

At minimum, an up-to-date PDF copy of the new zoning code, broken down by Article, should be made available on the planning department's and permitting services' website.



9. MODERNIZE AND CONSOLIDATE

The structure of the current zoning code is scattered—major topics such as uses and procedures are spread throughout. The new zoning code should unite the major themes of the document. This will lead to a more usable table of contents and to easier navigation of the document.

The current code dates back to 1928, and many of the uses regulated in the zoning code are no longer relevant. For example, uses such as millinery shop and hat repair should be eliminated from the use tables. Additionally, other uses such as neighborhood coffee shops, doggie day care, or payday lending are not currently identified as separate uses. Further, individual uses that are treated similarly should be combined together into use categories to reduce the bulk of the use table.

Under the current zoning code, each group of zones has its own allowed use table. This approach can lead to, among other problems, inconsistencies between tables. The new zoning code should consolidate all allowed uses into one comprehensive use table. This will allow a user to compare allowed uses across all zones. Given the 120 zones in the current zoning code, this approach would not have been possible; however, with the new zoning code's more manageable number of zones this consolidation effort becomes feasible.

10. CREATE AN EFFICIENT AND EFFECTIVE IMPLEMENTATION STRATEGY

The approach to implementation will rely heavily on decisions made during this phase of the work. Once the content of the new zoning code has been outlined, and the extent of major changes agreed upon, a detailed strategy for implementation can be developed. The following concepts will affect the outcome.

A variety of options for implementing the new zoning code exist. The simplest is to adopt the new zoning code and put it into effect immediately. A countywide map amendment will accompany the adoption, placing the new zones on the ground. Where zones are not substantially changed from their current requirements (such as in the majority of agricultural and one-unit neighborhoods), a conversion of the existing zone to any new zone could occur, without the need for a countywide map amendment. Where substan-

tial changes are recommended, any map amendment will be accompanied by a comprehensive plan.

The challenge of Maryland's "change/mistake" rule, which requires the county to make most map amendments as part of a planning process or address them as a mistake on the current map, makes innovation and plan implementation by individual property owners difficult. The county has countered this difficulty with a number of floating zones that can be applied for upon request by the property owner. Additional discussion of the possibility of using a single planned development (PD) zone to replace the numerous existing PDs must also resolve the question of whether these zones may be applied by local map amendment without a specific master plan recommendation.

In order to make the changes contemplated in this outline, it may be necessary to evaluate the adequacy of state enabling authority to address such issues as sustainability and built form, and, if necessary, to seek changes in state enabling authority.

3. LAYOUT AND FORMAT

Have you read the county's existing zoning code? Not cover to cover, but maybe to find the answer to a basic question, such as "What could be built on that vacant lot across the street?" or "Am I allowed to construct a rear addition on my house?" What you probably found was a tough read.

Zoning regulations should be predicable, understandable and easy to use. In fact, one of the recurring themes of the stakeholder input was how difficult it is for the average resident to use and understand the current zoning code. Even those who administer the zoning code each day are sometimes left scratching their heads over the meaning of some provisions. Given the important role zoning plays in shaping the visual environment of the county, the zoning code should be logically organized, well-formatted, and easy to use. The zoning code doesn't have to read like a novel, but it does need to be an easy-to-use reference document that's laid out so people can look up the information they need. In short, a zoning code is less effective if people don't understand it.

Plain Language

The new zoning code should be as easy to understand and as intuitive as possible. This means plain language should be used whenever possible. Any excessively "lawyered" provisions, including legal terms of art such as "herein" or "therefore" should not be used in the new zoning code. This is not to suggest that a legally-defensible zoning code is not critical, but even the federal government has moved to require plain language drafting.

Digital Enhancements

The new zoning code should take advantage of advances in document technology such as digital cross-references, tables of contents, and indexing, allowing the user to click on a page number or cross-reference and jump to that section. Additionally, document navigation techniques such as thumbnails embedded in Adobe PDF documents can be useful. These digital enhancements are often just a "save as" away from the original document. Digital enhancements can also include internal interpretations embedded as comments, legislative history (including links to prior versions), and ex-

DOCUMENT CHECKLIST FOR PLAIN LANGUAGE



- Written for the average reader
- Organized to serve the reader's needs
- Has useful headings
- Uses active voice
- Uses short sections and sentences
- Uses the simplest tense possible
- Omits excess words
- Uses concrete, familiar words
- Uses lists and tables to simplify complex material
- Uses no more than two or three subordinate levels
- Simple graphics used to convey concepts

ternal links to items such as state statutes, external manuals and other helpful materials.

Page Layout

Other easy-find features include a running header that allows the reader to quickly flip through pages of the zoning code (think of a dictionary or yellow pages directory). Annotation of each page with a date of publication or adoption in the footer is also important to reassure users that they have the most



current copy of the document. And while most users reasonably assume the on-line copy is the most up-to-date, that may not be true due to the time lag often associated with codification.

SOFTWARE

The selection of software for drafting the zoning code has significant implications for the visual quality of the end product. While Montgomery County continues to use Wordperfect to codify the zoning code, other communities have turned to the flexibility of page layout software such as Adobe's InDesign. The current version of InDesign is not only capable of all of the typical word processing functions such as tables of contents, cross-references, spell-checking, and searching, it is also intended to specifically incorporate graphics. InDesign's built-in "book" feature allows the consultant team to separate the document into multiple chapters. This function allows individual chapters to be pulled out of the "book" and worked on separately. This means multiple people can draft and edit the code at the same time (as long as they are using different chapters of the document). The "book" function

insures paragraph and page numbering and format remains constant throughout all chapters of the document. Traditional word processing software provides nowhere near this level of control and interaction; the entire code must be located in a single word processing file. This means only one person can be working on the original digital file of the code at any one time.

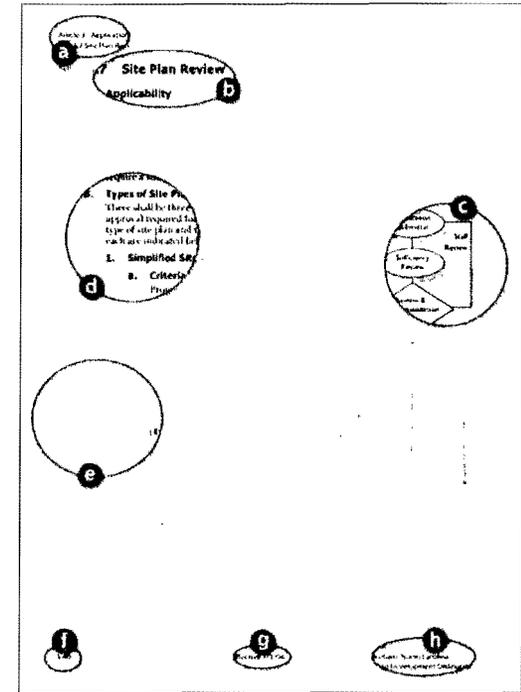
The implications of using InDesign are that the county would have to manage future code revisions using InDesign as well. We believe this is a trade-off worth making in order to provide a higher quality document.

TABLES

The existing zoning code makes limited use of tables and graphics. As they say—"a picture is worth a thousand words." While we are not suggesting the county eliminate the words, supplementing them with images and tables makes access to the information more intuitive for more people. Remember—the target of the code is the general public as well as the lawyers!

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CONTEMPORARY PAGE LAYOUT



- a** RUNNING HEADER
- b** PROMINENT TITLES
- c** GRAPHICS AND ILLUSTRATIONS
- d** CONSISTENT NUMBERING, INDENTED PARAGRAPHS
- e** GENEROUS USE OF WHITE SPACE
- f** PAGE NUMBERS
- g** ADOPTION DATE
- h** DOCUMENT TITLE



the established building line requirement) for which graphics would be useful.

Additional graphics would make other portions of the zoning code easier to understand. Simple flow charts of procedures provide a helpful overview. Illustrations of sign types may rely on photographs of existing examples, while lot layout standards use plan views and architectural standards use elevations or isometric views.

Where possible, best practice concepts should be used in the illustrations in the zoning code as a guide to sound development practices.

FOOTNOTES

There are approximately 480 footnotes in the zoning code covering subjects of use, standards, definitions and exceptions. Many of these footnotes are due to years of text amendments that have resulted in an unwieldy document. Some tables contain more than 50 footnotes that a user must wade through in order to understand all the rules that apply to a property. The new zoning code will address footnotes in the following ways:

- Review existing footnotes and incorporate their intent into the body of the text.
- Review footnotes for common characteristics, with the intent of reducing and possibly deleting.
- Eliminate footnotes that refer to other parts of the zoning code (instead incorporate as a cross-reference in the use table).
- Eliminate footnotes that repeat other requirements of the zoning code.
- Footnotes with additional standards should be permitted by right if certain conditions are met. These footnotes could be handled as conditional uses. If the conditions are met, as determined by staff, the use is permitted by right.

CODE AVAILABILITY

Chapter 59 and all of its related materials should be easily available in a variety of ways. While the growing use of the internet has made digital versions a requirement for any professional, the general public may be more likely to purchase a paper copy.

The county's code publisher (American Legal) maintains the digital version of Chapter 59, which means that digital users must fumble through American Legal's awkward interface to get to necessary materials. The digital interface does not handle graphics or tables very well. Finally, updates must wait until American Legal has included the new materials in the digital version of the zoning code—which is at least weeks, and often months after their adoption. While the online version tracks new or revised ordinances, it seems important that an up-to-date copy of any amendments to the zoning code be generally available as quickly after the adoption of changes as possible.

At minimum, an up-to-date PDF copy of the new zoning code, broken down by Article, should be made available on the planning department's website.

New Zoning Code Outline

The following two pages compare the existing zoning code organization to a more ideal model proposed for the new zoning code.

CURRENT ZONING CODE OUTLINE

Article 59–A. In General.

- Division 59-A-1. Purpose and Applicability.
- Division 59-A-2. Definitions and Interpretation.
- Division 59-A-3. Building and Use-and-Occupancy Permits; Registration of Certain Uses.
- Division 59-A-4. County Board of Appeals.
- Division 59-A-5. Compliance Required.
- Division 59-A-6. Uses Permitted In More Than One Class of Zone.
- Division 59-A-7. Reserved.

Article 59–B. Exemption From Controls.

- Division 59-B-1. Exemptions from Height Controls.
- Division 59-B-2. Exemptions from Yard Requirements.
- Division 59-B-3. Exemptions for Projections.
- Division 59-B-4. Exemption for Church Buildings.
- Division 59-B-5. Special Provisions For Conditions Predating 1958.
- Division 59-B-6. Special Provisions for the Area of the City of Tacoma Park Annexed into Montgomery County on July 1, 1997.
- Division 59-B-7. Exemptions for Accessibility.

Article 59–C. Zoning Districts; Regulations.

- Division 59-C-1. Residential Zones, One-Family.
- Division 59-C-2. Residential Zones, Multiple-Family.
- Division 59-C-3. R-MH Zone-Mobile Home Development.
- Division 59-C-4. Commercial Zones.
- Division 59-C-5. Industrial Zones.
- Division 59-C-6. Central Business District Zones.
- Division 59-C-7. Planned Unit Development Zones.
- Division 59-C-8. Transit Station Development Area Zones.
- Division 59-C-9. Agricultural Zones.
- Division 59-C-10. RMX Zones-Residential Mixed Use Development.
- Division 59-C-11. Mixed-Use Town Center Zone (MXTC).
- Division 59-C-12. Mineral Resource Recovery Zone.
- Division 59-C-13, Transit Oriented, Mixed-Use Zone (TOMX)
- Division 59-C-14, Transit Mixed-Use (TMX) Zone
- Divisions 59-C-15-C-17. Reserved.
- Division 59-C-18. Overlay Zones.

Article 59–D. Zoning Districts–Approval Procedures.

Introduction.

- Division 59-D-1. Development Plan.
- Division 59-D-2. Project Plan for Optional Method of Development in CBD, TOMX, TMX, and RMX Zones.
- Division 59-D-3. Site Plan.
- Division 59-D-4. Diagrammatic Plan.
- Division 59-D-5. Combined Urban Renewal Project Plan.

Article 59–E. Off-Street Parking and Loading.

- Division 59-E-1. Off-Street Parking and Loading.
- Division 59-E-2. Plans and Design Standards.
- Division 59-E-3. Number of Spaces Required.
- Division 59-E-4. Parking Facility Plans for Projects Constructed in Accordance with Building Permits Filed After June 28, 1984.
- Division 59-E-5. Exceptions, Waivers and Reductions.
- Division 59-E-6. Compliance Requirements for Certain Parking Facilities Constructed in Accordance with Building Permits Filed Prior to June 28, 1984.

Article 59–F. Signs.

- Division 59-F-1. Purpose, Intent, and Applicability.
- Division 59-F-2. Definitions.
- Division 59-F-3. Sign Area Measurement.
- Division 59-F-4. Permanent Sign - Design Elements and Limitations.
- Division 59-F-5. Limited Duration Signs.
- Division 59-F-6. Temporary Signs.
- Division 59-F-7. Prohibited Signs.
- Division 59-F-8. Exempt Signs.
- Division 59-F-9. Permits and Licenses.
- Division 59-F-10. Authority.
- Division 59-F-11. Nonconforming Signs.
- Division 59-F-13. Regulations For Signs in Urban Renewal Areas that are within an Arts and Entertainment Districts.

Article 59–G. Special Exceptions, Variances, and Nonconforming Uses.

- Division 59-G-1. Special Exceptions - Authority and Procedure.
- Division 59-G-2. Special Exceptions—Standards and Requirements.
- Division 59-G-3. Variances.
- Division 59-G-4. Nonconforming Uses, Buildings, and Structures.

Article 59–H. Amendment Procedures.

- Division 59-H-1. Map Amendments.
- Division 59-H-2. Map Amendments-Applications.
- Division 59-H-3. Map Amendments-Planning Board Recommendation.
- Division 59-H-4. Public Hearing.
- Division 59-H-5. Hearing Examiner.
- Division 59-H-6. Action by District Council, Local Map Amendments.
- Division 59-H-7. Action by District Council, Sectional and District Map Amendments.
- Division 59-H-8. Actions by District Council-Procedure.
- Division 59-H-9. Text Amendments.
- Division 59-H-10. Corrective Map Amendments.



PROPOSED ZONING CODE OUTLINE

Article 59 –A. General Provisions

- A.1. Short Title [NEW]
- A.2. Authority and Purpose
- A.3. Jurisdiction and Applicability
- A.4. Severability
- A.5. Effective Date [NEW]
- A.6. Minimum Requirements
- A.7. Conflicting Provisions
- A.8. Annexed Land
- A.9. Transitional Provisions

Article 59–B. Zoning Districts

- B.1. Zones Established
- B.2. Intent Statements [NEW]
- B.3. Groups of Districts [NEW]
- B.4. Zoning Map

Article 59–C. Use and Use Standards

- C.1. Use Interpretation
- C.2. Allowed Use Table
- C.3. Use Categories
- C.4. Use Standards and Requirements
- C.5. Accessory Use Standards
- C.6. Temporary Use Standards

Article 59–D. Zoning District Regulations

- D.1. Applicability [NEW]
- D.2. Measurements and Exceptions
- D.3. Building Types [NEW]
- D.4. Agricultural Districts
- D.5. Residential Districts
- D.6. Mixed Use Districts
- D.7. Mixed Campus Districts
- D.8. Industrial Districts
- D.9. Planned Development District
- D.10. Overlay Districts

Article 59–E. General Development Standards

- E.1. General Provisions and Applicability
- E.2. Streetscape Standards [NEW]
- E.3. Access Management [NEW]
- E.4. Parking and Loading
- E.5. Landscaping and Screening [NEW]
- E.6. Outdoor Site Lighting [NEW]
- E.7. Signs
- E.8. Outdoor Storage and Display [NEW]
- E.9. Resource Protection [NEW]

Article 59–F. Administration and Enforcement

- F.1. Review Bodies
- F.2. Common Review Procedures [NEW]
- F.3. Development Review
- F.4. Nonconformities
- F.5. Enforcement

Article 59–G. Definitions

- G.1. Word Usage
- G.2. Abbreviations [NEW]
- G.3. Defined Terms

4. ANNOTATED OUTLINE

How to Read This Chapter

The annotated outline in this chapter is crafted to help the reader understand where existing provisions are located, and the provisions that may be entirely new. An overview of the proposed code outline is included in the Table of Contents at the beginning of this document. Shown below are a few of the formatting conventions applied:

[Sec. 59-A-1.1. Reference to existing section of Chapter 59, Zoning] = Relevant section of existing Montgomery County Zoning Code

[NEW] = An entirely new section.

Quick–Start Guide

A zoning code is seldom read from start to finish, so the casual user needs an easy way to understand where they should start reading, depending on their specific questions. A User Guide to the document—a “quick start” insert often placed inside the front cover—helps the casual user understand where to start. And of course, a digital copy can allow the user to start anywhere within the document by providing a series of links to key starting points (use tables, procedures, etc.).

Article 59 –A. General Provisions

A.1. SHORT TITLE [NEW]

Codifies the official name of the Ordinance as “The Zoning Code for Montgomery County” which may be referred to as the “zoning code.”

A.2. AUTHORITY AND PURPOSE

A.2.1 Authority [NEW]

Establishes and cites to the state enabling legislation that grants the county the legal authority to adopt and apply zoning.

A.2.2 Purpose

[Sec. 59-A-1.1. Purpose of chapter]

Identifies the intent of the zoning code, establishes the rational basis for why the county is exercising its zoning power through these regulatory actions.

Modernization to include sustainability elements. Expand the purpose of the zoning code to include implementation of adopted master plans.

A.3. JURISDICTION AND APPLICABILITY

[Sec. 59-A-1.2 Non-applicability to certain municipalities]

In addition to identifying those municipalities exempt from the provisions of the zoning code, this section should expressly state where the zoning code applies. The zoning code applies to all land within Montgomery County except Brookeville, Poolesville, Laytonsville, Rockville, Barnesville, Gaithersburg, and Washington Grove.

A.4. SEVERABILITY [NEW]

Includes a statement of severability so that if individual provisions are struck down in court, the remainder of the zoning code survives.

A.5. EFFECTIVE DATE [NEW]

Establishes the effective date of this zoning code. This may relate to the transitional provisions discussed below.

A.6. MINIMUM REQUIREMENTS

[Sec. 59-A-2.2. General rules of interpretation]

Statement that the requirements of this zoning code are the minimum requirements for protecting and promoting the health, safety and welfare of the present and future inhabitants of the county.

A.7. CONFLICTING PROVISIONS

[Sec. 59-A-2.2. General rules of interpretation]

Statement describing how to interpret conflicting provisions of other laws such as private deed restrictions and federal and state laws.

A.8. ANNEXED LAND

[Sec. 59-A-1.8. Annexation of additional area to regional district, Sec. 59-A-1.9. July 1, 1997 annexation of additional area to Montgomery County]

Existing text. Delete provisions related to 1997 annexation of Takoma Park.

A.9. TRANSITIONAL PROVISIONS

[Division 59-B-5. Special Provisions for Conditions Predating 1958; Division 59-B-6. Special Provisions for the Area of the City of Takoma Park Annexed into Montgomery County on July 1, 1997]

A.9.1 Existing Approvals

Describes how existing approvals are affected by adoption of the zoning code. The provisions here will address the effect of the zoning code on pending applications. Typically, after a complete application has been filed, pending projects are allowed to proceed under the previous rules.

Consideration should also be given to deleting Attachment to 59-B (the original 1928 ordinance) and applying an alternative form of transitional provisions to affected lots (those recorded prior to 1928).

A.9.2 Sunset Provisions

Transitional provisions should also be used to clear old, abandoned or unused approvals from the system by providing a specific date to “sunset” all old approvals or applications for unused entitlements. All new procedures should include default sunset dates for each approval to avoid similar issues in the future.

A.9.3 Zone Conversion Table

An essential component of the transitional provisions will be the zone conversion table. This table will specify how the existing zones are treated when

the new zoning takes effect. Some zones may be carried over, others combined, and still others deleted (see table on the following page).

A.9.4. Text Amendments

[Division 59-H-9. Text Amendments]

The material located in the various portions of 59-H-9, Text Amendment should be consolidated with Council Resolution 16-33 (see Montgomery County Code, Appendix E. Zoning Amendment Procedure).

Article 59–B. Zoning Districts

One major step toward simplifying the existing regulations is to reduce the overall number and complexity of the zones and to better organize the zones into a rational set of groups.

