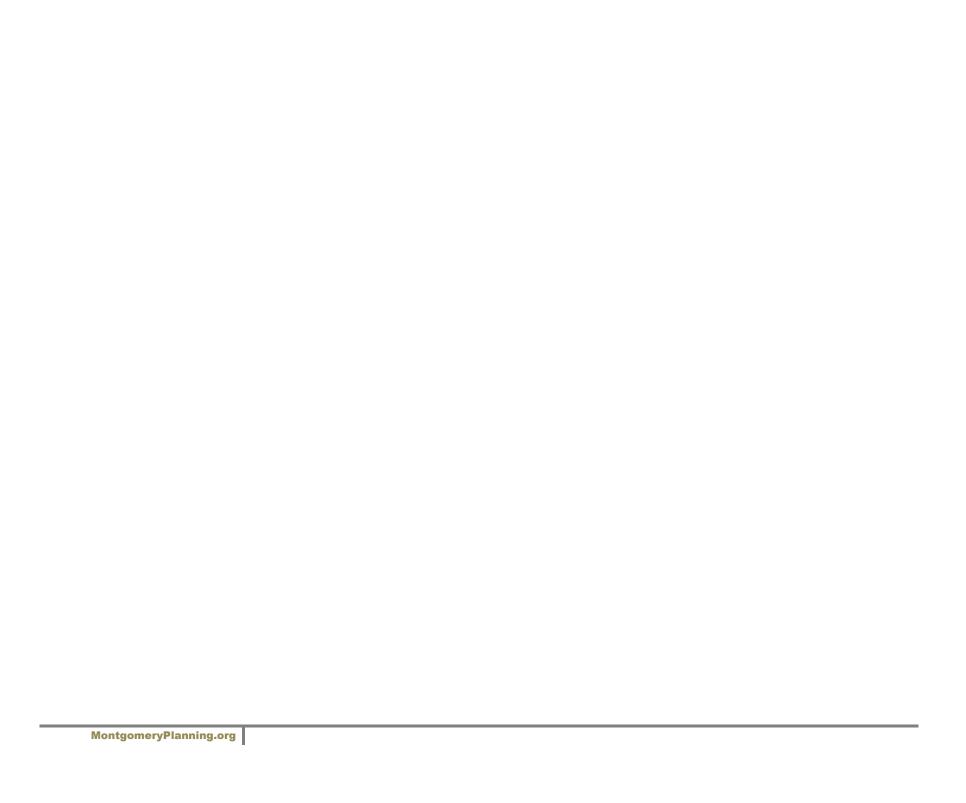
# zoningdiscovery

montgomery county council
PRESENTATION TO PHED COMMITTEE

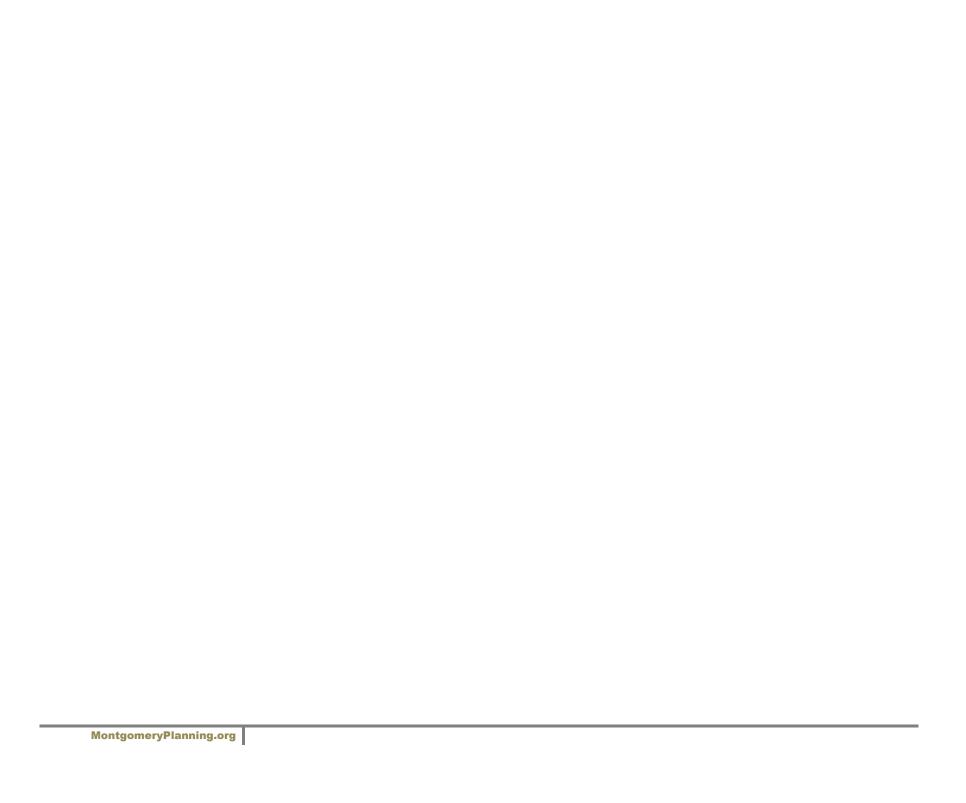
montgomery county planning department

The Maryland-National Capital Park and Planning Commission



# table of contents

overview	3
why	6
how	7
goals	7
changing how we think	9
thinking new	11
direction	14
discovery	16
processes	16
zones	18
development standards	24
organization	53
outreach	57
implementation	58



## overview

This report reflects the discovery of the current zoning code and outlines new directions that would form the basis for a new document. We address the fundamentals of the ordinance, suggest some directions, and as important, outline methods for easy organization and display of the information. Zoning should be about creating quality of place.

The ordinance can set the stage for achieving this vision by promoting infill of appropriate scale and creating neighborhoods of mobility, where sustainable design makes great public spaces. This approach can position the county to grow smart, with a minimum of red tape.

# why

Communities across the country have recently completed or embarked on zoning change to simplify, rationalize, and more importantly, establish a framework for the evolution of their zoning ordinances. Their codes, like Montgomery County's, had become a patchwork of ideas reflecting the good ideas of their time, but were failing to achieve an overall goal. Like Montgomery County, they saw out-of-date provisions, antiquated zones, and cumbersome processes and used them as the catalyst for timely updates.

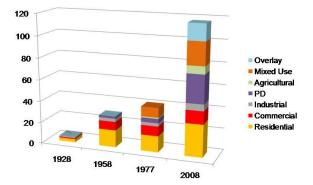