Based upon the *Zoning Discovery*, the current regulations make use of more than 100 zones. These zones come in the form of single use, overlay, or special one-of-a-kind zones. The new zoning code should address consolidation and elimination through a multi-faceted approach. In some cases, existing zones may be consolidated into one new zone that accomplishes the purposes of the previous zones. Obsolete zones should be deleted in their entirety, while other zones may be carried over with minor updates made to the development standards or zone name.

The current zoning code organizes the zones into one of 15 general land use categories [One-Family, Multiple-Family ... Overlay Districts]. Once the new,

smaller palette of zones has been determined, the zones will be organized into one of five or six groups of districts.

B.1. ZONES ESTABLISHED

[Sec. 59-C-1.1. Zones established. (One-Family); Sec. 59-C-2.1. Zones established. (Multiple-Family); Sec. 59-C-4.1. Zones established. (Commercial); Sec. 59-C-5.1. Zones established. (Industrial); Sec. 59-C-6.1. Zones established. (CBD); Sec. 59-C-7.1. Zones established. (PUD); Sec. 59-C-8.1. Zones established. (Transit Station Development); Sec. 59-C-9.1. Zones established. (Agriculture); Sec. 59-C-10.1. Zones established. (RMX); Sec. 59-C-13.1. Zones established. (TOMX); Sec. 59-C-14.1. Zones established. (TMX)]

TDR CONVERSION



An example of district consolidation may come from eliminating the duplication of districts designated as TDR receiving zones. The existing TDR districts could be replaced with an appropriate overlay district outlining what specific options property owners within those base districts may have. For example, the RE-1 district and the RE-1/TDR would be combined as RE-1; however, a TDR overlay district would designate those areas of RE-1 that are eligible for receiving TDRs. This step alone would eliminate up to 17 duplicate districts. The new zoning code needs to include the method of calculating TDRs as well as a map that shows the sending and receiving areas.

Rather than establishing all the zones individually, this section succinctly establishes all zones, except overlays and certain PD zones, using an easy to read table. This table consolidates the county's 120 existing zones into 15 modified or new zones.

Symbol	Proposed Zone	Intended Purpose	Current Zone
AGRICULTURAL DISTRICTS			
AC	Agriculture Conservation	To protect and preserve land exclusively for large-scale agricultural and farming activity. Residential is allowed as an accessory use to the agricultural activity.	RDT
AR	Agricultural Residential	To preserve and accommodate small-scale farming and rural housing.	R, RC, LDRC
RESIDENTIAL DISTRICTS			
RE-2	Residential Estate -2	Estate housing with detached units on 2 or more acres.	RE-2, RE-2/TDR, RE-2C, RE-2C/TDR
RE-1	Residential Estate -1	Estate housing with detached units on 1 or more acres.	RE-1, RE-1/TDR
RLD-20	Residential Low Density -20	Low-density housing with detached units on minimum 20,000 square foot lots.	R-200, R-200/TDR, R-150, R-150/TDR, RNC, RNC/TDR, RMH-200
RMD-9	Residential Medium Density -9	Medium-density housing with detached units on minimum 9,000 square foot lots.	R-90, R-90/TDR
RMD-6	Residential Medium Density -6	Medium-density housing with detached units on minimum 6,000 square foot lots.	R-60, R-60/TDR, R-40, RMH
RHD-6	Residential High Density -6	High-density housing with a variety of unit types on minimum 6,000 square foot single-family detached lots (with smaller lots for other unit types).	RT-6, RT-8
RHD-4	Residential High Density -4	High-density housing with a variety of unit types on minimum 4,000 square foot single-family detached lots (with smaller lots for other unit types).	RT-10
RHD-2	Residential High Density -2	High-density housing with a variety of unit types on minimum 2,000 square foot single-family detached lots (with smaller lots for other unit types).	RT-12.5, RT-15, R-30, R-30/TDR, R-4plex

Symbol	Proposed Zone	Intended Purpose	Current Zone
MIXED USE DISTRICTS			
CR	Commercial/ Residential	To allow mix of residential and nonresidential uses at varying densities and heights; 0.25 - 8.0 FAR	CR, C-Inn, R-20, R-20/TDR, C-T, R-H, R-10, R-10/TDR, CBD-0.5, CBD-R1, CBD-R2, CBD-1, CBD-2, CBD-3, HM, TSR, TSM, TOMX-2, TOMX-2/TDR, TMX-2, C-1, C-2, C-3, C-4, C-5, C-6, MXTC, MXTC/TDR, MXPD
CR Components		Description	Range
	-C	Max nonresidential density	0.25 - 7.5 FAR
	-R	Max residential density	0.25 - 7.5 FAR
	-H	Max height	40 - 300 feet
MIXED CAMPUS DISTRICTS			
MC	Mixed Campus	To provide office and employment opportunities with supporting housing and commercial uses. Especially for medical/biotech/scientific research and industry.	O-M, C-O, I-3, R&D, LSC, CP
MC Components		Description	Range
	-C	Max nonresidential density	0.25 - 3 FAR
	-R	Max residential density	0.25 - 2.5 FAR
	-H	Max height	40 - 125 feet
INDUSTRIAL DISTRICTS			
IL	Industrial Light	To protect and preserve areas for light industry, artisan, warehousing and distribution.	I-1, I-4, RS
IH	Industrial Heavy	To protect and preserve areas for heavy industry and manufacturing.	I-2, MRR
PLANNED DEVELOPMENT			
PD	Planned Development	To allow a type of development integrating varied and compatible land uses with greater flexibility in site planning and building design.	PD, TS, PN, PRC, MXN, PCC, RMX-1, RMX-2, RMX-2C, RMX-3, RMX-3C, RMX-1/TDR, RMX-2/TDR, RMX-2C/TDR, RMX-3/TDR

B.2. INTENT STATEMENTS [NEW]

[Located throughout Article 59-C. Zoning Districts]

The current zoning code takes an intermittent approach to intent statements, including them for some zones but not for others. This section will include all of the zones established in the previous section and provide an intent statement for each zone. The purpose of the intent statement is to both justify the zone and provide guidance for how the zone might be applied on the zoning map in the future.

B.3. GROUPS OF ZONES [NEW]

This section is where the individual zones are organized into groups, or "districts". These groups may be used throughout the zoning code as a shorthand to signify certain similar characteristics (for example, "in all residential districts" or "abutting mixed use districts"). This shorthand prevents the need to cite long lists of individual zones, which often become out of date.

B.4. ZONING MAP

[Sec. 59-A-1.4. Adoption of maps.; Sec. 59-A-1.5. Location and boundaries of zones.; Sec. 59-A-1.6. Uncertainty as to boundaries of zones.; Sec. 59-A-1.7. Zoning and development within rights-of-way; 59-A-4.52. Zoning map to indicate decision]

Incorporates the zoning map into the document and provides the general rules of interpretation and use for the zoning map. In light of the recent activity in developing a GIS version of the official zoning map, language about

how the new digital map will be used is needed. This section also includes the existing language on zoning and development within rights-of-way and interpretation of zone boundaries.

Article 59–C. Use and Use Standards

Consolidates the use provisions applicable in all zones into a single consolidated use table, series of use categories (to allow reduction in the number of rows required in the table), and the specific use standards that apply. This article also provides standards for accessory and temporary uses.

C.1. USE INTERPRETATION

Establishes rules and authority for interpretation of unlisted uses.

C.2. ALLOWED USE TABLE

[Sec. 59-A-2.2. General rules of interpretation; Sec. 59-A-5.7. Uses constituting public nuisances; Sec. 59-C-1.31. Land uses (Residential Zones, One Family), Sec. 59-C-1.71. Land uses (R-T zones, townhouse, residential), Sec. 59-C-2.3. Land uses (Residential Zones, Multiple-Family), Sec. 59-C-3.2. Land uses (R-MH Zone – Mobile Home Development), Sec. 59-C-4.2. Land uses (Commercial Zone), Sec. 59-C-5.21. Allowable uses (Industrial Zones), Sec. 59-C-6.22. Land uses (Central Business District Zones), Sec. 59-C-7.13. Uses permitted (Planned Unit Development Zones), Sec. 59-C-8.3. Land uses (Transit Station Development Area Zones), Sec. 59-C-9.3. Land uses (Agricultural Zones), Sec. 59-C-10.3.2. Land uses (RMX Zones) Sec. 59-C-11.4. Permitted uses (Mixed use town center zone), Sec. 59-C-12.3. Land uses (Mineral resource recovery zone),

Sec. 59-C-13.22. Land uses (Transit oriented mixed use zone), Sec. 59-C-14.23. Land uses (Transit mixed use zone)}

In the existing zoning code, there are numerous tables of uses. Most of the groups of districts have their own separate allowed use tables. For example, commercial and industrial sections each have their own tables. From these tables, a landowner may be able to ascertain permitted uses for a property; however, it would be difficult to use the existing series of tables to determine all the zones that would allow a given use. Multiple tables may also lead to inconsistencies in terminology, as one table may be amended and others missed.

One consolidated table that contains all the zones and uses should replace the existing set. The single table will greatly simplify the presentation of information, making content more transparent for all users of the zoning code.

Many communities use an additional designation to describe uses that are subject to additional use standards. A term like "conditional use" is often used, designated with a "C" on the table in addition to permitted uses "P" and special exceptions "SE." Uses should be either permitted by right, as a conditional use subject to additional use standards or as a special exception requiring approval by the Board of Appeals.

C.3. USE CATEGORIES

[Sec. 59-C-1.31. Land uses (Residential Zones, One Family), Sec. 59-C-1.71. Land uses (R-T zones, townhouse, residential), Sec. 59-C-2.3. Land uses (Residen-

tial Zones, Multiple-Family), Sec. 59-C-3.2. Land uses. (R-MH Zone -- Mobile Home Development), Sec. 59-C-4.2. Land uses (Commercial Zone), Sec. 59-C-5.21. Allowable uses (Industrial Zones), Sec. 59-C-6.22. Land uses (Central Business District Zones), Sec. 59-C-7.13. Uses permitted (Planned Unit Development Zones), Sec. 59-C-8.3. Land uses (Transit Station Development Area Zones), Sec. 59-C-9.3. Land uses (Agricultural Zones), Sec. 59-C-10.3.2. Land uses (RMX Zones) Sec. 59-C-11.4. Permitted uses (Mixed use town center zone), Sec. 59-C-12.3. Land uses (Mineral resource recovery zone), Sec. 59-C-13.22. Land uses (Transit oriented mixed use zone), Sec. 59-C-14.23. Land uses (Transit mixed use zone)]

To the maximum extent possible, the new use table should rely on broader categories of uses. Current uses would be collapsed into more general use categories. Specific uses would be given individual rows only when that use is allowed in more or less zones than the broader use category. For example, if an equestrian facility is not allowed in a specific zone, but other agricultural uses are allowed, the equestrian facility would be given its own row as the exception to the broader, agricultural category. Appropriate categories should be created and applied to all uses to collapse the table.

As noted in the *Zoning Discovery*, there are over 400 residential, commercial, industrial and institutional uses listed in the current use tables. Uses are listed individually, and many have long descriptive elements to distinguish them from other uses. While some uses are clearly different, they would have a similar impact on a given neighborhood. For example, florists, bookstores, and gift shops could all be replaced with a more general "retail sales and ser-

vice" category. Also noted in the *Zoning Discovery*, some uses are outdated and no longer in use. These should be deleted. Examples include millinery shop and variety and dry goods store. There are also some contemporary uses missing such as doggie day care and bio-fuel stations.

C.4. USE STANDARDS AND REQUIREMENTS

[Sec. 59-A-6.8. Opportunity housing projects; Sec. 59-A-6.15. Personal living quarters (PLQ); Sec. 59-A-6.16 Adult entertainment businesses; Division 59-G-2. Special Exceptions—Standards and Requirements]

Incorporates all specific conditional and special exception use standards that are cross-referenced from the allowed use table.

The current zoning code includes a list of 98 special exceptions, all with additional use standards. In order to gain approval for any of these uses, the landowner must go through a public hearing process and demonstrate that they meet all of the use standards. As part of creating a consolidated use table, streamlining the special exception use standards should occur. Many of these special exception use standards should be replaced by improved general development standards. Planning staff are currently performing an analysis to determine whether specific special exceptions could be allowed as conditional uses or even permitted by right in certain instances. The results of that analysis should be included in the new zoning code.

C.5. ACCESSORY USE STANDARDS

[References occur throughout; see also Sec. 59-A-2.1. Definitions (Accessory Structures, Uses); Sec. 59-A-6.4. Fallout or emergency shelter; Sec. 59-A-6.9. Cable communications system; Sec. 59-A-6.10. Registered living unit -- Standards and requirements; Sec. 59-A-6.12. Private telecommunications facility attached to a publicly owned structure or located on publicly owned land; Sec. 59-A-6.14. Antenna for a private telecommunication facility mounted on a rooftop or structure located on privately owned land; Sec. 59-A-6.17 Security pavilion; Sec. 59-A-3.4. Registration of a home occupation or home health practitioner's office; Sec. 59-A-3.5. Termination of Home Occupation; Sec. 59-A-6.1. A no-impact home occupation, registered home occupation, or home health practitioner's office]

Currently, accessory structure and use regulations are embedded in each district section. A consolidated section for accessory uses and structures that covers the basics of their regulation should be added. While accessory structure dimensional standards should be included in the dimensional standard tables in the district regulations article, the uses should be described here.

Only a limited number of zones allow accessory dwelling units, which are typically allowed only by special exception. The *Zoning Discovery* proposes increasing the number of zones that allow accessory dwelling units. Wherever possible, accessory dwelling units should be allowed by right. Where there is little tolerance for such units by right, the special exception process should be used.

When regulating accessory uses, new technologies should also be considered, such as wind energy facilities, electric car charging stations, and other possible implications of new green technologies.

Home occupation regulations need to be simplified. The current zoning code establishes three tiers of regulation for home occupations based on neighborhood impact determined by the number of client visits: No-impact home occupations do not require county approvals; Registered home occupations must be registered with the county; and Major home occupations require special exception approval by the Board of Appeals.

All home occupation provisions should be consolidated in this section of the new zoning code. Currently, home occupation information is located in one part of the zoning code and criteria for establishing a no-impact home occupation or a registered home occupation is located in another.

The home occupation provisions should be modified to address real community impacts and be enforceable. Several requirements for no impact, registered, and major home occupations are difficult to enforce. For example, the number of visits is difficult to gauge, especially when some visits are unrelated to the home occupation. This becomes more of an issue since visits per week is the defining gauge between No-impact and Registered home occupations.

Portland, Oregon defines two categories of home occupations. Type A home occupations have no visible elements or external impacts. Examples

include an architect or realtor working out of their home. No customers or employees come to the house. Type B home occupations may be visited by customers, may have modest external impacts such as periodic deliveries, may include a small sign, and may even include one or two employees. This slightly more intense version might include a hairdresser or a cabinet-making shop.

This approach proposes reducing home occupations to two tiers of regulation: permitted with conditions (Type A) and special exceptions (Type B). Maintenance of a visitation log and the requirement that a person must reside in the home at least 220 days per year should be eliminated. Instead, require proof of residency when requested by the county.

C.6. TEMPORARY USE STANDARDS

[Sec. 59-A-6.3. Home show; Sec. 59-A-6.5 Benefit performance; Sec. 59-A-6.6. Landing of rotorcraft; Sec. 59-A-6.7. Temporary helistop; Sec. 59-A-6.11. Temporary construction administration or sales office, Sec. 59-A-6.13. Transitory use.]

Currently, temporary and transitory uses have regulations in two adjoining sections. The only temporary uses listed in the initial section are temporary construction administration or sales offices. Transitory uses are only allowed on a property if it would be allowed as a permanent use. In reality, there are numerous temporary uses occurring at any given time throughout the county. These uses include garage or yard sales, placement of storage PODS, construction dumpsters, tent sales, commercial circuses, and outdoor vehicle sales. Currently, regulations for these uses are scant. A review of the

impacts of temporary uses on surrounding properties and appropriate performance standards and permit procedures should be crafted.

Article 59–D. Zoning District Regulations

Currently, the county applies dimensional standards such as setbacks and lot size through a system of tables and footnotes contained in one of 15 land use groups. In some instances, dimensional standards change depending on the method of development (standard, cluster, optional). Required setbacks are measured from a number of different locations (edges of zones, street right-of-way) depending on the zone and the standards used to arrive at the various buildable envelopes differ from zone to zone. In some cases the building envelope appears not to be prescriptive at all and is determined at site plan. These regulations will be simplified and consolidated, relevant regulations found in the footnotes incorporated into the body of the zoning code, and a consistent methodology for determining the building envelope established.

D.1. APPLICABILITY [NEW]

Specifies how the standards in this article apply to various types of development. For example, the provisions of the article will apply in their entirety to new construction, but may apply only in part to minor alterations or expansions of prior development.

D.2. MEASUREMENTS AND EXCEPTIONS

[Division 59-A-5. Compliance Required; Sec. 59-B-1.1. Belfries, chimneys, etc.; Sec. 59-B-2.1. Walls or fences; Sec. 59-B-3.1. Steps, terraces, and porches; Sec. 59-

B-3.2. Bay windows; Sec. 59-B-3.3. Cornices, eaves, outside stairways, chimneys, air conditioners and heat pumps; Sec. 59-B-3.4. Shelter entrance; Sec. 59-B-4.1. Generally; Division 59-B-7. Exemptions for Accessibility]

Understanding precisely how a dimensional standard is measured is just as important as knowing the actual standard. As such, it is important to know how standards such as floor area ratio, structure height, transparency, setbacks and lot width are measured. Each of these explanations will be explained with text and reinforced visually with detailed graphics. This section should also set out permitted encroachments such as those generally found in the existing Article 59-B. Exemption From Controls.

Maximum height is set out in the current zoning code in terms of both stories and feet, which causes inconsistencies and conflicts. There are different ways to calculate height based on measuring to the highest roof surface or to the mean height level between the eaves and ridge. There are unique standards and a definition of height for residential building in the R-60 and R-90 zones. A single approach to height is encouraged.

Ways to measure height should be included in the zoning code, not in external documents. One example is the allowance for additional stories on a sloping lot, which is regulated by an executive regulation. All similar provisions should be brought into the zoning code document, rather than externally referenced.

D.3. BUILDING TYPES [NEW]

Conventional zoning does a poor job of regulating the various types of buildings that may be built in a given zone, especially in the case of mixed use. The location, bulk and mass of all types of buildings in a given zone are often set using the same building envelope (a combination of floor area ratio, lot coverage, height, and setbacks). By adding location, bulk, and mass standards, various building types permitted within the same zone can be fine tuned and regulated separately. These standards are often described in general as “form” standards.

For example, under a typical zoning system a mixed use zone intended to create an urban neighborhood may permit both retail and residential uses adjacent to one another, but may not permit them as separate forms or patterns. The danger is that a townhouse and a shopfront building would use the same development standards. We might prefer to have a small yard in front of the townhouse, and a raised ground floor to enhance privacy. On the other hand, we may want more glass on the ground floor of a shopfront and require it be built adjacent to the sidewalk to ensure an active pedestrian environment.

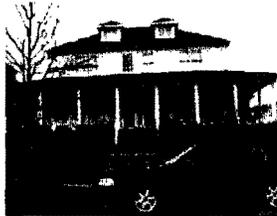
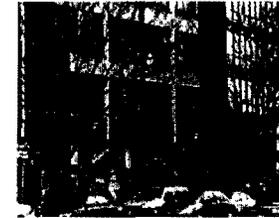
When building types are linked to zones, the predictability of the system is increased. A zone intended to create walkable, mixed use urban neighborhoods would be limited to building forms that complement this character. Ground floor retail uses would be located in shopfront buildings, and standards would be developed that define the specific parameters of a shopfront

building [large storefront windows, tall first floor]. Similarly, residential uses would be permitted only in more urban forms such as townhouses or apartments or in upper stories above retail. Specific development standards for each building type ensure that the variety of building forms work well together to create the mixed use area desired.

The new zoning code should contain a palette of building types each linked to specific zones. Each type would be managed through a detailed regulating graphic that provides standards for key form components of each specific building.

One important note—building types are not intended to define an architectural “theme” such as Mediterranean, or Shaker Victorian. Architecture is left to the builder, but key form components are controlled so that mixing building types is seamless. An example of building types and the intent of each can be seen on the following page.

SAMPLE PALETTE OF BUILDING TYPES

**Single-Family House**

A building type containing one principal dwelling unit typically located on a single lot with private yards on all four sides.