"The Zoning Ordinance is a patchwork of old and new rules. It is one of the most complex, overly complicated zoning ordinances that I have worked with. To even the most sophisticated planners, lawyers, and architects it is a morass of processes and procedures. A complete overhaul is long overdue. The ordinance must be completely rewritten to focus on 21st century planning practice."

—focus group participant

The Code has grown by 100 pages in the past year alone with no sign of any slowdown. As more infill development occurs, the pressure to regulate will grow. While the five zones and 15 pages of the 1928 Code are unrealistic, we can rethink our approach to simplifying the Code's regulations and processes.

growth in zones, pages, and complexity

year	z o n e s	pages
1928	5	15
1958	29	135
1977	41	274
2008	119	1000



Amending the document will not achieve the kind of change needed to make the Code a document that keeps the County regulatory process competitive. The current Code is the result of ongoing uncoordinated amendments attempting to keep pace with development trends. This discovery process for the first time, identifies a **direction** for the Code, which should be reflected in the organization and policy.

## how

The purpose of this diagnosis is to drill down to the foundations of the document. To understand why each provision has evolved and to then consider how it fits into the broader approach we need to take to guide development over the next three decades. This document addresses both the problems and how we can address them. The analysis is informed by examples of best practices in similar places and on similar issues. All aspects of the code are on the table as we determine the reasoning behind a provision and whether it is still relevant. Recommendations will be examined

and tested to create a document that addresses development and redevelopment today and into the future. Simplification and ease of use will be a priority.

## dissecting the code included—

- public outreach breaking down the code
- assessing issues
- researching best practices
- discussing ideas

# goals

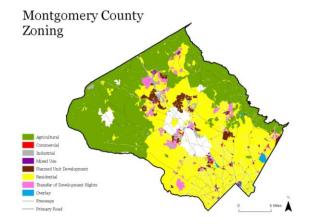
A detailed review of the Code coupled with 14 outreach sessions led to the development of several goals for this diagnosis effort. The following goals will shape the preparation of a new Code that will direct growth for the next 30 years.

## simplify and streamline the standards and process

Zoning requirements and processes should be clear, simple, and consistent. Diagrams can be used to convey complex information. A rewrite will eliminate repetition and small differences that make the code so difficult to use. Costs to the public and County would be reduced through easier interpretation.

## match land use to development patterns

Much of the Code is geared to development of greenfields. But only four percent of the County remains to be developed from greenfields. The Code should reflect the shift to infill development and redeveloping commercial parking lots near transit stations with mixed uses and a balance of jobs and housing.



## rationalize development standards

Whether it is called performance zoning or form based zoning, the basics of zoning remain the same. The purpose of standards is to maintain the relationship of buildings to the spaces, public and private, and buildings around them. Weeding out the obsolete requirements will allow us to evaluate the best rules and develop new ideas to achieve our development goals.

## things to regulate

- us
- floor area
- sethacks
- landscaping
- height
- □ lot size
- parking and loading

## accommodate change and recognize consistency

Infill development should be regulated simply and consistently to encourage mixed uses at strategic locations. Infill on small parcels within established neighborhoods should be permitted, but with controls to maintain separation and general building characteristics.

The updated Code must be formatted to direct change in a logical manner and prevent the document from regressing back to a patchwork of amendments. Its organization and content should reflect the need for variances that will arise as more infill development occurs.

## update technology

Use the most current technology to create legal zoning maps that convey more information, faster, and with greater accuracy. At the same time, public accessibility will be enhanced, lowering costs for interpretation.

#### mixed-use zones

Past efforts to regulate mixed uses have created 15 zones attempting to regulate jobs, housing, and services. Yet none of these zones allow the mix of uses necessary to achieve planning goals.

# changing how we think

# residential growth-from greenfields to infill

Growth in the County has been predominantly greenfield development with single family homes reaching up and into the Agricultural Reserve. The growth patterns of the past will change with so little "new" land to develop.

Small lot infill projects will increase. With 97.5 percent of the residentially zoned land in the County for single family house construction and most already built out, there will be more multifamily housing along the transportation corridors.

## future development patterns

- single family home construction will increasingly be through small lot, infill projects
- redevelopment will be primarily of parking lots and strip malls that dominate main roads
- multifamily buildings located at transit nodes and business districts will make up a greater share of new unit construction
- compact, mixed-use development will make best use of existing infrastructure

Regional forecasts predict 1.6 million more people will live in the region by 2030. Of that growth, 207,000 people are expected to settle in Montgomery County, a 22 percent increase over the current 930,000 people. These new residents will need housing.

Equally important are the demographics of the new growth.

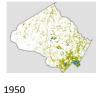
- the number of residents over 65 years of age will increase by 81 percent
- the number of dual parent households will decrease
- household size will get smaller
- households with children will also decline

Changing our zoning laws to encourage a mix of unit types and sizes in strategic growth areas can help ensure a healthy housing market. Minimum lot size requirements, subdivision patterns, and parking standards, all intended to regulate large houses on large lots, need to be evaluated against sustainability goals.





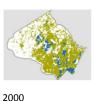














2007

MontgomeryPlanning.org

## job growth

an aging population
Between 2002 and 2007 the median age of residents in the county increased from 37.1 years to 38.9 years, a five percent increase. As the County ages, providing mixed uses and housing alternatives will become more important.