Attached House

A building type containing two principal dwelling units on a single lot with private yards on all four sides. Each unit has its own external entrance. Units can be located on separate floors, side by side, or back-to-back. Often call a duplex or two family house.

Townhouse

A building type with three or more attached dwelling units consolidated into a single structure. Each unit shares a common side wall or a common floor or ceiling. Units may be stacked vertically, however, no more than one unit is permitted above another unit. Each ground floor unit has its own external street facing entrance.

Apartment

A building type containing three or more dwelling units consolidated into a single structure. An apartment contains internal common walls. Dwelling units within a building may be situated either wholly or partially over or under other dwelling units. The building often shares a common entrance. Primary entrances are prominent and street facing.

Mixed Use

A building type intended for ground floor commercial uses with upper-story residential or offices uses. Windows are provided on the ground floor to encourage interaction between the pedestrian and the ground story space. Primary entrances are prominent and street facing and are spaced at regular intervals along the street edge.

Shopfront

A building type intended primarily for ground floor retail and upper-story residential or offices uses. Large storefront windows are provided to encourage interaction between the pedestrian and the ground story space. Each ground floor unit has a street facing entrance spaced at regular intervals along the street edge. This building type should be linked to priority retail streets as specified in any applicable master plan.

D.4. AGRICULTURAL DISTRICTS

[Division 59-C-9. Agricultural Zones.]

According to the *Zoning Discovery*, almost half of the county is currently zoned as one of six agricultural zones. The approach being taken to the agricultural areas reduces the overall number of agricultural zones from six to two. Similar zones—Rural (R), Rural Cluster (RC) and Low Density Rural Cluster (LDRC)—will be combined into one new zone with the same dimensional standards, but allowing clustering in exchange for significant open space preservation.

D.4.1. Zones

The Rural Density Transfer (RDT) Zone will be carried over with only minor revisions made. The Rural Neighborhood Cluster (RNC) Zone will be combined with R-200. The Rural Service (RS) Zone will be combined with an existing light industrial zone. There is some concern that allowing a light industrial zone in rural areas will promote uses that may not be supportive of the local agricultural industry. A more specific approach would establish a zone specifically tailored to the agricultural industry, only allowing certain more intense uses such as food or animal processing and not allowing such uses as a dry cleaning and laundry plant that may not necessarily support the local agricultural industry. Another approach is to allow more intense agriculture activity in all agriculture zones as a conditional use or special exception subject to performance standards that limit their impact on adjacent residential uses.

Symbol	Proposed Zone	Intended Purpose	Current Zone
AGRICULTURAL DISTRICTS			
AC	Agriculture Conservation	To protect and preserve land exclusively for large-scale agricultural and farming activity. Residential is allowed as an accessory use to the agricultural activity.	RDT
AR	Agricultural Residential	To preserve and accommodate small-scale farming and rural housing.	R, RC, LDRC

D.4.2. Agricultural Building Types

The rural character of the agricultural zones calls for a palette of building types that are not urban. In a standard residential development (non-clustered), building types may be limited to a one-unit house. If the project is clustered, then additional building types such as attached housing products may be allowed.

D.4.3. Agricultural Dimensional Standards

Establishes the dimensional standards for each permitted building type. Generally, the dimensional standards for the agricultural zones will remain the same following conversion. Minimum lot sizes and permitted densities will remain the same.

D.4.4. Agricultural Compatibility

A concern that was repeatedly raised was the need to keep agricultural areas rural in nature. This section would assist by providing simple context standards. For example, this section may require that new fences be of a certain

type that are rural in nature, or may place limitations on the amount of lawn turf permitted on any given lot.

D.4.5. Agricultural Development Patterns

Specifies the standards for the pre-approved building forms and development patterns that would offer incentives in exchange for increased public benefits. Options would allow for conservation developments and limited commercial activity, supporting agriculture and residential needs.

D.5. RESIDENTIAL DISTRICTS

[Division 59-C-1. Residential Zones, One-Family.; Division 59-C-2. Residential Zones, Multiple-Family.; Division 59-C-3. R-MH Zone-Mobile Home Development.]

D.5.1. Zones

Outside of the agricultural areas, almost all of the other half of the county is mapped under one of 30 residential zones. The new zoning code presents an opportunity to consolidate several of the current residential zones and delete the RM-H Zone but fundamentally, the county's current one-unit residential zones will not change much. By combining zones with similar standards, deleting obsolete zones, and converting all TDR designated zones back into their base zone and applying a TDR overlay, the new zoning code could reduce the number of residential zones from 30 to eight. The intensities and uses associated with the R-H Zone will be accommodated in a mixed use zone.

Symbol	Proposed Zone	Intended Purpose	Current Zone
RESIDENTIAL DISTRICTS			
RE-2	Residential Estate -2	Estate housing with detached units on 2 or more acres.	RE-2, RE-2/TDR, RE-2C, RE-2C/TDR
RE-1	Residential Estate -1	Estate housing with detached units on 1 or more acres.	RE-1, RE-1/TDR
RLD-20	Residential Low Density -20	Low-density housing with detached units on minimum 20,000 square foot lots.	R-200, R-200/TDR, R-150, R-150/TDR, RNC, RNC/TDR, RMH-200
RMD-9	Residential Medium Density -9	Medium-density housing with detached units on minimum 9,000 square foot lots.	R-90, R-90/TDR
RMD-6	Residential Medium Density -6	Medium-density housing with detached units on minimum 6,000 square foot lots.	R-60, R-60/TDR, R-40, RMH
RHD-6	Residential High Density -6	High-density housing with a variety of unit types on minimum 6,000 square foot single-family detached lots (with smaller lots for other unit types).	RT-6, RT-8
RHD-4	Residential High Density -4	High-density housing with a variety of unit types on minimum 4,000 square foot single-family detached lots (with smaller lots for other unit types).	RT-10
RHD-2	Residential High Density -2	High-density housing with a variety of unit types on minimum 2,000 square foot single-family detached lots (with smaller lots for other unit types).	RT-12.5, RT-15, R-30, R-30/TDR, R-4plex

D.5.2. Residential Building Types

Establishes the building types that are permitted in each zone. A mix of residential building types will be provided for each zone based on the zone's intended purpose and level of intensity. For instance, the RE-2 Zone may only permit one-unit houses, while the RHD-4 Zone might permit a wider variety of housing types such as duplexes and townhouses.

D.5.3. Residential Dimensional Standards

Establishes the dimensional standards for each permitted building type. The low to medium density residential zones will, for the most part, remain the same. The standards will be reviewed and, where possible, simplified and conveyed in a clear and concise manner.

Due to the consolidation of many of the higher density residential zones, the dimensional standards will require updating to accommodate a form of development that is both compact and complements the established or desired character of an area.

D.5.4. Residential Compatibility

Addresses two primary areas of residential compatibility: 1) garage and carport placement and 2) contextual infill development.

The garage and carport placement component establishes how garages and carports must be treated when associated with certain housing types. The primary goal is to prevent the garagescape effect by ensuring that the garage doors and carport openings are located in either a carriage court style or

located behind the front façade of the house. These standards apply to all building types that typically accommodate garages or carports and would be accompanied by graphic representations of site layout.



GARAGE PLACEMENT PLAYS AN IMPORTANT ROLE IN ESTABLISHING THE WALKABILITY OF A STREET. THE TOP IMAGE (EPA SMART GROWTH) IS OVER DOMINATED BY STREET-FACING GARAGES. THE BOTTOM IMAGE (GLENWOOD PARK IN ATLANTA) HAS ALLEY- OR REAR-LOADED GARAGES.

Many communities are developing standards to ensure a basic level of compatibility between single-lot infill projects and the established character of established single-family neighborhoods. These standards often ensure compatibility of certain features such as front, side and rear setbacks, massing, bulk, height, impervious surface, and garage placement. In areas where the regulated setback area differs from the established setback for the area, context standards can require a house to be built within the range of existing setbacks, taking into account the setback of adjacent houses.

Another method for controlling the size and bulk of a house is by regulating FAR (floor area ratio) in combination with height, setback and building coverage requirements. FAR is common in the county's commercial zones. It is not generally used in residential areas. Garrett Park has an overlay zone that limits residential FAR and the Town of Chevy Chase is considering a residential FAR limit. Planning staff are currently exploring the applicability of a floor area limit in all the residential zones.

D.5.5. Residential Development Patterns

Specifies the standards for the pre-approved building forms and development patterns that would offer incentives in exchange for increased public benefits. Options would allow for such things as conservation developments, cottage housing and neighborhood commercial centers.

The current zoning code allows for several methods of residential development: 1) Standard; 2) Density Control (lot averaging was deleted as an option in 1986); 3) Cluster (smaller lots in exchange for common open space);

4) Moderately Priced Dwelling Units (density in exchange for affordable housing) and 5) TDR (density in exchange for the purchase of TDRs). The new zoning code will seek to incorporate these options into the palette of pre-approved building forms and development patterns. The density associated with the Moderately Priced Dwelling Unit method will mirror the current approach. While the presentation of the standards may be updated, no substantive changes are being considered to the Moderately Priced Dwelling Unit requirements.

D.6. MIXED USE DISTRICTS

D.6.1. Zones

The *Zoning Discovery* provided a great amount of research and analysis on the county's 30+ existing commercial and mixed use zones. The report served as the foundation for the creation, development, and refinement of the new CR zones, that could easily replace all existing commercial and mixed use zones. Because the CR zones were drafted as a self-contained piece of legislation developed within the context of the existing zoning code, there were numerous limitations on format, organization and content. The general framework of the CR zones, however, remains a guiding principle for any proposed changes to the existing commercial and mixed-use zones. Specifically, the range of intensities, heights, standards and incentives should remain. The basic features of the zone should be refined and simplified to reflect the new format and incorporate new ideas that are supported by the context of the new zoning code. Mixed use zones are less about regulating

use—they are by their nature more permissive kinds of zones. The introduction of conditional use standards and requirements will allow for some fine-tuning based on adjacent land uses without undue hardship to property owners.

Several standardized building typologies have been modeled. These typologies could provide a predictable building envelope and take advantage of an expedited review process. Further, the line between standard and optional method development may be altered to allow by-right development to the full densities allowed by the zone, provided that certain requirements are met. This procedure and the specific requirements should be modeled during the discussion of the next phase to determine how this may work.

Symbol	Proposed Zone	Intended Purpose	Current Zone
MIXED USE DISTRICTS			
CR	Commercial/ Residential	To allow mix of residential and nonresidential uses at varying densities and heights; 0.25 - 8.0 FAR	CR, C-Inn, R-20, R-20/TDR, C-T, R-H, R-10, R-10/TDR, CBD-0.5, CBD-R1, CBD-R2, CBD-1, CBD-2, CBD-3, HM, TSR, TSM, TOMX-2, TOMX-2/TDR, TMX-2, C-1, C-2, C-3, C-4, C-5, C-6, MXTC, MXTC/TDR, MXPD
CR Components		Description	Range
	-C	Max nonresidential density	0.25 - 7.5 FAR
	-R	Max residential density	0.25 - 7.5 FAR
	-H	Max height	40 - 300 feet

D.6.2. Mixed Use Building Types

The CR zones will be enhanced by the introduction of building types. By linking certain building types to CR zone intensity and proximity to other zones, the county will have more precise control of the form that each CR-zoned area may take. Because the current CR-zoned areas are in established urban centers, these building types would have less impact. But if the CR zones are applied in limited situations to suburban and rural commercial centers, building types should be carefully selected so they do not negatively impact the visual character of the area. The full range of proposed building types might include townhouses, apartments, mixed use buildings, and shop-fronts.

D.6.3. Mixed Use Dimensional Standards

All development in mixed use zones should also have to meet basic visual requirements related to siting and massing of buildings, open space, and parking. These factors are embedded in the current version of CR and should remain during the evolution of the zone.

Modifying the existing CR zone approach slightly to allow for increased floor area under the standard method in exchange for enhanced general development standards modeled after some of the currently proposed public benefit options will improve the quality of all development in a CR zone. This approach would shift the balance of the system so that a quality, contributing development could be approved under both the standard and optional method. The overall quality of development will be improved by providing

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greater by-right development in exchange for required benefits such as a mix and size of units, tree canopy, and connectivity. The designation of priority retail streets should also remain as it is an important implement to enhancing the pedestrian experience of a CR zone.

D.6.4. Mixed Use Compatibility

Addresses how a development in any given context can progressively increase in size and intensity above base parameters and remain compatible with adjacent development.

D.6.5. Mixed Use Development Patterns

Specifies the standards for pre-approved templates for building design and layout that would offer incentives in exchange for increased public benefit.

D.7. MIXED CAMPUS DISTRICTS

D.7.1. Zones

As a companion to the CR zones, a more flexible approach to accommodating large-scale employment, educational, research and medical facilities that does not readily assimilate into a typical mixed use zone due to the campus like setting is needed. Large-scale office, educational, research and medical areas value integrated commercial and residential opportunities as options for visitors and workers. In addition, restaurants and retail services can help support daily workers and evening residents. The mixed campus zones are intended to accommodate mixed use areas where office, light industrial, and light manufacturing are the dominant uses in a campus-like setting. Com-

mercial uses would be allowed; however, such uses would be primarily for the convenience of employees or residents of the area. There is also the possibility that the CR zones are flexible enough to accommodate the uses and development patterns prescribed for in the mixed campus zones.

Symbol	Proposed Zone	Intended Purpose	Current Zone
MIXED CAMPUS DISTRICTS			
MC	Mixed Campus	To provide office and employment opportunities with supporting housing and commercial uses. Especially for medical/biotech/scientific research and industry.	O-M, C-O, I-3, R&D, LSC, CP
MC Components		Description	Range
	-C	Max nonresidential density	0.25 - 3 FAR
	-R	Max residential density	0.25 - 2.5 FAR
	-H	Max height	40 - 125 feet

D.7.2. Mixed Campus Building Types

Establishes the building types that are permitted in each zone.

D.7.3. Mixed Campus Dimensional Standards

Dimensional standards would encourage originality and flexibility in design to ensure that the development is properly related to its site and to the surrounding context. The character of the development would be more campus- or park-like, and the emphasis would be on low-to mid-rise buildings that blend into the natural environment. The mixed campus zones will follow the same general philosophy as the CR zones in the sense that they will allow



multiple development methods (both standard and optional) and promote mixing of uses through various combinations of allocated residential/non-residential floor area.

D.7.4. Mixed Campus Compatibility

Addresses how a development in any given context can progressively increase in size and intensity above base parameters and remain compatible with adjacent development.

D.7.5. Mixed Campus Development Patterns

Specifies the standards for the pre-approved building forms and development patterns that would offer incentives in exchange for increased public benefits. Options would allow for such things as cottage housing and commercial centers.

D.8. INDUSTRIAL DISTRICTS

D.8.1. Zones

There will still be a need for a conventional industrial zones that can accommodate such uses as landfills, dismantling and recycling operations, scrap metal processing, warehousing and distribution, incineration, contractors storage and heavy manufacturing, and other uses likely to be incompatible with residential, commercial and mixed use areas.

Symbol	Proposed Zone	Intended Purpose	Current Zone
INDUSTRIAL DISTRICTS			
IL	Industrial Light	To protect and preserve areas for light industry, artisan, warehousing and distribution.	I-1, I-4, RS
IH	Industrial Heavy	To protect and preserve areas for heavy industry and manufacturing.	I-2, MRR

D.8.2. Industrial Building Types

Establishes the building types that are permitted in each zone.

D.8.3. Industrial Dimensional Standards

Establishes the dimensional standards for each building type in each zone.

D.8.4. Industrial Compatibility

Addresses how industrial uses remain compatible with adjacent residential, commercial and mixed use development.

D.8.5. Industrial Development Patterns

Specifies the standards for the pre-approved building forms and development patterns that would offer incentives in exchange for increased public benefits.

D.9. PLANNED DEVELOPMENT

Even with a new zoning code, the Planned Development (PD) Zone will remain relevant. The problem with the current system is that the county has

created an unwieldy number of different planned development types that vary depending on the level of intensity and intended purpose. It is anticipated that with the initiation of the CR zones, the reliance on planned development will be reduced. But planned developments should not be eliminated. They do serve a purpose as a mechanism to permit innovative designs that, if planned and executed appropriately, can be successful additions to the community.

Rather than completely eliminating the planned development, it should be re-envisioned from its current use-specific approach to a more general set of standards that effectively address residential, mixed use, and nonresidential projects. A single rezoning process will be developed that is based on a threshold level of LEED-ND points and compatibility standards.

Symbol	Proposed Zone	Intended Purpose	Current Zone
PLANNED DEVELOPMENT			
PD	Planned Development	To allow a type of development integrating varied and compatible land uses with greater flexibility in site planning and building design.	PD, TS, PN, PRC, MXN, PCC, RMX-1, RMX-2, RMX-2C, RMX-3, RMX-3C, RMX-1/TDR, RMX-2/TDR, RMX-2C/TDR, RMX-3/TDR

D.10 OVERLAY DISTRICTS

[Sec. 59-C-1.39. Special regulations for optional method development using transferable development rights; Division 59-C-18. Overlay Zones]

Current Overlay Districts
US 29/Cherry Hill Rd Employment Area
Burtonsville Employment Area
Neighborhood Retail
Arlington Rd District of Bethesda CBD
Chevy Chase Comparison Retail
Retail Preservation for Wheaton CBD
Chevy Chase Neighborhood Retail Preservation
Takoma Park/East Silver Spring Commercial Revitalization
Fenton Village
Ripley / South Silver Springs
Town of Garrett Park
Sandy Spring/Ashton Rural Village
Rural Village Center
Upper Paint Branch Special Protection Area
Upper Rock Creek Special Protection Area

The zoning code contains provisions for 15 different overlay zones divided into four categories; 1) Employment-Oriented; 2) Design-Oriented; 3) Suburban Character Preservation; and 4) Environment-Oriented. The overlay zones provide additional regulatory controls to promote a desired outcome or protect the environment or character of an area.

The *Zoning Discovery* makes two key observations about these overlay zones. First, that the various overlay zones are each structured around a different framework with varying approaches to regulations. Their navigation and ultimate usability could be improved by structuring the overlay zones around a common model or outline. Second, if the base zones contained the right controls there might not be a need for as many overlay zones. The new zoning code will seek to eliminate as many of the current overlay zones as possible by improving the rules of the base zones.

D.10.1. TDR Overlay Districts [NEW]

The current base zones designated as “/TDR” will be consolidated with their respective non-TDR designated zones. A new TDR overlay zone will be created that will serve the purpose of designating TDR sending and receiving areas. This step alone would eliminate up to 17 duplicate zones. The new zoning code needs to include a method of calculating TDRs under various scenarios as well as a map that shows the receiving areas throughout the county.

In addition to TDR standardization, a comprehensive application of building lot termination easements should be developed.

D.10.2. Upper Paint Branch Overlay District

[Sec. 59-C-18.15. Environmental Overlay Zone for the Upper Paint Branch Special Protection Area.]

The purpose of this overlay zone is to protect an environmentally sensitive area by regulating the amount of impervious surface and by limiting the allowed uses. The existing regulations will be reviewed to ensure compatibility with the new zoning code.

D.10.3. Upper Rock Creek Overlay District

[Sec. 59-C-18.24. Environmental overlay zone for the Upper Rock Creek Special Protection Area.]

As with the Upper Paint Branch Special Protection Overlay District, the Upper Rock Creek Protection Overlay District is designed to protect an environmentally sensitive area by regulating the amount of impervious surface and by limiting the allowed uses. The existing regulations will be reviewed to ensure compatibility with the new zoning code.

Another option is to develop generalized environmental overlays that could be applied in a number of settings and used to replace the Upper Paint Branch and Upper Rock Creek overlay zones.

For example, the Environmental Protection Overlay District would reduce impacts of development to a lesser degree while the Environmentally Sensitive Overlay District would reduce impacts of development to a greater degree.

Article 59–E. General Development Standards

The general development standards apply to the majority of zones and serve as a companion to the zone-based dimensional standards. The quality of the general development standards typically defines the quality of the overall project. Elements such as landscaping, lighting, and parking set the stage for the public's impression of site quality.

E.1. GENERAL PROVISIONS AND APPLICABILITY

[Sec. 59-C-5.41. Special regulations-I-1 zone, Sec. 59-A-3.4.]

In the existing zoning code, development standards are attached to use, and appear in sections labeled both “development standards” and “special regulations.” Users of the zoning code must find and read the appropriate section to determine the development standards to be followed and when compliance is triggered. As described in Zoning Discovery, the linking of development standards to use has resulted in both redundancy and inconsistent application of standards. In other cases, there are subtle and unnecessary differences among standards.