By 2030, regional job growth is expected to increase by 1.2 million people (39 percent). Montgomery County's share would be about 170,000 people (a 34 percent increase). Master plans are calling for mixed uses with access to services. But our current pattern of office parks in the middle of large expanses of lawn should not be repeated. As transportation costs climb, these spaces will be challenged to maintain high lease rates. In fact, we should pursue zoning that allows other uses to fill in the vast lawns surrounding many of these sites.

## growing smarter

With 47 percent of County land dedicated to agricultural or park purposes and 47 percent of the remaining area already built, future growth will have to occur in underused areas. There is a lot of space where intensification is both necessary and desirable, including more than 7,000 acres of surface parking lots, undeveloped land on top of transit stations, and other sites suitable for infill development. Encouraging mixed uses in these areas will result in sustainable growth.

## benefits of mixed-use infill

- walkable development
- reduced car trips—less loca congestion
- greater use of existing infrastructure
- greener development—less impervious surface

Only four percent of the County's land is left to develop. Future growth will be on underdeveloped areas like surface parking lots and should be sustainable infill with mixed-use buildings.



Yet the many strip malls zoned C1 and C2 are not zoned for mixed uses. With a zoning ordinance written for the past, we must change if redevelopment is to occur in a sustainable way. The alternative is to watch amendments pile up, adding to the complexity of our regulatory system.



Reinvestment areas like downtown Silver Spring and emerging areas like downtown Wheaton are where most of the future growth will occur and where zoning should promote mixed uses.

MontgomeryPlanning.org

# thinking new

We are regulating past development trends and confusing future growth patterns through a myriad of zones and associated regulations. The market is shifting to smaller, energy efficient buildings and more mixed-use development. The recent crash in the housing market shows the most vulnerable segment of the market—homes located farther away from services, in the outer suburbs. As the rewrite process moves forward, we will explore new ideas to set our regulatory framework for the next 30 years.

## big ideas

- *separating use from lot standards*
- no single purpose commercial areas
- floor area ratios in all districts
- interactive GIS mapping
- rationalizing processes
- consolidation of zones
- rethinking footnotes

Mixed-use retailing should replace single purpose commercial districts. Surface parking lots on transportation corridors and strip malls are good candidates for redevelopment.



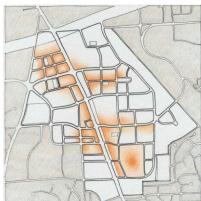
## planning framework

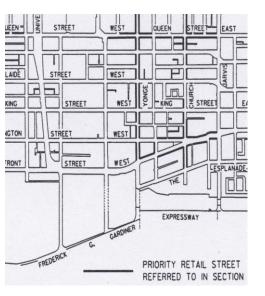
Emerging master plans are developing recommendations for sustainable growth that combines social and physical objectives to develop interactive communities in areas where transit and infrastructure already exist and can flourish with higher density. The plans also introduce design guidelines that build on a regulatory framework that will be set out in accompanying zoning.

## three elements of the planning hierarchy

- master plans establish a vision—describing the goals and the regulatory policies to get us there
- zoning implements the vision—setting out form-giving details and standards
- design guidelines elaborate on the vision—"coloring the landscape and setting the relationship between public and private spaces







Planning documents should work together to encourage active retail streets. The master plan highlights retail priority streets; the Code defines which portion of the street, for example, corners; and the design guidelines address windows, weather protection, streetscape, etc.

## growth policy elements

- design—better buildings and spaces
- diversity—promoting choices in housing, work, recreation, and services
- connectivity—linking transportation, jobs, services, and housing
- environment—green buildings, transportation options, and lifestyles

Four elements in the emerging growth policy guide the new master plans—design, diversity, connectivity, and the environment. All look to promote more sustainable growth.

These same elements must guide the zoning rewrite to effectively implement future master plans. Rationalizing how we use the available zoning tools, how we regulate uses, and how we apply standards to the built environment all combine to create a more sustainable County.

## design for people

Zoning can define and enhance public spaces. Zoning defines the uses, the size, distances and percentages that combine to make up our buildings, public spaces and ultimately, how people perceive the community. Think of Rockville Pike where zoning allows for single-use buildings with large setbacks,

surrounded by parking lots. As a result, the White Flint portion of Rockville Pike is a pedestrian wasteland.

The most used public spaces in any community are the sidewalks. By defining what happens along our sidewalks and within the publicly visible areas, spaces designed for people will result in a more welcoming environment for the community. The recent buildings on "the Pike" have begun to generate pedestrian activity by getting away from single purpose buildings, creating street activating uses and internalizing parking.



Rockville Pike could have active sidewalks like downtown Silver Spring if the zoning permitted and guided sustainable development.

## design for people means

- creating mixed-use neighborhoods at strategic locations
- focusing higher densities at transit
- building street activity
- promoting services within walking distance of established neighborhoods
- encouraging quality urban and open spaces

## design for green

The zoning ordinance can create a constituency for buildings and activities that reduce carbon emissions and protect the regional watersheds. There is much zoning can do to encourage greener environments.

- fewer single purpose zones
- compact development in new subdivisions and on infill sites
- taller buildings with small floorplates where appropriate
- accessory units
- green roofs
- on-site energy production
- reduced parking requirements
- limited surface parking areas



A successful compact subdivision with smaller lots, a range of house sizes, less paving, and sustainable landscapes.

Programs like Leadership in Energy and Environmental Design (LEED) and Sustainable Sites Initiative are popping up in local government legislation around the country including Montgomery County. The Sustainability Working Group's evaluation of LEED for Neighborhoods and other ideas, like compact design, will inform the rewrite.

## design for connections

Sustainable zoning includes creating connections to our everyday activities—work services and places where we live and play. Past growth patterns isolated jobs and housing opportunities, though the County has begun to move away from single purpose residential areas.

## creating connections

The potential to create places for people to connect to where and what they need is an important part of zoning.



Redevelopment of downtown Silver Spring has created multiple connections to transit, jobs, housing, entertainment and services.



The remaking of downtown Silver Spring illustrates how strategic investment can remake an auto centered environment into a more sustainable space where pedestrians are encouraged to use transit and walk to shopping and services.

The suburban growth in Germantown has led to the common problems of an unchecked mix of uses. The market has provided lots of housing without providing nearby jobs and services to prevent additional traffic congestion. As older master plan areas are rethought, it is important to make sure the zoning is in place to achieve broad public objectives like jobs—housing balance and access to services, housing, and transit.

# zoning connections

- mixed use zoning
- sufficient zoned land for services
- encourage retail diversity
- zoning for infill
- alternate transport like bicycles

## direction

The rewrite's priority is to simplify the rules and accommodate future development, resulting in a new Code guided by the following objectives.

- increasing accessibility to information through technology and common sense
- rationalizing repetitive provisions and the Code's organization
- encouraging infill reinvestment
- deleting obscure provisions

## vision

The current ordinance lacks vision. Uncoordinated amendments have not maintained a common objective. The new ordinance should work in tandem with the emerging growth policy and master plans to create the next step in the evolution of the wedges and corridors plan that has guided development since the 1960s. The County is now moving into the reinvestment phase that all maturing suburbs experience.

The mission of the new ordinance should be to create quality of place. We can achieve this by promoting infill of appropriate scale and creating neighborhoods of mobility where sustainable design enhances the public realm.

## future growth needs

- *infill development on small sites in established areas*
- rethinking commercial and office areas
- processes that address subtle differences
- sustainable development
- a direction for industrial policy

Infill development on Georgia Avenue just north of the Silver Spring CBD where higher density blends in well with the existing community.



This direction will include downloading information usually included in master plans to the zoning code. An inflexible system requiring master plan amendments for basic design changes has delivered mediocre results. Maturing suburbs around the country have adapted their plans and codes for this very purpose.