The new zoning code should contain a matrix that clearly shows whether physical improvement or a change in use would trigger compliance.

E.2. STREETScape STANDARDS

[Chapter 49. Streets and Roads]

The area between the façade of the buildings and curb is often referred to as the streetscape. It sets the stage for our experiences as we walk, bike, or drive down a street. One way to think about it is to imagine that the streetscape comprises the walls, floor, and furniture of our neighborhood living room. A wide variety of streetscape elements constitute and enliven the street.

To the extent possible, the new zoning code should include standards that regulate certain elements of the streetscape such as sidewalk width and street tree planting. Since some of these elements may be located on private property outside of the public right-of-way, these controls are within the purview of zoning.

E.2.1. Intent

E.2.2. Applicability

E.2.3. Design Standards

E.2.4. Nonconforming Streetscapes

E.3. ACCESS MANAGEMENT [NEW]

Currently, there are no standards for access management in the zoning code. Basic access standards should be part of the zoning code. Specifically, the goal is to encourage cross-access and reduce the need for multiple curb-cuts. Without regulation, an unsafe and inefficient situation may arise. New access management standards will effectively deter these types of situations.

E.3.1. Intent

E.3.2. Applicability

E.3.3. Shared Access

E.3.4. Use of Residentially-Zoned Property for Access

E.3.5. Access to Thoroughfares

E.3.6. Emergency Vehicle Access

E.3.7. Visibility at Intersections

E.4. PARKING AND LOADING

[Sec. 59-A-5.5. Off-street parking; Sec. 59-A-6.22. Parking in conjunction with historic districts; Sec. 59-C-4.307. Parking (Commercial Zone); Article 59-E. Off-Street Parking and Loading]

As discussed in the *Zoning Discovery*, existing parking and loading requirements are written with suburban development in mind. In general, the standards are excessive and there is little flexibility for alternative parking

strategies that could potentially reduce the total number of required spaces and therefore lower development costs. The parking ratios should be modernized—where possible requiring less parking and allowing for shared parking. Planning staff is working with a consultant to reflect more appropriate parking standards in mixed use areas.

The bicycle parking standards are overly simple. Cyclists come in multiple varieties, and their needs are quite different. A bicycle commuter needs a locker and shower, while a biking shopper needs a rack near the front door. Standards should be set that reflect these various users.

The availability of transit should also be considered as an offset to required parking. Alternative parking plans with a variety of credit and flexibility options including off-site parking, valet parking, carpooling, and other transportation demand management measures should be created. The new zoning code should allow for emerging technologies such as vehicle stacking without drive aisles, allow off-site parking in pedestrian-oriented areas within a specified distance, and require or incentivize pervious pavement when parking exceeds minimum standards.

E.4.1. Applicability

[Sec. 59-E-1.1. Required; Sec. 59-E-5.3. Waiver - Addition to building under previous ordinances; Sec. 59-E-5.5. Exceptions and waivers for parking facilities constructed in accordance with building permits filed prior to June 28, 1984; Sec. 59-E-5.6. Exception for proposed parking facilities shown on an approved development plan, project plan, site plan, or special exceptions approved prior

to June 28, 1984; Sec. 59-E-5.7. Exception for certain public utility facilities; Division 59-E-6. Compliance Requirements for Certain Parking Facilities Constructed in Accordance with Building Permits Filed Prior to June 28, 1984]

Triggers compliance.

E.4.2. Parking Ratios

[Division 59-E-3. Number of Spaces Required; Sec. 59-E-3.7 Schedule of requirements; Sec. 59-E-3.5. Computing number of employees; Sec. 59-E-5.4. Reduction - New use in existing building; Sec. 59-E-5.8. Exception for storage space in general retail establishments and regional shopping centers]

How to calculate required parking. Need to add standards for assembly uses without fixed seating. Includes both minimum and maximum parking ratios.

E.4.3. Credits

[Sec. 59-E-3.2. Computing parking requirements for office development; Sec. 59-E-3.21. Proximity to a metrorail station; Sec. 59-E-3.3. Credits for specific uses; Sec. 59-E-3.31. Credits for general office building; Sec. 59-E-3.32. Credits for specified commercial uses; Sec. 59-E-3.33. Credits for specified residential uses; Sec. 59-E-5.2. Exceptions for parking lot districts]

Options for credits against required parking. These credits, along with the parking ratios, will be comprehensively reviewed and modernized.

E.4.4. Design Standards

[Sec. 59-E-1.3. Distance from establishment served; Sec. 59-E-2.2. Size and arrangement of parking spaces; Sec. 59-E-2.3. Standards for bicycle and motor-

cycle parking; Sec. 59-E-2.4. Access and circulation; Sec. 59-E-2.5. Drainage; Sec. 59-E-2.6. Lighting; Sec. 59-E-2.7. Landscaping; Sec. 59-E-2.8. Parking facilities within or adjoining residential zone; Sec. 59-E-2.9. Screening from land in a residential zone or institutional property; Sec. 59-E-3.4. Off-site parking spaces; Sec. 59-E-5.1. Reduction in area prohibited]

Parking lot layout and parking space design. Includes handicapped spaces, parking lot surfacing (including pervious options), cross-reference to parking lot landscaping, marking, cross-reference to parking lot lighting, cross-reference to drainage requirements. Improvements to pedestrian safety and implementation of enhanced accessibility provisions should be considered as part of this process.

E.4.5. Stacking [NEW]

Standards for stacking and queueing of vehicles at drive-through facilities, gated entrances, valet stands, car washes, gas stations and similar facilities.

E.4.6. Loading

[Sec. 59-E-1.4. Off-street loading space]

Standards for loading zones and loading docks. In urban areas on sites below a certain size and density, loading docks should not be required. Loading from the street may be regulated by operational conditions.

E.4.7. Bicycle Parking

[Sec. 59-E-2.3. Standards for bicycle and motorcycle parking]

Replacement of existing bicycle parking, allowing for both enclosed bicycle parking and fixed outdoor racks in direct relationship to demand for customer bicycle parking versus employee bicycle parking.

E.4.8. Parking Facility Plans

[Sec. 59-E-1.2. Structured Parking; Sec. 59-E-2.1. Subject to approval; Division 59-E-4. Aprking Facility Plans for Projects Constructed in Accordance with Building Permits Filed After June 28, 1984]

Parking facility plans are required for all structured parking, and any surface parking lot over 25 spaces.

E.4.9. Alternative Parking Plans [NEW]

Staff approval mechanisms for alternative parking strategies such as valet parking, off-site parking beyond that allowed by right, transportation demand management (TDM), and shared parking. The shared parking table currently used should be updated. For example, a more recent (and more sophisticated) spreadsheet model incorporating a similar concept is available through the Urban Land Institute.

E.4.10. Parking Controls in Residential Areas

[Sec. 59-E-2.8. Parking facilities within or adjoining residential zone]

Basic controls on over-size vehicle parking in residential areas.

E.5. LANDSCAPING AND SCREENING

[Sec. 59-C-5.43. Special regulations-l-3 zone (Industrial Zone); Sec. 59-C-5.47. Special regulations LSC zone (b,g,2); Sec. 59-C-5.474. Landscaping guidelines (LSC Zone); Sec. 59-C-7.58. Parking facilities (Mixed use planned development zone); Sec. 59-C-9.83. Special Development Standards for a Construction Recycling Facility. (Rural Service Zone); Sec. 59-C-12.52. Development standards for mineral resource extraction, processing and utilization activities and related uses. (Mineral Resource Recovery Zone); Sec. 59-E-59-E-2.7. Landscaping (parking lots); All overlays- Site plan contents and exemptions sections contain requirement for landscape plans; see also Urban Design Guidelines for sector plans]

In the current zoning code, landscape standards appear infrequently, attached to only a handful of zones. Often, landscaping is described in a vague manner and regulation relies on guidelines rather than quantifiable standards resolved through site plan review to finalize any issues. In order to clarify the requirements and ensure better site plans, codifying basic standards for landscaping should occur.

E.5.1. Intent**E.5.2. Applicability****E.5.3. Design Standards****E.5.4. Parking Lot Landscaping****E.5.5. Buffers and Screening****E.5.6. Maintenance****E.6. OUTDOOR SITE LIGHTING**

[Sec. 59-C-2.23. R-H zone-Lighting; Sec. 59-C-5.473(j) Development standards (LSC Zone); Sec. 59-C-12.6(e). Special regulations; see also Urban Design Guidelines for sector plans]

The zoning code includes some lighting standards attached to specific zones, mostly in connection with parking lots. For example, in the LSC Zone there are some minimum lighting standards. The new zoning code should include site lighting standards that are appropriate for a variety of settings and contexts.

E.6.1. Intent**E.6.2. Applicability****E.6.3. Design Standards****E.6.4. Prohibited Lighting****E.7. SIGNS**

[Article 59-F. Signs]

As discussed in Zoning Discovery, updating the sign standards to follow every single trend in the sign industry would lead to “a never ending series of amendments” focused on every type of sign. While additional sign area is not needed, some flexibility in the location of signage, to ensure maximum effect, should be considered. Also, pedestrian areas require different sign types from auto-oriented areas. Clearly setting out the context for signs will help ensure the regulations fit each place.

The new zoning code should also address the latest sign technology, specifically LED and other technologies with the potential for displaying full-motion video. Finally, an up-to-date sign code does not need to allow variances—especially for sign area. Further discussion of allowed variances following crafting of the new standards is appropriate.

E.7.1. Intent**E.7.2. Applicability and Exempt Signs**

E.7.3. Measurements**E.7.4. Design Standards****E.7.5. Prohibited Signs****E.7.6. Permanent Signs****E.7.7. Limited Duration Signs****E.7.8. Temporary Signs****E.7.9. Arts and Entertainment District Signs****E.7.10. Permits and Licenses****E.7.11. Nonconforming Signs****E.7.12. Special Provisions for Sign Enforcement****E.8. OUTDOOR STORAGE AND DISPLAY**

The new zoning code should include a consolidated approach to regulating outdoor storage and display. Poorly managed outdoor storage or display areas can be a visual nuisance, block pedestrian connections, and interfere with access. Rather than regulate individual uses that might provide outdoor storage (such as a garden center), and risk duplicating material or treating outdoor storage in a variety of different ways, a series of design standards should be applied to all outdoor storage. Regulating height, screening and location, along with requiring outdoor displays to be returned indoors at night, will help create equity among commercial tenants.

E.8.1. Intent**E.8.2. Applicability****E.8.3. Design Standards****E.8.4. Prohibited Storage****E.9. RESOURCE PROTECTION [NEW]**

This section would be crafted by extracting any standards (not guidelines) from the existing Environmental Guidelines and Trees Technical Manual. For example, grading must occur no closer than 25 feet to a stream buffer, and septic fields are allowed no closer than 25 feet to a slope of greater than 25 percent. Taking care to differentiate standards (which are measurable and quantifiable) from guidelines (which are often expressed as "should" statements) is important. Reconsidering the "shalls" and "shoulds" of environmental regulations is appropriate during this update. In addition, cross-references to applicable guidelines should be provided.

- E.9.1. Stream Valley Protection
- E.9.2. Wetland and Floodplain Protection
- E.9.3. Forest and Tree Conservation
- E.9.4. Unsafe and Unsuitable Land Protection
- E.9.5. Danger Reach, Dam Break
- E.9.6. Threatened and Endangered Species and Species in Need of Conservation
- E.9.7. Site Imperviousness Considerations

Article 59–F. Administration and Enforcement

The zoning code relies heavily on procedural responses to regulating the development of land, yet the zoning code itself does a poor job of letting the general public and the developer know who does what. Consolidating the administrative procedures—including cross-references to authority found throughout the remainder of the County code is sorely needed. Currently, the Manual of Development Review Procedures serves a key role in explaining how development review is conducted. A clearer article on administration may eliminate the need to produce this separate manual.

F.1 REVIEW BODIES

F.1.1. District Council [NEW]

This section should describe the District Council's role in establishing laws and setting policy governing land use and development. The District Council sets land use and development policy in the County through zoning text and map amendments, approval of master plans, and through the laws governing subdivision, the provision of moderately priced dwelling units, and forest conservation, among others.

F.1.2. Montgomery County Planning Department

[Sec. 59-A-1.10 Fees]

A description of the authority of the Planning Department should be included here.

F.1.3. Planning Board [NEW]

This section should describe generally the zoning-related functions performed by the Planning Board, and delineate where the Board exercises primary regulatory authority and where it plays an advisory role. The Planning Board plays a central role in shaping planning policy and reviewing proposed development projects. The Planning Board has the final say in the review of certain development applications, including preliminary plans of subdivision, concept plans, site plans, and forest conservation plans. In other areas, such as in the preparation of master plans, zoning map amendments, mandatory referrals, and the growth policy, the Planning Board serves in an advisory capacity to the District Council and other arms of county government.

F.1.4. County Board of Appeals

[Division 59-A-4. County Board of Appeals]

The establishment and authority for the County Board of Appeals is found in the county's Administration chapter (see Chapter 2, Administration, Article V. County Board of Appeals). It would be useful to incorporate the powers and duties of the Board that are related to Chapter 59 here. These include decisions on special exceptions, following review by a hearing examiner.

F.1.5. Hearing Examiner

[59-A-4.125. Hearing Examiner; Sec. 59-A-4.6. Public hearings by Hearing Examiner; Division 59-H-5. Hearing Examiner (map amendments)]

The establishment and authority for hearing examiners is found in the county's Administration chapter (see Chapter 2, Administration, Article X. Office

of Zoning and Administrative Hearings). It would be useful to incorporate the powers and duties of the hearing examiner that are related to Chapter 59 here. These include review of special exceptions, and any other matters referred by the County Board of Appeals.

F.1.6. Department of Permitting Services [NEW]

The establishment and authority for the Department of Permitting Services is found in the county's Administration chapter (see Chapter 2, Administration, Article III. Executive Branch, Division 7B. Department of Permitting Services). It would be useful to incorporate the powers and duties of the department that are related to Chapter 59 here. These include review of plans for compliance with fire prevention law, and enforcement of the zoning code.

F.1.7. Department of Environmental Protection [NEW]

The establishment and authority for the Department of Environmental Protection is found in the county's Administration chapter (see Chapter 2, Administration, Article III. Executive Branch, Division 2. Department of Environmental Protection). It would be useful to incorporate the powers and duties of the department that are related to Chapter 59 here. These include review of plans for compliance with state and local environmental laws.

F.1.8. Department of Transportation [NEW]

The establishment and authority for the Department of Transportation is found in the county's Administration chapter (see Chapter 2, Administration, Article III. Executive Branch, Division 10. Department of Transportation). It

would be useful to incorporate the powers and duties of the department that are related to Chapter 59 here. These include reviews of street cross-sections and vehicular circulation safety.

F.1.9. People's Counsel [NEW]

The establishment and authority for the people's counsel is found in the county's Administration chapter (see Chapter 2, Administration, Article XII. People's Counsel). It would be useful to incorporate the powers and duties of the people's counsel that are related to Chapter 59 here. These include representing citizen interests in variance, special exception, local map amendment, development plan, optional method, and site plan hearings.

F.1.10. Review Authority [NEW]

A summary matrix showing all of the review procedures as rows, and the various review bodies as columns as a quick summary of which review bodies are involved in each procedure. This also clarifies the level of review occurring—staff, Board of Appeals, Planning Board and District Council.

F.2. COMMON REVIEW PROCEDURES [NEW]

[Sec. 59-A-4.4. Public hearings on petitions and appeals; Sec. 59-A-4.6. Public hearings by Hearing Examiner]

Clarifies those procedures that are common to all (or most) applications. Also identifies (through the public notice and hearing provisions) how the general public is involved in development review. In addition to clarification, this section removes redundancy from the zoning code by consolidating

procedural elements. The contents of this section should include the language similar to that provided in the existing Manual of Development Review Procedures.

F.2.1. Pre-Submission Meeting

F.2.2. Applications

F.2.3. Application Referral

F.2.4. Public Information Meetings

F.2.5. Technical Staff Report

F.2.6. Public Notice

F.2.7. Conduct of Public Hearings

F.3 DEVELOPMENT REVIEW

[Division 59-A-3. Building and Use-and-Occupancy Permits; Registration of Certain Uses; Article 59-D. Zoning Districts - Approval Procedures]

Include the remainder of each procedure—those portions not covered in the prior “common review” section. Each procedure should be organized identically, perhaps as set out below:

- Applicability
- Application
- Review by [insert Review Bodies]

- Technical Reports and Recommendations
- Action by [insert Decision-Making Body]
- Review Criteria
- Time Limits on Approval
- Refiling and Appeals
- Amendments or Modifications

It is important to include criteria in each development approval as a basis for approval or denial—even (or especially) staff-level decisions. The streamlining of development review proposed by staff serves as the basis for this discussion.

F.3.1. Map Amendments

[Division 59-H-1. Map Amendments; Division 59-H-2. Map Amendments - Applications; Division 59-H-3. Map Amendments - Planning Board Recommendations; Division 59-H-6. Action by District Council, Local Map Amendments; Division 59-H-7. Action by District Council. Sectional and District Map Amendments; Division 59-H-8. Actions by District Council - Procedure; Division 59-H-10. Corrective Map Amendments]

Clarifies the difference in application of Euclidean and “floating” zones. The procedure for adopting a sectional map amendment should also be included here. The procedures listed below follow the recent proposal for the streamlining of approvals provided by planning staff, and currently under consideration by the Planning Board.

F.3.2. Special Exceptions

[Division 59-G-1. Special Exceptions - Authority and Procedure; Division 59-G-2. Special Exceptions - Standards and Requirements]

The existing procedure will be revised and inserted here. Note that the use standards associated with special exceptions have been moved to proposed "Article 59-C. Use and Use Standards" on page 25 . All of these standards should be reviewed to determine whether or not a special exception remains necessary, and whether the standards themselves are up to date. It is also important to review those uses obligated to demonstrate "need" or establish "adequacy" before they can be approved. The existing list may no longer represent the county's current economic environment.

F.3.3. Natural Resource Inventory & Forest Stand Delineation [NEW]

As part of streamlining development review, additional clarity regarding the "starting point" for all approvals should be codified. The trend toward infill and redevelopment in the county means many sites will not contain significant natural resources. This is the step during which the county can emphasize environmental site design (ESD) and low impact development (LID) techniques, based on their external design manuals such as the stormwater manual (SWM).

F.3.4. Concept Plans [NEW]

[Division 59-C-6. Central Business District Zones; Sec. 59-C-7.2. Town sector zone; Division 59-D-1. Development Plans; Division 59-D-2. Project Plan for

Optional Method of Development in CBD, TOMX, TMX, and RMX Zones; Division 59-D-3. Site Plan; Division 59-D-4. Diagrammatic Plan]

A concept plan is a new plan type focusing on the big picture: stormwater management, circulation, building massing, public amenities, density, height, and master plan conformance. This same plan would be used as the first step for all existing regulatory plans that meet certain impact thresholds.

At the concept plan stage, it will be important to have stakeholder input from citizens and agencies regarding the broad impacts of the proposed development. Reviewing staff will use this input to spell out requirements for certain development aspects, such as stormwater management, road design and forest conservation, and work to resolve potential conflicts prior to an application is submitted to the Planning Board. It will be essential that staff commit to the decisions made and the direction given at this stage. Therefore, the items to be reviewed at this stage need to be strictly limited and minimum submittal requirements developed that provide staff with the information needed without those requirements rising to the level needed for the application itself.

F.3.5. Consolidated Plan Application [NEW]

A cross-reference to the required subdivision process in Chapter 50, where required. A separate discussion should be held regarding the inclusion of the subdivision regulations in the zoning ordinance.

Consolidated plans will establish threshold levels that trigger greater levels of review and more substantial submittal requirements based on impacts. Low level impact plans will be similar to the existing preliminary plans, while higher level impact plans will be similar to the existing site plans.

F.3.6. Variances

[Division 59-G-3. Variances]

The existing variance procedure should be expanded and clarified here.

F.3.7. Waivers

The submittal and review process for waivers from development standards varies throughout the existing ordinance. These waivers are typically for setbacks, area requirements, parking minimums and the like; they are found in various tables, text, and paragraphs. While specific provisions for waivers may remain in particular sections, another option is to consolidate waiver provisions in one section with basic limitations, such as within 10% of a standard according to compatibility findings. In this case, a standard submittal and review process can be created and the predictability of development standard implementation can be more easily met.

F.3.8. Appeals [NEW]

[Sec. 59-A-4.11. Authority]

Explains how decisions made by the District Council, Planning Board, Department of Permitting Services or Hearing Examiner can be appealed.

F.4 NONCONFORMITIES

[59-C-1.34. Existing buildings and building permits; Sec. 59-C-2.25. Existing structures; Division 59-G-4. Nonconforming Uses, Buildings, and Structures]

F.4.1. Nonconforming Uses

Whether in a conforming or nonconforming structure the basic policy should be to eliminate nonconforming uses over time. No expansion should be allowed. Some communities allow a reduction of the degree of nonconforming use over time, using the Board of Appeals to determine whether or not a proposed use is of lesser intensity. Others focus on elimination—not allowing any change in use other than to a use that would be conforming. The zoning code's broader approach to regulating use may reduce the number of existing nonconforming uses.

F.4.2. Nonconforming Structures

Approach to nonconforming structures, whether occupied with a conforming or nonconforming use. Basic policy should be to continue to allow the structure - neighbors are used to it. Any subsequent investment, however, should be in conformity. Expansion should be allowed where the dimensional standards can be met. Where they cannot be met, a variance would be required.

F.4.3. Nonconforming Lot of Record [NEW]

These are the rules for lots platted legally under prior regulations that no longer meet district standards. Basic policy should be that all nonconforming lots of record are buildable. The county's gracious approach to "grandfather-

ing” at the time of adoption of new ordinance language may imply that very few nonconforming lots of record exist.

F.4.4. Nonconforming Sites [NEW]

Describes when and to what extent site elements such as landscaping, parking, and lighting must come into compliance. General policy should be to require improvements on sites when significant change occurs. This section requires a careful balance between the desire for redevelopment/re-investment and the cost of required improvements. The balance may be set differently for various portions of the community. Perhaps where substantial redevelopment is anticipated, such as near transit stations, the provisions should require complete conformity. In other, older corridors where modest incremental change is anticipated, a more flexible approach to the imposition of improved general development standards should occur.

F.5. ENFORCEMENT

[Sec. 59-A-1.3. Violations, penalties, and enforcement]

The final element of a good zoning code is its enforcement. This section clarifies who enforces the zoning code and what their options for enforcement are.

F.5.1. Responsibility [NEW]

Describes who is responsible for enforcement. Include discussion of Hearing Examiner role.

F.5.2. Violations

Describes what is considered a violation of the zoning code.

F.5.3. Penalties

Describes penalties that may be imposed. Should include both civil and criminal penalties.

Article 59–G. Definitions

[Division 59-A-2 Definitions and Interpretations]

G.1. WORD USAGE

[Sec. 59-A-2.2. General rules of interpretation]

Clarify the language which is commonly used in the zoning code, removing gray areas and clearing up possible confusion about word usage. List words that are mandatory, binding, or permissive. For example, the word “must” will be listed as mandatory, and “may” as permissive. Additionally, phrases such as “the county” will be specified as a reference to Montgomery County.

G.2. ABBREVIATIONS [NEW]

List all abbreviations in the zoning code, as a quick reference, such as MDPU (Moderately Priced Dwelling Unit).

G.3. DEFINED TERMS

[Sec. 59-A-2.1. Definitions; Division 59-F-2. Definitions (Signs)]

As described in the *Zoning Discovery*, the definitions section in the current code contains 354 definitions. Some definitions are not broad enough to accommodate future changes to industries. The language of some definitions needs to be adjusted to better describe the term.

All existing definitions should be reviewed, removing definitions which are not relevant or not contained in the zoning code, creating definitions that

can be flexible as technology and industries change, and consolidating definitions whenever possible.

Some thoughts about definitions:

- Don't define terms in common usage.

EXAMPLE: **Access:** A means of approach or admission.

- Do define “terms of art” where words are used in a special way for zoning purposes.

EXAMPLE: **Opportunity housing project:** A housing project developed pursuant to Chapter 2, Article IX, public facility area development, Montgomery County Code, as amended, and reviewed and approved by the district council in accordance with the procedure set forth in

- Don't embed standards in definitions.

EXAMPLE: **Hotel, apartment:** Any building or portion thereof originally designed for or containing both individual guest rooms or suites or rooms and dwelling units and lawfully existing prior to April 26, 1966.

5. SUSTAINABILITY AUDIT

Introduction

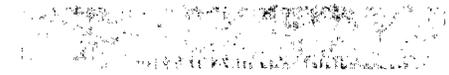
This sustainability audit provides a comprehensive review of the county's zoning code to assess the regulations as they relate to sustainability. Other related regulations have also been reviewed, included the subdivision regulations, road code, and stormwater manual, although these components are not included in the work program, which focuses on the zoning code.

Some of the concepts included here are already proposed in the Annotated Outline. Many of the remaining ideas could easily be incorporated in the zoning code, provided there is willingness on the part of the elected and pointed officials to incorporate the concepts.

Sustainability may be defined as providing for the needs of our generation without compromising the ability of future generations to meet their needs. Since our human well-being is integrally connected with the well-being of the natural world and the responsible use of natural resources, sustainability focuses on environmental health as a top priority. Key tenets of sustainability related to planning and zoning codes include reducing the amount of pollution created by minimizing the amount of vehicle miles traveled and conserving natural resources. Permitting complete neighborhoods (compact, mixed-use development) to minimize vehicular usage and pollution; minimizing parking footprints to decrease impervious coverage and the urban heat island effect; and permitting urban agriculture to increase access to local, fresh produce are all components of sustainability.

The zoning code audit aims to identify potential areas of improvement related to sustainability for the zoning code. The audit is organized into the nine general topics. Each topic includes a series of recommendations, some of which are further organized by sub-topic. In some instances, where the county currently has adequate regulations in place to address a certain issue, it is recommended that current regulations be continued and carried through to the new zoning code. For other topics, the county may have related regulations on the books that can be taken further or expanded upon and the recommendation will describe how to do so. This audit will be used as a starting point for rethinking sections of the existing zoning code that could enhance Montgomery County's commitment to sustainability.

A summary of the audit by topic is provided on the following pages. A complete matrix is provided at the end of this chapter (see "Full Sustainability Audit" on page 73).



Buildings and Neighborhoods

The purpose of the Buildings and Neighborhoods audit is to consider the most sustainable form of development at the neighborhood and lot levels for each context area. Key themes include requiring appropriate density for each context area, encouraging walkability through mixed uses and minimizing pedestrian-vehicle conflicts, co-location of jobs to reduce VMT, provision of open space, and providing a variety of housing types.

Requiring Appropriate Density

Focusing density in key areas will aid in creating a sustainable county, as minimum levels of density are necessary to support neighborhood-scale commercial uses as well as transit. Having viable public transit in place is essential to reducing Vehicle Miles Travelled (VMT) and automobile-related pollution. The county already has standards in place to support increased density in mixed use and transit-oriented areas. For example, the Transferable Development Rights (TDR) zones allow developers to shift development rights from a rural or preserve area to an area where increased density is encouraged, such as around a transit station. The county should continue to utilize TDRs in appropriate locations. Current single-family residential standards limit density to around five to six dwelling units per acre, which is typically too low to support transit. The zoning code could be revised to require or at least permit higher residential density near transit stations.

Walkability

Creating an inviting environment for pedestrians is integral to minimizing VMT and improving quality of life and aesthetics. There are several ways to enhance walkability via the built environment—such as lining commercial streets with mixed-use storefronts, locating parking in the rear of the building, minimizing the number of curb cuts and visible drive throughs, and requiring a walkable block length. While some of these components are present in the current zoning code, scattered amongst various mixed use zones, walkability will be most enhanced by incorporating these features in most if not all mixed use areas. For example, currently drive throughs are prohibited only in central business district zones. In all other zones, drive throughs are not restricted. It is recommended that drive throughs be prohibited in most mixed use commercial areas. In zones where drive throughs are to be permitted, standards may be developed to minimize their impact on the pedestrian realm—such as locating the drive through on the rear or side of the building and using landscaping to screen the area from view of the street and adjacent residential uses.

Housing Diversity

Another critical aspect of sustainability is ensuring that a wide spectrum of people can live and thrive in a community. Housing diversity may also increase density in appropriate areas, making neighborhood commercial and/or transit more economically feasible. Currently, Montgomery County

has a few zones (CR Zones and Planned Development Zones) that permit and even encourage a variety of housing types. However, in some instances, housing diversity should be required, ranging from a variety of single-family residential lot sizes in rural and suburban areas to a variety of all housing types in traditional neighborhoods, TOD areas, and downtowns.



Stormwater

Montgomery County and the State of Maryland have taken great steps to effectively manage stormwater, including the creation of a model state ordinance and subsequent county stormwater ordinance. The audit aimed to identify any additional opportunities not already being taken advantage of by the county. The organization of the table contains separate objectives for urban and suburban/rural areas, recognizing the fact that the density and imperviousness of urban areas makes it difficult, if not impossible, for such areas to adhere to the same stormwater management standards as other areas. The table also includes a series of retention methods for handling stormwater both on- and off-site, found in the state Design Manual, and defined their appropriate context areas.

Urban Stormwater Management

According to the Maryland Stormwater Ordinance, all sites must handle a minimum amount of stormwater, typically 50 percent or 1"-2.6" of rainfall, depending on the context. While this may be an appropriate requirement for non-urban areas, in densely populated, highly impervious areas this standard may be quite difficult to achieve. The county's Stormwater Ordinance states that this requirement may be waived if a watershed management plan is in place. Therefore, the creation of watershed management plans for those watersheds containing urban areas should be a top priority. In addition, stormwater volume in urban areas should be managed before it reaches the stream, instead of forcing the stormwater to be managed on-site in all

instances. With that said, the amount of infiltration should be maximized by use of the appropriate reuse and retention methods for urban sites.

Stormwater Management in Other Context Areas

Non-urban sites should be able to meet the state mandate of managing 50 percent or 1"-2.6" of rainfall by utilizing appropriate reuse and retention methods. Design standards for many of these methods may be found in the Maryland Stormwater Design Manual. For new subdivisions, stormwater management may be accomplished through the use of a district stormwater system.

Currently, in the state's ordinance, non-structural methods of stormwater management are preferred over structural methods, but structural methods are not limited. It is recommended that single-use structural stormwater facilities be prohibited; detention and retention ponds should serve also as parks or open space, and should incorporate design features to make them more welcoming public space.

Parking

Excessive surface parking lots are a barrier to sustainability. Parking lots decrease the amount of buildable land on a site and at the same time, increase the imperviousness, making stormwater management more challenging. In more urban areas, parking lots also contribute to the urban heat island and air quality issues. In addition, parking lots are often unsightly expanses of pavement that contribute little to street activity. The audit of Montgomery County's parking requirements uncovered several areas of potential improvement, including strategies for limiting requirements for off-street parking and reducing the off-street parking footprint. The following describes some of the highlights from the table.

Off-Street Parking Requirements

Off-street parking requirements should be reconsidered in two steps: first, the minimum requirements for various uses across different general contexts should be reevaluated to ensure that an adequate, but not excessive, amount of parking is required; second, parking credits should be incorporated into the code for sites with carsharing, cooperative parking, and adjacent public parking. The county already has a great start on offering parking credits, as the current zoning code including parking reductions for proximity to transit stations, sharing parking facilities, participating in the county Share-a-Ride program, and offering private incentives.

Off-Street Parking Footprint

In addition to modifying existing minimum parking requirements, excessive surface parking can be controlled by implementing a maximum parking allowance. This allowance is typically around 10 percent more than the minimum requirement, which gives the developer flexibility but also ensures that parking will be provided within an appropriate range. Providing bicycle parking for commercial and multifamily uses can also help to reduce the demand or need for surface parking spaces. The county already has some requirements for bicycle parking, but the requirements focus on larger parking lots with over 20 surface parking spaces. Bicycle parking should be provided for all commercial spaces with parking lots and for multifamily uses of over 8 units.



Tree Canopy and Heat Island

Tree canopy and heat island issues are greatly interconnected, as tree canopy helps to absorb sunlight, as it shades paved surfaces and roofs that would otherwise emit heat that contributes to the heat island. The Tree Canopy and Heat Island table focuses on the goals of limiting tree removal, requiring the planting of new trees when development occurs, providing an environment that fosters healthy trees, and mitigating imperviousness and the urban heat island effect. The following describes some of the highlights from the table.

Limiting Tree Removal

The Montgomery County Forest Conservation Law and Maryland State Forest Conservation Law currently has several provisions in place to protect existing tree canopy as well as champion and specimen trees in particular. The county should continue to protect existing tree canopy, emphasizing the preservation of champion and specimen trees.

Requiring New Trees

With regard to requiring the planting of new trees, the code audit found some areas of improvement. For example, street trees are currently coordinated between the Department of Permitting Services, Department of Transportation, and Planning Board staff. There is no specificity as to how many street trees are required per linear feet of frontage. This process could be simplified by designating a standard number of street trees per linear feet of frontage, such as 1 street tree per every 40 feet. Such a requirement, in ad-

dition to other private parcel requirements, would add greatly to the canopy coverage of the county.

Healthy Trees

Requiring the planting of new trees is fruitless unless the trees are given a hospitable environment to survive in. Conventionally, trees in parking lots or parkways have faced 2 major challenges: a) they are planted in areas that are too small for them to grow; and b) they are surrounded by impervious surfaces, making it difficult for their roots to get sufficient irrigation. It is recommended that the zoning code resolve these difficulties by a) increasing the required width of tree planting areas (medians, parkways, islands) to be at least 9 feet and b) requiring the use of structural soil and permeable pavement around trees to improve irrigation.

Imperviousness and Reflectivity

Reducing imperviousness and reflectivity are central to reducing the heat island effect. Current code standards do not contain many standards related to the use of such materials as reflective pavement and roof surfaces, or the reduction of impervious coverage. It is recommended that pavement and roof surfaces be required to have a level of reflectivity, and that the amount of impervious coverage is minimized to the extent practicable.

Water Reuse and Irrigation

Water conservation is one of the greatest challenges facing the world today and yet, many common practices are still in place that waste tremendous amounts of water. Two such practices include the excessive, wasteful, and unnecessary irrigation of landscape and the treatment of wastewater, including greywater (wastewater generated from activities such as washing dishes, doing laundry, and bathing). Enormous amounts of water may be saved by examining these two key practices. The following describes some of the highlights from the table.

Greywater

Greywater systems present a way to reuse water that has been used for common domestic activities, such as dishwashing and bathing. Such water is far easier to treat and recycle on-site than blackwater (sewage) because of much lower levels of contamination. Greywater, after being partially treated, may then be used to irrigate landscape and flush toilets.

The audit could find no evidence of greywater reuse being utilized in the county, which represents a huge missed opportunity. Identifying any Building Code barriers and encouraging greywater systems in the county should be of top priority.

Irrigation

Landscape materials of choice have long been dominated by turf grass and other non-native plants that require extensive watering and maintenance.

Great amounts of water may be conserved by minimizing the need for such irrigation through the use of xeriscape and native plants. Some areas of the county code currently encourage native plantings, but use of xeriscape and native plants should be required wherever feasible to limit wasted water.

Energy

Encouraging the use of renewable sources of energy is critical to reducing pollution and greenhouse gases, and creating a more sustainable county. Surprisingly, the audit did not uncover many regulations on the books for the county that pertain to renewable energy, such as geothermal, solar, and wind power. Facilitating the application and permitting process for renewable energy sources relies on having streamlined, well-thought out regulations on the books to be prepared for those who may want to install such facilities. The following describes some of the highlights from the Energy table.

District Energy

District energy, such as geothermal systems, can shift entire neighborhoods from the traditional power grid to using renewable energy. Since geothermal systems are located underground, they also do not have the same aesthetic impacts or concerns that might be encountered with other renewable energy sources. District energy systems should be permitted in all districts, and particularly encouraged where subdivision developments are occurring.

Wind

While wind access may be a little challenging in some areas of the county, there has already been demand for wind turbine installation. To accommodate the demand, it is essential that the county have regulations in place specific to varying context areas, such as single-family, multifamily, commer-

cial, and rural locations. These regulations should include height, noise, and setback limitations.

Solar

Solar panels are quickly becoming a commonplace way for homeowners and business owners to generate electricity on-site. Solar panels should be permitted in all zones, with flush-mounted panels permitted in residential areas. Also, for both solar and wind facilities, the county should ensure that there is a streamlined, clear permitting process to encourage developers and others to install such systems.

Food Production

Enabling more residents of the county to produce local food will reduce vehicle miles traveled and improve access to fresh, healthy food. The following describes some of the highlights from the Food Production table.

Livestock

Current regulations include a bias against raising livestock on smaller lots, as any accessory structure to house animals must be at least 25 feet from the lot line and 100 feet from a dwelling on another lot. Meeting these requirements may be difficult for compact developments where the homes could be quite close together. The recommendations include revised buffer distances for such accessory structures, as well as more specific requirements related to raising livestock on residential lots (how many animals per lot, penning of animals, prohibition of slaughtering, etc).

Gardens

Another way to encourage locally grown produce is by permitting community gardens. Currently, there are no standards defined for community gardens in the county related to what types of activities of permitted and whether community gardens qualify as "green area." The county should cultivate the use of community gardens by providing clear and practical standards for their use and permitting community gardens to count towards green area requirements.

Food Sales

Farmers' markets are a great way to support local farmers and improve access to fresh produce, but current county code permits them (as "Country markets") only as a Special Exception in some residential zones; they are not allowed in higher density zones. Farmers' markets should be permitted in most residential and commercial areas to provide a broad base of support for the small farms that depend on such markets and to improve access to fresh, local produce for those who live in the county.

Lighting

Lighting standards are crucial to protect mating, migration, and predation behaviors of many different species, preserve the night sky, minimize the amount of energy wasted from overlighting, and reduce glare. Lighting can best be controlled across a large area like Montgomery County by utilizing lighting zones, which are described below.

Lighting Zones

Lighting zones address the need to have varying lighting standards across different context areas. Each zone has a different set of standards, including maximum lighting standards, maximum allowed initial lamp lumens per square foot, and required shielding of lighting. Lighting zones include LZO (no ambient lighting), LZ1 (low ambient lighting), LZ2 (moderate ambient lighting), LZ3 (moderately high ambient lighting), and LZ4 (high ambient lighting). These zones should be applied to various context areas; for example, LZ4 (high ambient lighting) should be applied to the most urban areas of the county. By applying lighting zones to the context areas, the county will be able to implement appropriate lighting standards across the various locations. See the International Dark-Sky Association for more details.

Waste Reduction

Construction and demolition waste is one of the worst offenders in terms of its contribution to landfills. Reducing construction and demolition waste, as well as requiring the recycling and reuse of such waste will greatly diminish the amount that ends up in landfills. Smaller-scale neighborhood recycling centers should also be encouraged. The following describes some of the highlights from the table.

Construction Waste

Currently, the county does not require the recycling or reuse of construction and demolition debris. Municipalities and counties across the country are enacting regulations that require some level of reuse or recycling. The audit recommends that Montgomery County require a minimum of 50% of construction and demolition debris produced on a construction site to be recycled or reused, to divert those materials from decaying in landfills.

Full Sustainability Audit

The audit lists objectives, references them to specific sections of the existing code, and proposes code language which could be used to promote more sustainable choices. The following describes the intent of the column headings found on each table.

Sustainability Objective

The objective describes the specific issue at hand across the row. These sustainability objectives are culled from experience with sustainability in other communities, and from a variety of available resources (including especially materials from the US Green Building Council), as listed in the tables.

Code Section

The code section refers to the area of the County Code that the objective is most applicable to (such as zoning and specific chapters within zoning, subdivision, permitting, lighting ordinance, etc).

Priority Level

Priority levels are utilized to provide a gauge for how critical the recommendation is to achieving the county's goals for sustainability and/or the ease of the item's implementation. Priority level 1 is the highest priority level, and is typically easy to implement and include in the code. Priority level 2 is a medium priority level and is a little more difficult to incorporate into the zoning code than level 1. A level 2 item may require more research or politi-

cal support prior to its implementation. Priority level 3 is the lowest priority level, and typically relates to county regulations outside of the zoning code (stormwater policy, Road Code, Building Code etc).