Property owners should be able to open the ordinance and quickly understand the parameters that apply to their property. In most jurisdictions, a building permit approval is determined through compliance with the zoning ordinance, not a master plan.

## organization

Generally, the Code is logically organized, beginning with general provisions moving to sections dedicated to use categories. The organization breaks down through the numerous amendments that don't follow the basic format. Some footnotes regulate use, special exceptions repeat

footnotes, general provisions are scattered, and repetition is considerable.

The Code's cumbersome numbering system doesn't help. We will consider a clearer system that could work within the overall County Code, making references much simpler.

The Code's organization is critical to its usability and any new document should have a guide that directs how the document is to be amended in the future. Subsequent legislators will follow the guide so the Code doesn't require another rewrite 10 years from now. How amendments are organized is key to maintaining a clear document. General provisions must be kept general and changes specific to small issues or parcels of land need to be linked to property addresses or parcel numbers so owners can locate them easily.

## coordination

In the past, amendments have not been coordinated. New zones have been added without regard to the current hierarchy; processes are added with distinctions so subtle they are not comprehensible, creating a document people can't understand. As a result, a lot of staff time is spent on interpreting, amending, and applying convoluted zoning regulations.

## organizational direction

- general provisions in one section
- consolidating districts by use—residential, mixed use, etc.
- use tables and diagrams
- more definitions to reduce repetition and enhance consistency and interpretation
- interactive online links to property addresses and parcel numbers
- new online GIS (geographic information system) maps, accessible to everyone, easily updated, and with enhanced capabilities for displaying information

#### Coordination issues include-

- uncoordinated amendments
- too many districts
- redundant text and processes
- outdated terms and policies
- zoning to extremes
- overly complex

#### content

Many current zones and standards are not helpful when evaluating infill or grayfield development. The lot standards that apply to typical subdivision patterns don't help with infill or in moving to a greener environment. These issues will be highlighted in the discovery section of this report.

#### content issues include-

- 15 different commercial zones, many permitting only single uses—the Code should be moving to a single mixed-use zone
- 13 different office designations, a real issue when technology is evolving so quickly that new definitions can't keep up
- some lot size requirements are environmentally insensitive
- parking standards are excessive

# discovery

Experienced staff has worked through each aspect of the Code to identify where improvements can be made. The work benefited from outreach sessions hosted by a facilitator, who brought together a range of ordinance users, including staff, residents, and representatives from the legal profession. The dominant theme is that the current Code is far too complex and that a complete overhaul is necessary to bring it back to a coordinated form that is suited to the future growth of the County.

What follows is an outline of what has been discovered through the review stage of the rewrite process.

## processes

## plans

The Code references seven different types of plans each applied differently to zones and uses. The distinctions are subtle, and may defy explanation. In most cases similar information, approvals, and hearings are required and there may be only slight differences in the necessary findings.

There is redundancy and complication, creating problems for reviewers, builders, and the public. Adding to the problems are multiple waivers and provisions that contradict the subdivision regulations.

## plan types

prun types		
plan	description	
development plan	Required for certain zones. The plan	
	must show how the proposed	
	development meets the standards and	
	purposes of the applicable zone.	
project plan	Required in CBD, RMX, MXTC, TOMX zones as part of an application for optional method development.	
site plan	Required for a building permit in floating zones, most overlay zones, and for optional method in most zones, cluster, MPDU, or TDR options.	
diagrammatic plan	Required for an application to rezone to MXN.	
schematic development plan	Part of the application for certain rezonings.	
urban renewal plan	A plan approved under Chapter 56 for an urban renewal area.	
supplementary plan	Required for the land use portion of a development plan and as part of an application for reclassifying land to the TS zone.	

Seven different types of review are applied in different situations. The differences should be rationalized.

## discussion

Planning staff is working to rationalize these various plans on two fronts. Alongside the rewrite effort, a staff group is examining ways to combine the preliminary and project plan processes as well as ways to combine other plans to shorten the review process. This work will impact the Code rewrite.

The rewrite will examine how and why processes are applied to various development situations to bring consistency to how they are applied.