Applicable Context

The county was considered as several broad context areas to provide more specificity in the audit analysis and recommendations. The context areas used are as follows (bold indicates the abbreviation used in the tables):

- **Rural** (Rural/Preserve)
- **Sub-Res** (Suburban residential - single-family pods)
- **Sub-Com** (Suburban auto-oriented commercial corridors, sometimes occurring with transit)
- **TND-Res** (TND/older suburban residential - compact, mixed residential type neighborhoods)
- **TND-Com** (TND/Main Street mixed-use commercial corridors)
- **Urban** (Urban Core/downtown - walkable, high intensity core with transit)

BUILDINGS AND NEIGHBORHOODS							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
DENSITY							
Transit supported density along transit corridors and stations	Zoning (districts and mapping)	1	Sub-Res TND-Res Sub-Com TND-Com	59-C-1.3, 59-C-1.53: Most sf housing development standards max out around 5-6 DU/AC Other mixed use and multifamily allows higher densities sufficient to support transit	REQUIRE minimum housing density to support transit type (metro, commuter rail, bus rapid transit) within a quarter mile of corridors/stations		
Utilize TDRs to increase density in desired locations	Zoning	1	All	59-C-1.33 Transferable Development Rights Zones 59-C-15.868: CR zones give a density incentive to those utilizing TDRs in TDR designated receiving areas	CONTINUE utilizing Transferable Development Rights per area Master Plans & Sector Plans to preserve high quality ag/natural land and focus density, especially near transit		
COMMERCIAL MIXED USE							
Mixed use commercial areas, including offices and residential above stores	Zoning (uses)	1	Sub-Com TND-Com Urban	Permitted in several districts, including: Central Business Districts, Planned Neighborhood, Mixed Use Neighborhood, Mixed Use Planned Development, Transit Station Development Areas, Residential Mixed Use Districts, Mixed Use Town Center, Transit Oriented Mixed Use Zones, Transit Mixed Use Zone	CONTINUE to permit vertically mixed-use buildings in appropriate areas		
Walkability to daily retail/services/civic uses (within 1/4 to 1/3 mile radius of most households)	Subdivision	1	Sub-Res TND-Res	59-C-2.3: Commercial uses not permitted except in a limited capacity in MF districts 59-C-1.3, 59-C-1.53, 59-C-1.4, 59-C-1.53, 59-C-1.72: Most sf housing development standards max out around 5-6 DU/AC	REQUIRE minimum density in key walkable neighborhoods to support a corner store PERMIT corner stores in new residential subdivisions with development standards OR REQUIRE new subdivisions to incorporate some level of commercial development to suit daily needs of residents	LEED-ND (NPD C3); SmartCode; Rocky Mountain Land Use Institute Sustainable Code	
	Zoning (districts, mapping, uses)	1	Sub-Res TND-Res	Central Business Districts, Planned Neighborhood, Mixed Use Neighborhood, Mixed Use Planned Development, Transit Station Development Areas, Residential Mixed Use Districts, Mixed Use Town Center, Transit Oriented Mixed Use Zones, Transit Mixed Use Zone permit mixed uses; Most other residential and commercial uses are completely separate from one another - no assurance that commercial will be within walking distance of residential	PERMIT a narrower list of uses within a neighborhood commercial district to focus on daily uses such as coffee shop, café, childcare, post office, library MAP neighborhood commercial uses adjacent to residential neighborhoods to improve walkability	LEED-ND (NPD C3); SmartCode; Rocky Mountain Land Use Institute Sustainable Code	



BUILDINGS AND NEIGHBORHOODS							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
Third places (informal meeting locations outside of home and work) within walking distance of neighborhoods	Zoning (uses)	1	Sub-Res TND-Com Sub-Com TND-Com Urban	Appropriate uses permitted in several districts	PERMIT a narrower list of uses within a neighborhood commercial district to focus on daily uses such as pubs, restaurants, cafés, libraries	LEED-ND (NPD C3); Project for Public Spaces	
Appropriate scale of commercial	Zoning (uses)	1	TND-Com Sub-Com Urban Campus	Combination retail store in C2 & C3 whose floor area exceeds 120,000 square feet & includes a pharmacy & full-line grocery store to obtain Special Exception - only permitted if adjacent to arterial or highway	PERMIT a variety of commercial scales in Sub-Com and Campus with combination retail stores permitted with Special Exception REQUIRE stores over 20,000 sf in TND-Com and Urban areas to seek a special exception OR PROHIBIT commercial over 20,000 sf (per user) in areas TND-Com and Urban areas except for grocery store uses	newrules.org	
Encourage locally based commercial	Zoning (uses)	2	TND-Com Sub-Com Urban Campus	Combination retail store in C2 & C3 whose floor area exceeds 120,000 square feet & includes a pharmacy & full-line grocery store to obtain Special Exception - only permitted if adjacent to arterial or highway	REQUIRE community and economic impact analysis for large box stores (over 50,000 sf)	Santa Cruz (thinklocal-santacruz.org); newrules.org	
	Subdivision	2	TND-Com Sub-Com Urban Campus		REQUIRE a Community Benefits Agreement (CBA) with developers for projects over a certain size that stipulates how much of each project's retail space must be set aside for local businesses	Santa Cruz (thinklocal-santacruz.org); newrules.org	
Active ground floor space for parking garages	Zoning (development standards, uses)	2	Sub-Com TND-Com Urban	59-C-11: Mixed Use Town Center - Off-street parking structures, if located along required street facades, must have retail or other pedestrian-oriented uses at the ground floor level fronting the street with direct access to the sidewalk or a public use space	REQUIRE liner active uses at the ground floor level in parking garages in pedestrian-oriented mixed-use areas	Nashville, TN; Fort Lauderdale, FL	

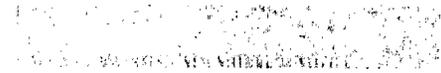
BUILDINGS AND NEIGHBORHOODS							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
JOBS							
Jobs-housing ratio	Zoning (uses, mapping)	1	TND-Com Sub-Com Urban Campus	Shady Grove Sector Plan & Gaithersburg West Master Plan call for increased jobs-housing ratio by increasing the amount of housing near existing office parks & employment centers	REQUIRE some level of office for mixed use as opposed to just residential above in key areas MAP for office buildings in appropriate locations near residential	LEED-ND (SLL Housing and Jobs Proximity)	
	Subdivision	1	Campus		PERMIT residential uses to be incorporated into or developed adjacent to employment center/office park subdivisions, preferably within a 1/3 to 1/4 mile radius		
Home occupations	Zoning (uses)	1	All	Sec. 59-A-2.1: Home occupation includes professionals (lawyer, accountant, architect, engineer, or veterinarian) who reside in the dwelling unit in which the office is located. Does not include bed-and-breakfast, boardinghouse, day care facility, display of furniture not made in the home, landscape contractor, private educational institution, tourist home, or repair & maintenance of motor vehicles. 59-A-3.4, 59-A-6.1, 59-G-2.29: No impact home occupations permitted by right in residential districts (not >5 visits per week, no nonresidential employees, no adverse impacts; Registered uses permitted by right but have to register; major home occupations permitted by special exception (don't meet 3.4 & 6.1, so have to meet special exception provisions in 59-G-2.29)	CONTINUE to permit home occupations CONSIDER expanding permitted home occupations uses to include light craftsman uses, service uses (hairstylist, day care, etc)		
Permit craftsman industry in mixed use/commercial areas	Zoning (uses)	1	TND-Com Sub-Com Urban Campus	59-C-5.21 I-4 Low intensity, light industrial district permits less volatile industrial uses, but uses are too permissive to be located adjacent to mixed-use areas	PERMIT small scale craftsman industrial with development standards in mixed use areas and corridors	Roanoke, VA	
Industrial jobs located close to housing	Zoning (districts, uses)	1	TND-Com Sub-Com Urban Campus	59-C-5.21 I-4 Low intensity, light industrial district permits less volatile industrial uses, but uses are still a little too permissive to be located adjacent to mixed-use areas	PERMIT and MAP craftsman industrial and small scale, non-noxious, green-friendly industry in districts adjacent to residential	Roanoke, VA	
Eco-industrial districts	Zoning (uses)	3	Urban Campus		INCENTIVIZE eco-industrial districts by providing assistance with location of industries that utilize each other	Eastville, VA; http://gei.ucsc.edu/eco-industrial_parks.html	



BUILDINGS AND NEIGHBORHOODS							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
OPEN SPACE							
Public open space	Subdivision	1	All	59-C-1.62 - in R-200 R-150 R-90 R-60, for each MPDU one-family detached dwelling unit with a lot area less than 3,500 square feet, 500 square feet of green area must be provided in the subdivision	REQUIRE open space/green area with a minimum size of 1/4 acre within 1/8 mile of the front door of each commercial unit REQUIRE open space/green area with a minimum size of 1/4 acre within 1/6 mile of each residential unit, regardless of unit type		
Private open space	Zoning (development standards)	1	All	Most commercial and residential zones set a minimum amount of open space or "green area"; Larger commercial and industrial uses generally have a higher minimum % of required green area; Increased density for residential often requires higher minimum % of required green area 59-A-2.1: Current definition of green area includes: lawns, decorative plantings, sidewalks, walkways, active/passive recreational areas including children's playgrounds, public plazas, fountains, swimming pools, wooded areas, watercourses 59-C-1.34: R-T districts require 50% green area, except R-T 15.0 which requires 30% 59-C-1.627: For R-200, R-150, R-90, R-60, townhouse uses must provide 2000 square feet of green area per unit	LIMIT impervious surfaces in the definition of "green area" CONTINUE to require adequate amounts of green area for single family residential and commercial areas CONSIDER reducing the amount of green area required for denser housing types; when possible, do not correlate increased green area with increased density		
	Subdivision	2	Rural Sub-Res TND-Res		REQUIRE minimum amounts of private open space for new residential subdivisions		

BUILDINGS AND NEIGHBORHOODS

Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
HOUSING							
Housing diversity	Subdivision	1	Rural Sub-Res TND-Res	59-C-15.846 CR Zones: density incentive for mix of unit sizes - permits all housing types 59-C-7.131: PDs at different density levels require different compositions of housing types - all PDs have detached, attached, and multifamily housing 59-C-1.62: The maximum percentage of one-family attached dwelling units, semidetached dwelling units, or townhouses allowed in a subdivision is: RE-2C and RE-1 zones: 30%; R-200 and R-150 Zones: 40%; R-90 Zone: 50%; R-60 Zone: 60% - the balance must be one-family detached dwelling units	REQUIRE a variety of building types for all new subdivisions over a certain size; Cater development standards to context area (ie varying single family in 1, different density levels including some townhouse/multifamily in 2,3) CONTINUE to require different housing type composition for PDs	LEED-ND (NPD C4); Rocky Mountain Land Use Institute Sustainable Code; Austin, TX	
	Zoning (districts)	1	Sub-Res TND-Res	59-C-1.31: R-40 permits 1 family semi-detached & 2-family detached 59-C-1.53: R-60 & R-90 permit townhouses 59-C-1.71: Sf permitted in R-T t'house districts 59-C-10: Residential Mixed Use Districts permit a variety of building types, such as single-family attached and detached and multifamily	PERMIT a variety of lot sizes and building styles in residential districts; Cater development standards to context area (ie varying single family in Rural, different density levels including some townhouse/multifamily in Sub-Res, TND-Res)	LEED-ND (NPD C4); Rocky Mountain Land Use Institute Sustainable Code; Austin, TX	
Accessory apartments in accessory structure	Zoning (uses, development standards)	1	Rural Sub-Res TND-Res	59-C-9.3, 59-G-2: Up to 4 accessory dwellings permitted with Special Exception in Rural, RC, LDRC, RDT, RS, RNC districts (ag uses only) 59-G-2.00: Accessory Apartments permitted in existing accessory structures constructed before 1983, in structures constructed after 1983 but only to house caregiver; Accessory apartment must be 50% less in floor area than principal structure or 2,500 square feet, whichever is less 59-A-2, 59-C-10: Carriage house permitted attached to main dwelling or as accessory structure in Residential Mixed Use Districts; Must be less than 800 square feet or 1/3 the floor area of main dwelling	CONTINUE to permit up to 4 accessory dwellings in accessory structure for worker housing in Rural/Ag districts (Rural areas) PERMIT an accessory apartment in Sub-Res and TND-Res in or above rear accessory structure. Require accessory apartment to be less than half the square footage of the principal structure or 2,500 square feet, whichever is less, and with a rear or side entrance	Portland, OR; Seattle, WA	
Accessory apartments in principal structure	Zoning (uses, development standards)	1	Rural Sub-Res TND-Res	59-C-1.31, 59-C-9.3: Permitted with Special Exception in RE-2, RE-2C, RE-1, R-200, R-150, R-60, R-90, RMH-200, Rural, RC, LDRC, RDT, RNC, RNC/TDR (all single-family districts) 59-A-2, 59-C-10: Carriage house permitted attached to main dwelling or as accessory structure in Residential Mixed Use Districts; Must be less than 800 square feet or 1/3 the floor area of the main dwelling	CONTINUE to permit 1 accessory apartment with Special Exception within the principal structure in all single-family districts; Accessory apartment should be less than half the square footage of the principal structure or 2,500 square feet, whichever is less, and with a rear or side entrance		



BUILDINGS AND NEIGHBORHOODS							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
Affordable housing	Zoning (MPDU Program)	1	Sub-Res TND-Com Sub-Com TND-Com Urban	MPDU program gives density bonus of up to 22% for including 12.5-15% affordable housing for projects over 20 units			
Adaptable, accessible housing	Subdivision	2	Rural Sub-Res TND-Res	59-B-7.1 accessibility improvement is not subject to setback, or lot coverage limitations if size of accessibility improvement does not exceed minimum design specifications in the Maryland Accessibility Code and Montgomery County Building Code.	REQUIRE a minimum percentage (suggest 20%) of new housing units to be built adaptable/accessible for new housing projects over a certain size	LEED-ND (Credit NPD 11)	No requirement; Design for Life Montgomery provides voluntary certification for single family attached & detached for homes meeting Universal Design standards
BUILDINGS							
LEED-Certified buildings	Zoning (development standards)	3	All	8-49: county buildings (owned by county for at least 30%) must be LEED-Silver 59-C-15.81: CR Zones give incentive density for those buildings achieving LEED certification (10% for LEED Silver, 20% for LEED Gold, 30% for LEED Platinum)	PROVIDE incentives (such as fast track permitting) for buildings that achieve LEED certification (or incorporate comparable sustainable features)	Aspen and Pitkin County, CO; Seattle, WA; LEED-ND (GIB P1)	
WALKABILITY							
Design for walkable commercial (build to lines, storefronts, parking in rear, minimum building frontage, limit curb cuts)	Zoning (development standards)	1	Sub-Com TND-Com Urban	59-C-7.5: Mixed Use Neighborhood district requires parking away from street frontage, in interior of lot 59-C-7.7: Mixed Use Planned Dev't landscape to screen parking 59-C-11: Mixed Use Town Center building façade located 0-10' from lot line, at least 75% building frontage along one street, ground floor portion of any street facade in a non-residential development must have windows and principal entrances to stores and retail establishments from the adjoining sidewalk or public use space 59-C-13: Transit Oriented Mixed Use Zones side or rear off-street parking, orient buildings to street, avoid blank facades 59-C-15.65: CR Zones - if a site is adjacent to an alley, the primary vehicular access to a parking facility must be from that alley; Curb cuts must be kept to a minimum Curb cuts not limited in Road Code	REQUIRE build-to lines in walkable areas REQUIRE a minimum percentage of building frontage along the street in walkable areas PROHIBIT parking in front of the building in walkable locations REQUIRE developers to utilize alley access in lieu of driveways when alley access is available (in all districts) PERMIT a maximum of 1 curb cut per lot in mixed-use commercial areas when alleys are not available REQUIRE transparency on the ground floor in pedestrian-oriented mixed-use areas	LEED-ND (NPD C1 Walkable Streets); Chicago P Streets; Washington DC & Forsyth GA	

BUILDINGS AND NEIGHBORHOODS							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
Drive throughs	Zoning (development standards)	1	Sub-Com TND-Corn Urban	59-C-6.22 7: Drive throughs prohibited in CBDs 59-C-15.65: CR Zones permit drive throughs but no on front or corner side of building and, if drive through is present, size of curb cuts limited to 20' for 2-way traffic and 10' for 1-way traffic	PROHIBIT drive-throughs in key walkable areas REQUIRE development standards for drive-throughs in other areas, such as location on the side or rear of the building and screening from residential uses	Chicago P Streets; Arlington, VA	
Walkable blocks with public streets	Subdivision	1	All	Sec. 50-28: Current subdivision code sets maximum block length of 1600'; Nonresidential blocks designed for business or industry shall be of such length and width determined suitable by the board	REQUIRE that subdivision of large parcels include walkable block sizes (such as between 300' and 600') or a minimum number of intersections per square mile (range between 140-400 per square mile) with public streets	LEED-ND (NPD Walkable Streets, Street Network, Connected Community)	
Street connectivity	Subdivision, Road Code	1	All	49-33: A road must not be constructed unless it connects with an existing public road at one end 50-25: Continuation of roads. The proposed plan shall provide for continuation of any existing roads or streets	PROHIBIT closing of streets REQUIRE a minimum number of connections to surrounding developments REQUIRE extension of stub streets to the boundary line of the parcel to make provision for the future projection of streets into adjacent areas	LEED-ND (Street Network, Connected Community, NPD P3)	
Limit cul-de-sacs	Subdivision	1	Sub-Res TND-Res	59-C-7.5 Mixed Use Neighborhood discourages use of cul-de-sacs, but does not prohibit 50-25 Subdivision - Board may approve the installation of culs-de-sac when use would produce improved street layout because of the unusual shape, size or topography of the subdivision. Board must not approve any other cul-de-sac. Cul-de-sac must not be longer than 500 feet, measured on its centerline, unless, because of property shape, size, topography, large lot size, or improved street alignment, the Board approves a greater length.	CONTINUE to approve cul-de-sacs only by Special Exception due to unusual shape, size or topography of the subdivision Further LIMIT the length of cul-de-sacs (recommend 250')	LEED-ND (Street Network, Connected Community, NPD P3)	

STORMWATER							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
URBAN CONTEXT							
Manage stormwater volume before it reaches stream	stormwater policy	1	Urban	NPDES Permit Requirement - watershed mgmt plans required by county NPDES permit; county Stormwater Ordinance - with watershed plan in place, can get a waiver for volume retention if it's an infill or redev site, or if site's circumstances prohibit possibility of accommodation	PRIORITIZE the development of watershed management plans for those watersheds containing urban areas within the county CONSIDER mapping urban areas eligible to receive waivers for volume retention requirements	Smart Code Sustainable Urbanism module	
Protect watershed by managing flow rate	stormwater ordinance	1	Urban	MD Stormwater Design Manual, County Stormwater Ordinance			
Protect water quality to the greatest extent feasible	stormwater ordinance	1	Urban	MD Stormwater Design Manual, County Stormwater Ordinance			
Infiltrate/reuse as much volume as possible without inhibiting dense urban development	stormwater ordinance	1	Urban	MD Stormwater Design Manual, Stormwater Management Plan	LIMIT infiltration methods to those which do not affect density or result in single use stormwater areas (see context areas listed below with each retention method)		
Encourage district stormwater systems	stormwater policy	1	Urban	Permitted in MD Stormwater Design Manual, County Stormwater Ordinance	ENCOURAGE district systems, including public facilities		
SUBURBAN / RURAL CONTEXT							
Manage appropriate volume on-site or in district systems	stormwater ordinance	1	All but Urban	MD Model Stormwater Ordinance: 50% or 1-2.6" (depending on context, p.16) of rain, County Stormwater Ordinance		Smart Code Sustainable Urbanism module	
Protect watershed by managing flow rate	stormwater ordinance	1	All but Urban	MD Stormwater Design Manual, County Stormwater Ordinance			
Protect water quality to the greatest extent feasible	stormwater ordinance	1	All	MD Stormwater Design Manual, County Stormwater Ordinance			

STORMWATER							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
Avoid single use stormwater facilities/features	Subdivision, stormwater ordinance	1	All	MD Stormwater Design Manual emphasizes the utilization of non-structural methods over structural methods; no requirement for multi-use structural methods	PROHIBIT the development of single use stormwater facilities REQUIRE detention and retention to also serve as parks or open space LIMIT retaining wall height to avoid extreme grades, prohibit fences, require public access, and require design by a landscape architect		
Require appropriate infiltration methods	stormwater ordinance	1	All but Urban	MD Stormwater Design Manual, County Stormwater Ordinance	REQUIRE use of decentralized infiltration methods to meet volume requirements (see context areas)		
Encourage district stormwater systems	stormwater ordinance	1	All	Permitted in MD Stormwater Design Manual, County Stormwater Ordinance			
RETENTION METHOD: INFILTRATE STORMWATER							
Green roofs	Zoning (development standards)	1	All	Section 5.3, A-1 of MD Stormwater Manual as an acceptable micro scale practice for ESD (M-5); design standards provided	ENCOURAGE green roofs on high density buildings which have little opportunity for green space on the ground (Urban areas) REVISE definition of green area to include green roofs		County's Rainscapes Rewards program gives up to \$1,200 per SF lot, \$5,000 per other lot, \$2,200 per SF lot in a targeted area (degraded watershed) for use of green roof
Rain gardens/swales	stormwater ordinance, Road Code	1	All but Urban	Included in MD Stormwater Manual, Chapter 5, as an acceptable micro scale practice for ESD (M-5); design standards provided	PERMIT swales in the area from the back of curb or edge of pavement to the sidewalk in the right-of-way		County's Rainscapes Rewards program gives up to \$1,200 per SF lot, \$5,000 per other lot, \$2,200 per SF lot in a targeted area (degraded watershed) for use of rain gardens
Landscape infiltration (retention areas)	stormwater ordinance, Subdivision	1	Rural Sub-Res TND-Res	MD Stormwater Design Manual			

STORMWATER							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
Tree canopy cover for interception and evapotranspiration	Zoning (landscape)	1	All		SEE TREE CANOPY		County's Rainscapes Rewards program gives up to \$1,200 per SF lot, \$5,000 per other lot, \$2,200 per SF lot in a targeted area (degraded watershed) for creation of new tree canopy coverage
Vegetated stormwater planters	Zoning (parking)	1	TND-Com Sub-Com Urban Campus	Micro bioretention practices (including stormwater planters) included in MD Stormwater Manual, Chapter 5, as an acceptable micro scale practice for ESD (M-5); design standards provided			
Parking lot stormwater filtration	Zoning (parking)	1	All	59-E-2.74: Islands at head of parking spaces must be minimum 8' wide, while islands parallel to parking spaces must be minimum 8 1/2' wide	REQUIRE islands between bays of parking to provide stormwater planters that will filter and infiltrate stormwater off paving surfaces		
Underground gravel storage (district)	stormwater ordinance, Zoning (parking)	2	Sub-Com TND-Com Urban Campus	Included in MD Stormwater Manual, Chapter 5, as an acceptable micro scale practice for ESD (M-5); design standards provided	PERMIT underground gravel storage of stormwater underneath parking lots		
Dry wells	stormwater ordinance	2	All	Included in MD Stormwater Manual, Chapter 5, as an acceptable micro scale practice for ESD (M-5); design standards provided			
RETENTION METHOD: REUSE STORMWATER							
Reuse of stormwater for irrigation	Zoning (development standards)	1	All	59-C-1.326: Cisterns/rainbarrels not included in definition of accessory structure for setback 59-C-5.434. Enclosed building and temporary outdoor storage does not expressly permit expressly cisterns/rainbarrels Rainwater harvesting included in MD Stormwater Manual, Chapter 5, as an acceptable micro scale practice for ESD (M-5); design standards provided	PERMIT cisterns/rainbarrels expressly as accessory structure in rear or side yards as long as setback requirements are met		County's Rainscapes Rewards program gives up to \$1,200 per SF lot, \$5,000 per other lot, \$2,200 per SF lot in a targeted area (degraded watershed) for use of green roof

STORMWATER							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
Greywater systems	WSSC Building Code, IBC Building Code	2	All	International Plumbing Code, adopted by the WSSC in 2009, permits greywater systems for underground irrigation and toilet flushing	PERMIT the use of internal greywater systems within buildings, permitting harvested rainwater to be re-used for non-potable uses within buildings such as toilet flushing	LEED-ND (GIB P1: Green Buildings and P3: Building Water Efficiency); NSW Government Department of Water and Energy; State of Montana	Promote the use of greywater systems within buildings for irrigation and toilet flushing
RETENTION METHOD: LIMIT IMPERVIOUS AREAS							
Permeable pavement	Zoning (parking),	1	All	No mention of permeable pavement in 59-E. Parking; 59-C-1.353. Streets; 59-C-7.58. Parking facilities; 59-C-7.772. Surface parking Included in Section 5.3, A-2 of MD Stormwater Manual	PERMIT the use of permeable pavement (asphalt, concrete, pavers) for parking lots and residential driveways and patios	City of Chicago Green Alley program; Portland Green Streets program	County's Rainscapes Rewards program gives up to \$1,200 per SF lot, \$5,000 per other lot, \$2,200 per SF lot in a targeted area (degraded watershed) for use of permeable pavers
	Subdivision, Public Works, Road Code	1	All	No mention in Ch. 51 Subdivision No mention in Road Code Included in Section 5.3, A-2 of MD Stormwater Manual	PERMIT the use of permeable pavement (asphalt, concrete, pavers) for on-street parking spaces (as % of spaces or more than x distance from entrance) PERMIT use of permeable pavement for new alleys developed as a subdivision	City of Chicago Green Alley program; Portland Green Streets program	County's Rainscapes Rewards program gives up to \$1,200 per SF lot, \$5,000 per other lot, \$2,200 per SF lot in a targeted area (degraded watershed) for use of permeable pavers
Parking lot pavement	Zoning (landscape, parking)	1	TND-Com Sub-Com Urban Campus	59-E-2.41: All driveways must have minimum 10' width for 1-way traffic, 20' width for 2-way traffic	LIMIT size of parking lot drives and parking spaces. SEE PARKING to reduce required number of spaces and size of parking spaces		



STORMWATER							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
Driveway width	Zoning (parking)	1	All	59-E-2.41: All driveways must have minimum 10' width for 1-way traffic, 20' width for 2-way traffic 59-C-15.65: CR Zones - If drive-through is incorporated, maximum 20' driveway for 2-way traffic, 10' driveway for 1-way traffic	LIMIT driveways to 11' wide in areas 1,2,3 within the front yard zone LIMIT driveways to 22' wide in areas 4,5,6,7, except in industrial areas (30') ALLOW driveways to incorporate a center landscape area to decrease impervious area ALLOW driveways to utilize reinforced grass paving		
Additional areas of imperviousness	Zoning (development standards)	1	All	59-A-2.1: Current definition of green area includes: lawns, decorative plantings, sidewalks, walkways, active/passive recreational areas including children's playgrounds, public plazas, fountains, swimming pools, wooded areas, watercourses	LIMIT impervious surfaces in "green areas" of lots		
Minimum street width	Subdivision, Road Code	1	All	Minimum private street width 10' for one-way traffic, 20' for two-way traffic (59-C-8.53; TS-R, 59-C-2.21: Multifamily zones, 59-C-4.336: C-P campus) 59-C-7.482: Planned retirement zone - private street width minimum 12' for 1-way traffic, 22' for 2-way traffic Road Code has different street widths for rural, suburban, and urban contexts	EVALUATE appropriate minimum street widths based on context area		

PARKING							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
LIMIT REQUIREMENTS FOR OFF-STREET PARKING							
Appropriate minimum parking requirements by use and context area	Zoning (parking)	1	All	59-E-3: Existing minimum parking requirements	REEVALUATE minimum parking requirements to ensure that an appropriate amount of parking is being provided per use & context area	San Francisco - Rincon Hill; Rocky Mountain Land Use Institute Sustainable Code	
On-street parking credit towards parking requirement	Zoning (parking)	1	TND-Com Sub-Com Urban Campus	59-C-18.185: In the course of site plan review, Planning Board may allow some on-street parking to fulfill requirement for off-street parking to enhance compatibility, provide additional green space and reduce impervious coverage For home occupations, bed & breakfasts, & accessory apartments, Board may allow use of on-street parking in lieu of providing on-street parking (59-G-2.00(c), 59-G-2.09.2(f), 59-G-2.29(j)(2))	PERMIT non-residential on-street parking to count toward parking requirement	Olympia, WA	
Lower requirements for proximity to transit	Zoning (parking)	1	TND-Com Sub-Com Urban Campus	59-E-3.2, 59-E-3.33: Parking requirements in proximity to Metro station are reduced for commercial, with one standard for <800' and another for 800'-1600' from the station (15%) 59-E-3.33: SF attached and MF uses are granted up to 10% reduction if within CBD or transit station dev't area, 5% if located within Metro station area (1600') 59-C-15.65 CR Zones include lower parking standards for proximity to transit	CONTINUE lower minimum parking within 0.3 mile of public transit station, suggest maximum parking at 75% of traditional minimum CONSIDER eliminating minimum parking requirements for higher density, more walkable areas (TND-Com, Urban)	Pasadena, CA; Rocky Mountain Land Use Institute Sustainable Code	
Public parking credit towards parking requirement	Zoning (parking)	1	TND-Com Sub-Com Urban Campus	59-E-3.1: Board of Appeals may reduce parking requirement in areas where public parking is available or when the meeting center will be utilized only by other commercial or industrial uses which are located within 800' of meeting center and provide their own parking space	PERMIT public parking spaces to count toward minimum parking requirement at a rate of 1 credit per 3 public parking spaces within 800'	Durham, NC; Rocky Mountain Land Use Institute Sustainable Code	
Shared parking	Zoning (parking)	1	TND-Com Sub-Com Urban Campus	59-C-11.6: MXTC zone: Off-street parking for two or more properties may be grouped to serve more than one lot or establishment pursuant to Section 59-E-3.4 59-E-3.4 permits joint parking agreements	CONTINUE to permit one facility to serve multiple users when peak demand differs between the users; EXPAND where this is permitted	Pasadena, CA; Rocky Mountain Land Use Institute Sustainable Code; Chapel Hill, NC	



PARKING							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
Cooperative parking	Zoning (parking)	1	TND-Com Sub-Com Urban Campus	59-E-3.1: Mixed use developments may reduce the amount of required parking by applying different % for different uses	PERMIT a reduction of nonresidential parking requirements for 2 or more users (within 500' of each other) with different peak parking periods who share parking facilities	Berkeley, CA; Rocky Mountain Land Use Institute Sustainable Code	
Share-a-ride program	Zoning (parking)	1	TND-Com Sub-Com Urban Campus	59-E-3.31: 15% parking reduction for participation in county ridesharing assistance program (Silver Spring, Bethesda, and big employment centers); Other areas not covered by the program may reduce parking by written agreement	CONTINUE to offer a reduction in parking for participation in the Share-a-ride program		
Carsharing	Zoning (parking)	1	All	59-C-15.65: CR Zones - every "car-share" space provided reduces total required spaces by 6 spaces for non-residential or 3 spaces for residential	PERMIT reduction in required parking by 6 spaces for non-residential and 3 spaces for residential per designated carshare space	San Francisco, CA; Austin, TX; Rocky Mountain Land Use Institute Sustainable Code	18A-22: Sustainability Working Group directed to investigate carshare program for county
Parking reduction for private incentives	Zoning (parking)	1	TND-Com Sub-Com Urban Campus	59-E-3.31: 1-15% reduction in parking may be approved for private incentives (including carpool, shuttle, transit pass discount programs)	CONTINUE to offer a reduction in parking for private incentives, and make them by right (not discretionary)		
Car-free housing	Zoning (parking)	2	TND-Com Sub-Com Urban Campus	County Council supportive of car-free living, has agreed to give developers discounts to build dense developments near transit stations as long as they also construct bike paths and walkways, put shops and other amenities nearby, and use environmentally friendly construction methods	PERMIT car-free housing within 1/4 mile of public transit, approval requires provisions for bike parking and car-share	Rocky Mountain Land Use Institute Sustainable Code; Vienna	
REDUCE FOOTPRINT OF OFF-STREET PARKING							
Maximum limits for parking	Zoning (parking)	1	TND-Com Sub-Com Urban Campus	59-C-15.65: CR Zones in transit proximity area - maximum number of parking spaces allowed for general retail and restaurant uses is 4 spaces for every 1,000 square feet	REQUIRE parking maximums consistent with level of development, suggest 110% of minimum requirement	Seattle, WA; San Francisco, CA; Portland, OR; San Antonio, TX; Chapel Hill, NC; Rocky Mountain Land Use Institute Sustainable Code	

PARKING							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
Bicycle parking spaces for multi-family units	Zoning (parking)	1	TND-Res TND-Com Urban	59-E-2.3: If more than 50 parking spaces, 1 bicycle parking space required for every 20 auto spaces; Not more than 20 bicycle parking spaces required for any one facility 59-C-15.64 CR Zones At least 0.5 bicycle parking spaces per dwelling unit, not to be fewer than 4 spaces and up to a maximum of 100 required spaces	REQUIRE 1 bicycle space per every 2 required auto spaces for multifamily buildings containing more than 8 units	Seattle, WA; San Francisco, CA; Portland, OR; LEED-ND (NPD Credit 5: Reduced Parking Footprint), San Francisco-Rincon Hill; Chapel Hill, NC	
Bicycle parking spaces for businesses	Zoning (parking)	1	TND-Com Sub-Com Urban Campus	59-E-2.3: If more than 50 parking spaces, 1 bicycle parking space required for every 20 auto spaces; Not more than 20 bicycle parking spaces required for any one facility 59-C-15.64 CR zones require 2 bicycle spaces for the first 10,000 square feet plus 1 additional space for every additional 10,000 square feet, up to maximum of 100 spaces	REQUIRE bicycle spaces based on number of employees and require 1 bicycle parking space for every 10 required auto spaces EXPAND districts that require bicycle parking to encompass most commercial areas	San Francisco, CA, Portland, OR; Seattle, WA; LEED-ND (NPD Credit 5: Reduced Parking Footprint); Chapel Hill, NC	
Increase amount of permitted small car parking spaces	Zoning (parking)	1	TND-Com Sub-Com Urban Campus	59-E-2.22: Small car spaces (7.5' x 16.5') permitted by director/board for up to 10% of spaces, but only where configuration of site prevents using standard size	PERMIT small car spaces for up to 40% of all spaces by right	Dallas, TX	
Dual use for all surface parking lots	Zoning (parking)	2	All		PERMIT dual uses including Farmers Markets and Art Fairs REQUIRE accessible power outlets for temporary uses		
MATERIALS							
Recycled materials	Zoning (parking)	2	All		REQUIRE new paving to use recycled material, suggest 20%	City of Chicago	
Regional materials	Zoning (parking)	2	All		REQUIRE new paving materials to be extracted and manufactured within 500 miles	LEED-NC	

TREE CANOPY AND HEAT ISLAND							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
LIMIT TREE REMOVAL							
Existing tree demolition/ replacement permit	Tree Ordinance	1	All	Montgomery County Forest Conservation Law (Chapter 22A) requires FSD & FCP for those seeking any plan approval, those removing 20,000 square feet of forest on a lot, those seeking to remove any champion or specimen tree State law requires variance for removal of any tree >30" diameter (dbh), county champion tree, any tree with dbh equal to or greater than 75% of current state champion, or any tree on rare, threatened, or endangered list (montgomeryplanning.org) (changes to Forest Conservation Law effective 10/01/09)	CONTINUE to minimize tree removal and protect specimen/champion trees	Austin, TX	Forest Stand Delineation (FSD): identify existing forest cover & proposed environmental features of proposed redev site; Forest Conservation Plan (FCP): limits of disturbance for proposed project & how existing forested site/sensitive area will be protected during & after development State Ordinance: no permit required for lots <1 ac; lots over 1 ac must prepare FSD & FCP. Dev'ts under threshold must reforest to meet threshold; Some cities have their own ordinances.
Tree protection	Tree Ordinance	1	All	State law requires variance for removal of any tree >30" diameter (dbh), county champion tree, any tree with dbh equal to or greater than 75% of current state champion, or any tree on rare, threatened, or endangered list (montgomeryplanning.org) (changes to Forest Conservation Law effective 10/01/09)	CONTINUE current tree protection practices	Rocky Mountain Land Use Institute Sustainable Code; Austin, TX	
Specimen tree preservation	Tree Ordinance	1	All	Specimen trees protected under county's Forest Conservation Law (Chapter 22A); In lieu fees to forest conservation fund are set by County Council resolution, if reforestation or afforestation on- or off-site cannot be obtained	SET fee for champion/specimen trees removed high enough to discourage their removal	Arlington, VA; Pasadena, CA; Orange County, FL	
Public parking credit towards parking requirement	Zoning (parking)	1	TND-Com Sub-Com Urban Campus	59-E-3.1: Board of Appeals may reduce parking requirement in areas where public parking is available or when the meeting center will be utilized only by other commercial or industrial uses which are located within 800' of meeting center and provide their own parking space	PERMIT public parking spaces to count toward minimum parking requirement at a rate of 1 credit per 3 public parking spaces within 800'	Durham, NC; RMLUI	

TREE CANOPY AND HEAT ISLAND							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
REQUIRE NEW TREES							
Parking lot tree coverage (shade)	Zoning (landscape)	1	All	<p>59-E-2.71: Minimum of 5% of parking lot must be landscaped with shade trees; Islands at head of parking spaces must be minimum 8' wide, while islands parallel to parking spaces must be minimum 8 1/2' wide</p> <p>59-C-18.232: Rural Village Center Overlay - at least 30% of parking lot must be shaded by trees - calculate using tree crown area after 15 yrs</p> <p>59-C-15.869: CR Zones - Tree Canopy - 25% coverage at 15 yrs, 50% coverage at 15 yrs get varying amounts of density incentive</p> <p>59-E-2.71: Adjacent to ROW, must have 10' landscape strip w/shade trees every 40' & evergreen hedge at least 3' in height; Adjacent to other property, must have 4' landscape strip w/shade trees every 40'. Support for 30% in Takoma/Langley, Twinbrooks, & Wheaton CBD master plans</p>	INCREASE minimum shade tree coverage to 30% of parking lot surfaces	LEED-ND (GIB Credit 9), Urban Horticulture Institute, Cornell University	
Street Trees	Subdivision, Road Code	3	All	<p>49-33(j): On public road rights-of-way, street trees must be planted in accordance with design standards of the Department of Transportation; Department of Permitting Services, Department of Transportation, and staff of Planning Board should coordinate specific location and species of street tree plantings</p> <p>59-C-13.237: Transit Oriented Mixed Use Zone - Site plan guidelines include "provide a canopy of closely spaced street trees along each street"</p> <p>59-C-15.65: CR Zones - Provide a minimum of 1 tree for every 30' of street frontage</p>	REQUIRE 1 tree for every 40' of street frontage with a minimum of 1 street tree per street frontage	Rocky Mountain Land Use Institute Sustainable Code; LEED-ND (NPD Credit 14)	County plants 1800 trees a year to replace missing street trees

TREE CANOPY AND HEAT ISLAND							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
Un-used parking lot areas	Zoning (landscape, parking)	1	TND-Com Sub-Com Urban Campus	59-E-2.71: Minimum of 5% of parking lot must be landscaped with shade trees; Islands at head of parking spaces must be minimum 8' wide, while islands parallel to parking spaces must be minimum 8 1/2' wide 59-C-18.232: Rural Village Center Overlay - at least 30% of parking lot must be shaded by trees - calculate using tree crown area after 15 yrs 59-C-15.869: CR Zones - Tree Canopy - 25% coverage at 15 yrs, 50% coverage at 15 yrs get varying amounts of density incentive 59-E-2.71: Adjacent to ROW, must have 10' landscape strip w/shade trees every 40' & evergreen hedge at least 3' in height; Adjacent to other property, must have 4' landscape strip w/shade trees every 40'. Support for 30% in Takoma/ Langle, Twinbrooks, & Wheaton CBD master plans	REQUIRE all parking lot areas that are not required drive or parking space to be landscape area		
Require parking lot landscape island divisions	Zoning (parking)	1	TND-Com Sub-Com Urban Campus	59-E-2.71: Minimum of 5% of parking lot must be landscaped with shade trees; Islands at head of parking spaces must be minimum 8' wide, while islands parallel to parking spaces must be minimum 8 1/2' wide	SEE STORMWATER	Rocky Mountain Land Use Institute Sustainable Code	
Limit driveway and parking surface areas	Zoning (parking)	1	All		SEE STORMWATER		

TREE CANOPY AND HEAT ISLAND							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
Private parcel tree canopy requirements	Zoning (landscape)	3	All		REQUIRE a level of tree canopy coverage for all parcels	Rocky Mountain Land Use Institute Sustainable Code	
HEALTHY TREES							
Tree survival measures	Tree Ordinance	2	All		REQUIRE the use of structural soil for all areas within half the diameter of the mature dripline of a tree when those areas are paved with impervious or semi-pervious materials REQUIRE trees to be planted in islands, medians, or parkways of sufficient width to encourage long lived trees (minimum 9' width) REQUIRE a certain percentage of permeable pavement to increase stormwater infiltration to tree roots	Urban Horticulture Institute, Cornell University; Rocky Mountain Land Use Institute Sustainable Code	
IMPERVIOUSNESS & REFLECTIVITY							
Require reflective pavement surface on driveways, parking lots, alleys	Zoning (parking)	1	All	5.6.4 of MD Stormwater Manual - In thermally-sensitive watersheds, designers should consider using materials with SRI values greater than 29 (see Table 5.9) for paving and steep-sloped (≥2:12) roofing	REQUIRE all pavement surfaces to have a Solar Reflective Index of 29 or greater	LEED-ND (GIB Credit 9); SmartCode Sustainable Urbanism Module	
Roof surfaces	Zoning (development standards)	1	All		REQUIRE reflective roof surfaces on all buildings. For flatter roofs, the Solar Reflective Index rating should be minimum of 78. For sloped roofs, the Solar Reflective Index can be lower, with a minimum of 29	LEED-ND (GIB Credit 9); SmartCode Sustainable Urbanism Module	

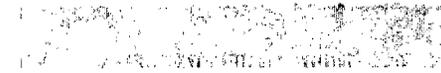


WATER REUSE AND IRRIGATION							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
REUSE							
Encourage greywater use	WSSC Building Code	2	All	International Plumbing Code, adopted by the WSSC in 2009, permits greywater systems for underground irrigation and toilet flushing	REMOVE any code barriers	LEED-ND (GIB P1: Green Buildings and P3: Building Water Efficiency); NSW Government Department of Water and Energy; State of Montana	Promote the use of greywater systems within buildings for irrigation and toilet flushing
Greywater distribution system	Wastewater Policy	3	All			Denver, CO; Austin, TX	Consider implementing a greywater distribution system with a separate pipe for greywater that may be distributed to private water users, large and small scale
IRRIGATION							
Require xeriscape/native plants	Landscape	2	All	59-C-5.474: LSC zone - native flowering trees "should" be used near pedestrian areas 49-33: Landowner allowed to install ground cover in public right-of-way adjacent to property as long as plantings are environmentally sensitive and promote conservation of natural resources/ sustainable landscaping	REQUIRE use of xeriscape/native plants in landscape requirements	LEED-ND (GIB Credit 4: Water Efficient Landscaping)	
Limit waste of irrigation systems	Landscape	2	All		REQUIRE the following for all irrigation systems, when installed: 1) automatic clock-activated permanent system for non residential landscape irrigation; 2) irrigation system does not spray or irrigate impervious surfaces; 3) system has a back-flow prevention device; 4) properly screens mechanical systems from public view	Rocky Mountain Land Use Institute Sustainable Code	

ENERGY							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
DISTRICT ENERGY							
District generation facilities: geothermal	Zoning	1	All	59-C-7.50(h): MXPD zone's objectives include encouraging cooperatives for energy production and heating 59-C-15.86: CR Zones - Provision of renewable energy generation facilities on-site or within ½ mile of the site for a minimum of 2.5% of the projected energy requirement (density incentive)	ALLOW use in all districts; no building required. Permit in open space with an easement	Smart Code Sustainable Urbanism Module	
District generation facilities: nonrenewable and renewable requiring above ground structure	Zoning	1	All	59-C-15.86: CR Zones - Provision of renewable energy generation facilities on-site or within ½ mile of the site for a minimum of 2.5% of the projected energy requirement (density incentive)	ALLOW use in all districts REQUIRE similar building style to fit within context CREATE incentives for areas served by district generation facilities integrated with power grid	Smart Code Sustainable Urbanism Module	
WIND							
Wind turbines on residential lots	Zoning	1	Rural Sub-Res TND-Res		ALLOW turbines roof-mounted (suggest 15' or less in height without special exception and special exception for up to 30' (roof-mounted)) LIMIT noise (suggest not to exceed 60dBA at nearest dwelling) REQUIRE equivalent setbacks from side property lines, centering the unit on the property and minimum 15' setback from the front building face	Chicago, IL; Minneapolis, MN; Rocky Mountain Land Use Institute Sustainable Code	18A-11: Clean Energy Rewards Program provides incentive of \$.005/kwh for providers of clean energy; Cap of 20,000 kwh for residential and 400,000 kwh for commercial
Wind turbines on commercial and multifamily lots	Zoning	1	TND-Res Sub-Com TND-Com Urban Campus		PERMIT in TND-Res, Sub-Com, TND-Com, Urban, & Campus areas, limit height (suggest 40' above roof, ground mounted height proportional to lot size up to 80') LIMIT noise (suggest not to exceed 60 dBA at nearest dwelling) REQUIRE location of turbines near center of building when applicable	AWEA Model Zoning Ordinance, Planning Practice, "Urban Wind Turbines" IEE 2007 www.urbanwind.org	18A-11: Clean Energy Rewards Program provides incentive of \$.005/kwh for providers of clean energy; Cap of 20,000 kwh for residential and 400,000 kwh for commercial

ENERGY							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
Wind and solar farms	Zoning (uses)	1	Rural Campus		PERMIT the development of wind and solar farms in complementary agricultural, infrastructure, or industrial districts REQUIRE setback of at least 1,000' for wind farms	RMLUI; American Wind Energy Association; Manitowoc County, WI	
SOLAR							
Solar panels in residential districts	Zoning	1	Rural Sub-Res TND-Res	59-C-1.326: Permitted in certain residential districts (RE-21, RE-2C1, RE-11, R-200, R-1503, R-90, R-60, R-402, R-4), 20' height limit for accessory structure providing solar energy	ALLOW flush-mounted system in all residential districts PERMIT maximum mounting height of one end of system when not visible from any street (not alleys) PROHIBIT shading of solar panels by new trees after the panels have been installed	Piedmont, CA; Seattle, WA; Rocky Mountain Land Use Institute Sustainable Code	18A-11: Clean Energy Rewards Program provides incentive of \$.005/kwh for providers of clean energy; Cap of 20,000 kwh for residential and 400,000 kwh for commercial
Solar panels in commercial and industrial districts	Zoning	1	Sub-Com TND-Com Urban Campus		ALLOW in all districts	Seattle, WA; Rocky Mountain Land Use Institute Sustainable Code	
Streamline permit process for wind turbines and/or solar panels	permitting	2	All		REQUIRE separate permit and fee for accessory structures for existing development to monitor locations ELIMINATE building permit requirement for homeowners installing flat or flush-mounted photovoltaic panels or tiles on the roof of a one- or two-family home ELIMINATE permit fee for installation on existing structures	Brookhaven, NY; Sonoma County, CA; Rocky Mountain Land Use Institute Sustainable Code	
Passive solar access protection	Subdivision	3	Sub-Res TND-Res		REQUIRE percentage (suggest 70%) of new subdivisions comprised of single-family homes to be oriented for passive solar (consider block, lot, and yard layout)	Boulder, CO; Eugene, OR; San Luis Obispo, CA; Rocky Mountain Land Use Institute Sustainable Code	

ENERGY							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
BUILDING							
Limit building footprint	Policy	2	Rural Sub-Res TND-Res				County passed Bill 10-07 Big House Tax: to obtain a building permit for houses with more than 3,500 square feet of floor space, the new owner must pay a \$1-per-square-foot tax (up to 7,500 square feet)
Shading of glazing	Zoning	2	All		REQUIRE shading of high levels of glazing on all building faces except north, via roof overhangs, awnings, screens	SmartCode Sustainable Urbanism Module, LEED-ND(GIC Credit 1: Certified Green Buildings, GIB Credit 2: Building Energy Efficiency)	
Operable windows	Zoning	3	All		REQUIRE percentage of operable windows on all buildings, such as 20% of windows per building face	Smart Code Sustainable Urbanism Module, LEED-ND(GIC Credit 1: Certified Green Buildings, GIB Credit 2: Building Energy Efficiency)	



FOOD PRODUCTION							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
LIVESTOCK							
Raising female chickens, other fowl, and rabbits	Zoning (uses)	1	Rural Sub-Res TND-Res (TND-Com, Urban?)	59-C-1.326, 59-C-9.45: "Agricultural" use permitted in rural and most single family residential districts (agriculture is defined, but not ag uses); Accessory structure to house animals must be 25' from lot line & 100' from dwelling on another lot	DEFINE agricultural uses to include raising female chickens, other fowl, and rabbits ALLOW in residential districts: 1) Limit 3 animals per lot in TND-Res, TND-Com, & Urban areas & 6 animals per lot in Rural (residential not agricultural lots), Sub-Com areas; 2) Must be penned; 3) Any coop or structure in which a bird is kept must be 20' from a neighboring residence (change from current 100')	Missoula, MT; San Francisco, CA; Honolulu, HI; Madison, WI; Seattle, WA; Ann Arbor, MI	
Raising goats	Zoning (uses)	1	Rural Sub-Res TND-Res	59-C-1.326, 59-C-9.45: "Agricultural" use permitted in rural and most single family residential districts (agriculture is defined, but not ag uses); Accessory structure to house animals must be 25' from lot line & 100' from dwelling on another lot	DEFINE agricultural uses to include raising goats ALLOW in residential districts: 1) Limit 1 animal per lot in TND-Res areas & 3 animals per lot in Rural (residential, not agricultural lots), Sub-Com areas; 2) Must be penned; 3) Any structure in which an animal is kept must be 25' from a neighboring residence (change from current 100'); 4) prohibit slaughtering	Morgan Hill, CA; Seattle, WA	
Raising farm animals (cow, horse, sheep, pig)	Zoning (uses)	1	Rural Sub-Res TND-Res	59-C-1.326, 59-C-9.45: "Agricultural" use permitted in rural and most single family residential districts (agriculture is defined, but not ag uses); Accessory structure to house animals must be 25' from lot line & 100' from dwelling on another lot	DEFINE agricultural uses to include raising farm animals (cow, horse, sheep pig) ALLOW in residential districts: 1) Limit 1 per 20,000 sf (or 1/2 acre); 2) Must be penned; 3) Any structure in which an animal is kept must be 40' to 100' from a neighboring residence; 4) prohibit slaughtering	Redwood City, CA; Seattle, WA	
Beekeeping	Zoning (uses)	1	Rural Sub-Res TND-Res (TND-Com, Urban?)	59-C-1.326, 59-C-9.45: Permitted as "agricultural" use in rural and most single family residential districts (agriculture is defined, but not ag uses); Accessory structure to house animals must be 25' from lot line & 100' from dwelling on another lot	ALLOW beekeeping in residential districts: 1) maximum 2 hives; 2) must be in rear 1/3 of lot; 3) 5' setback from rear/side lines; 4) 6' flyover barrier required; 5) no outdoor storage of bee paraphernalia	Honolulu, HI; Seattle, WA; Ann Arbor, MI	

FOOD PRODUCTION							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
GARDENS							
Community gardens	Zoning (uses)	1	All	No standards defined	ALLOW community gardens within most open space zones PERMIT open space and community gardens to count toward green area/permeable requirements	Seattle, WA; Minneapolis, MN; LEED-ND (NPD Credit 13: Local Food Production); St. Petersburg, FL	Community gardens/ open space not defined in existing code, no regulations about whether they qualify as green space or types of activities permitted
Residential vegetable gardens in side yards	Zoning (uses)	1	Rural Sub-Res TND-Res	Definition of green area does not include vegetable gardens	ALLOW vegetable gardens in side yards (amend definition of green area to include vegetable gardens). Covenants may not restrict.	LEED-ND (NPD C13); Rocky Mountain Land Use Institute Sustainable Code	
Solar access to backyard area on small lots	Zoning (development standards, landscape)	2	TND-Res		LIMIT shading of south yards for small-lot development (if blocking solar access with trees with mature heights of 25' or greater)	Ashland, OR; Boulder, OR; Clackamas, OR	
FOOD SALES							
Farmers' Markets	Zoning (uses)	1	Rural Sub-Res TND-Res TND-Com Urban	59-C-1.31: Country market a Special Exception in some residential zones and not allowed in higher density zones	ALLOW Farmer's Markets in noted context areas as well as open space and civic districts SEE PARKING for provisions for dual use parking lots	Minneapolis, MN; LEED-ND (NPD Credit 13: Local Food Production), Rocky Mountain Land Use Institute Sustainable Code	
Food licenses	permitting	1	All	Regulations for such products are confusing and fees are cost prohibitive for many participants of farmers markets	STREAMLINE permitting process REEVALUATE permit fees to encourage local agriculture		
Farm stand in residential areas (selling)	Zoning (uses)	1	Rural Sub-Res TND-Res		ALLOW with permit, no permanent structures, setbacks from front property line, comply with health standards	Rocky Mountain Land Use Institute Sustainable Code	
Fruit bearing trees in lieu of shade tree requirements	Zoning (landscape)	1	All		PERMIT fruit bearing trees to be used in lieu of shade tree requirements		Yoshino Cherry tree and Callery Pear tree included in permitted tree list



LIGHTING							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
LIGHTING							
Non-residential lighting curfew in applicable areas	Lighting Ordinance	1	All	59-C-9.31 Equestrian Facility in Ag Zone: No illumination of outdoor arena after 10 pm, except on Sunday through Thursday, when no illumination is permitted after 9 pm 59-F-4.1(e)(5) Illumination of Signs near Residential: Any sign on lot/parcel within 150' of residential use has a maximum of 100 sf and must be illuminated only during hours of public business 59-C-15.863: CR Zone gives density incentive for those projects utilizing standards established by IDA for dark skies; additional density bonus given if exterior lighting plan is integrated into an energy efficiency plan for the site	REQUIRE non-residential lighting be turned off or reduced by at least 30% between midnight and start of business. Permitting required for special situations.	IDA Model Ordinance	
Lighting zones	Lighting Ordinance	2	All	59-C-15.863: CR Zones give density incentive for those projects utilizing standards established by IDA for dark skies; additional density bonus given if exterior lighting plan is integrated into an energy efficiency plan for the site	ASSIGN appropriate lighting zones to specific context areas REQUIRE lighting standards specific to each lighting zone consistent with ambient light levels, densities, and community considerations	IDA Model Ordinance; LEED-ND (GIB Credit 17); Flagstaff, AZ; Tucson, AZ; Boulder, CO; SmartCode (by transect); Homer Glen, IL	LZ0 - no ambient lighting; LZ1 - low ambient lighting; LZ2 - moderate ambient lighting; LZ3 - moderate ambient lighting; LZ4 - moderately high ambient lighting; LZ5 - high ambient lighting
Light trespass; lamp wattage and lumens; shielding requirements	Lighting Ordinance	2	All	59-C-9.31 Equestrian Facility in Ag Zone: Outdoor arena lighting must direct light downward using full cut-off fixtures 59-G-1.23 Lighting in residential zones: Glare & spill light control devices to minimize light & glare trespass; Lighting levels along the side and rear lot lines may not exceed 0.1 footcandles 59-F-4 Permanent Signs: Requires enclosed lamp design or indirect lighting from shielded source that prevents glare beyond property line "Lighting is not to reflect or cause glare into any residential zone" RH Zone, auto filling station, auto rentals, car wash, combination retail store, drive-in restaurant, meeting center, recreation/entertainment center (commercial), equestrian facility in ag zone, country inn zone, rural village center zone 59-C-15.863: CR Zone gives density incentive for those projects utilizing standards established by IDA for dark skies; additional density bonus given if exterior lighting plan is integrated into an energy efficiency plan for the site	REQUIRE that outdoor lighting complies with wattage, lumen and shielding requirements as outlined according to the lighting zones. All outdoor lighting fixtures conform to the Building Code, Electrical Code and Sign Code as applicable	IDA Model Ordinance; LEED-ND (GIB Credit 17); Boulder, CO; Homer Glen, IL; Flagstaff, AZ; Tucson, AZ; SmartCode Sustainable Urbanism Module	

LIGHTING							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
Energy efficient lighting	Lighting Ordinance	2	All	59-C-15.863: CR Zone gives density incentive for those projects utilizing standards established by IDA for dark skies; additional density bonus given if exterior lighting plan is integrated into an energy efficiency plan for the site	REQUIRE total site lumen limits for noncommercial sites (TND-Com, Sub-Com, Urban, Campus), with the highest total site lumen limit occurring in Urban context areas REQUIRE energy efficiency requirements to encourage efficient lighting design in all areas	IDA Lighting Code Handbook; Flagstaff, AZ; Tucson, AZ	
Height limits for lighting	Lighting Ordinance	2	All	59-C-2.23 R-H Zone (high density multifamily): Luminaries on parking lots must be less than 10' above ground level & must not shine in apartment windows 59-C-5.47 LSC Zone (Life Science Center): Maximum pole height of 24' with cut-off luminaries 59-C-15.863: CR Zone gives density incentive for those projects utilizing standards established by IDA for dark skies; additional density bonus given if exterior lighting plan is integrated into an energy efficiency plan for the site	REQUIRE maximum pole height for lighting of 20' in residential areas (rural, Sub-Com, TND-Com) and 25' in all other areas	Homer Glen, IL; Boulder, CO	
Nighttime dimming	Lighting Ordinance	2	All	59-C-9.31 Equestrian Facility in Ag Zone: No illumination of outdoor arena after 10 pm, except on Sunday through Thursday, when no illumination is permitted after 9 pm 59-E-2.6 Lighting (for parking): Adequate lighting shall be provided for surface parking facilities and structured parking as required by construction codes...Shall not cause glare or reflection into adjacent residential or interfere with safe operation of vehicles	REQUIRE the ability to dim light fixtures in large exterior facilities such as parking lots and recreational fields	LEED-ND (GIB Credit 17)	
Control lighting of signage	Zoning (signage)	2	TND-Com Sub-Com Urban Campus	59-F-4 Permanent Signs: Requires enclosed lamp design or indirect lighting from shielded source that prevents glare beyond property line 59-F-4.1(e)(5) Illumination of Signs near Residential: Any sign on lot/parcel within 150' of residential use has a maximum of 100 sf and must be illuminated only during hours of public business	REQUIRE that exterior lighting for signage is down directed, shielded and includes lamp type standards. Exemptions for certain types of signs including temporary and holiday	IDA Lighting Code Handbook; Tucson, AZ; Flagstaff, AZ	

WASTE REDUCTION							
Sustainability Objective	Code Section	Priority Level	Applicable Context	Existing Code	Recommended Changes	References	Notes
CONSTRUCTION WASTE							
De-couple demolition and building permits	Permitting	1	All		SEPARATE these permitting processes, allowing sufficient time for deconstruction of buildings	Chicago, IL	
Expand permitted locations for construction debris reclamation facility	Zoning (uses)	1	TND-Com Sub-Com Campus	Construction debris reclamation facility permitted only in I-2 (59-C-5.21) & RS (Rural Service, 59-C-9.3)	PERMIT construction debris reclamation/reuse/recycling centers in expanded industrial and commercial locations with development standards when appropriate		
Require reuse/recycling of demolition materials	Separate Ordinance	2	All	Recycling of construction/demolition debris not required	REQUIRE a minimum of 50% of construction and demolition debris produced on a construction site to be recycled or reused	City of Chicago Municipal Ord. 11-4-120; LEED-ND (GIB Credit 16); Oakland, CA; Contra Costa County, CA	
SMALL SCALE REUSE & RECYCLING							
Expand permitted locations for recycling facility	Zoning	1	Sub-Res TND-Res Sub-Com TND-Com	Recycling facility permitted only in I-1, I-2, I-4 (59-C-5.21)	PERMIT small-scale recycling collection centers with development standards in or adjacent to residential areas (Sub-Com, TND-Com)	LEED-ND (GIB Credit 16); Dallas, TX; Richmond CA	
Reuse of existing infrastructure for redevelopment	Subdivision	3	All		REQUIRE reuse of existing infrastructure for redevelopment	LEED-ND (SLL Pre-req 1 [infrastructure-water service] and SLL Credit 3 [transit infrastructure])	
Reuse of existing buildings	Zoning	3	All	50-29(b)(2): Houses greater than 5,000 sf are subject to Resubdivision Criteria 59-C-15.84 CR District provides density incentive for building adaptive buildings that can adjust to diverse uses over time	CONSIDER incentives for re-use or expansion of existing buildings (Building Code, permit fee waivers) PERMIT houses greater than 5,000 sf to be reused as senior housing, duplexes, or triplexes without being subject to Resubdivision Criteria (in Sub-Com, TND-Com)	LEED-ND (GIB Credit 5 and Credit 6); Los Angeles, CA: Adaptive Reuse Ordinance	

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