We will also explore the best time in the process to discuss important built form controls. They are currently reviewed as part of the site plan process, at a point when a development plan or project plan review may have already precluded good design solutions.

While streamlining the plans would be a big improvement, it would also reduce the number of speculative applications where there is little intent to redevelop. With over 25,000 units and 30+ million square feet of non-residential space approved and unbuilt, a portion of this inventory fits this category. Staff believes the various process requirements can be shortened while enhancing the outcome.

#### ideas

Streamline the Code's various process requirements.

#### variances

Compared to other jurisdictions, the County's variance process is restrictive. The requirement to show hardship is interpreted as being inflexible. If an application does not meet this standard, a variance is not approved.

The outreach sessions highlighted frustrations with the current procedures. People suggested that "variance standards should not be so tight and narrow." This idea fits in well with changing the focus of the Code from greenfield development to tailoring infill development to neighborhood character.

#### variance standards

"...by reason of exceptional narrowness, shallowness, shape, topographical conditions, or other extraordinary situations or conditions peculiar to a specific parcel of property, the strict application of these regulations would result in peculiar or unusual practical difficulties to, or exceptional or undue hardship upon, the owner of such property."— quote from the Code

#### discussion

In maturing areas around the country, variance processes acknowledge that general standards cannot possibly anticipate all situations, especially for redevelopment and infill. Zoning amendments are often required for changes that other communities consider variances. The County's approach adds to the cost of development.

The need for variances will increase as new development becomes redevelopment. Simplifying the process while enhancing the outcome can be achieved through administrative procedures.

## variances and redevelopment



General provisions cannot plan for all nuances of land development, especially when the activity is redevelopment or infill. For example, an odd shaped lot may require different setbacks or minimum lot sizes to achieve compact, sustainable development. The variance process should allow for reconfiguring standards where good design will result.

## ideas

- have the Board of Appeals take a broader view concerning circumstances or conditions peculiar to a specific parcel of property
- create a unified and broad process allowing certain standards to be waived if for example, a site plan shows that a development would not have a negative visual or environmental impact on adjacent properties
- look at best practices in other communities where variances are successfully handled to cope with development in mature communities.

#### zones

A sound planning approach to zones means having as few as possible. Generally, residential and non-residential zones can be grouped into three categories—high, medium, and low density. This grouping is based on the floor area limits that apply to a use category. Discussed below, is how the use, and the standards like density, should be separately regulated.

The current code contains 119 zones. This unwieldy system grew for several reasons.

- using lot standards to define a zone
- creating too many mixed-use zones
- attaching a TDR designation to an existing zone
- the growth in planned development zones

There has been no attempt to cleanup zones that are not used, that have been superseded or that no longer make sense, like single purpose commercial zones. For example, there are 15 zones that attempt to achieve a balance between jobs, housing, and services. None of these zones really enable the County to specify the use mix that will achieve diversity at a fine grained level. The "mrr" zone is for quarries, but of the few in the County, none have this zoning.

Nine of the Code's zones are not mapped or used anywhere in the County. The Planned Development (PD) zones, intended for develop mixed use areas in the 1970s, today are being applied to infill development. They may still have a role to play, especially considering the County's 106 existing commercial centers where mixed use zoning is not currently permitted and should be. A modified PD zone could be useful in allowing mixed uses without amending all of the existing master plans.

public comments on zones

These three zones have limited applicability. The C-5 Zone only applies to one property in the County.



<sup>&</sup>quot;We should have fewer, more flexible zones"

<sup>&</sup>quot;Having a multitude of zones is confusing"

<sup>&</sup>quot;The profusion of different zoning categories and sub-categories we have now is utterly ridiculous"

<sup>&</sup>quot;Fewer zones can be a useful way to control development standards and can communicate what can be done"

<sup>&</sup>quot;There are multiple types of mixed use zones that could be simplified into one broad category of mixed use"

<sup>&</sup>quot;We need more flexible uses and more flexible way of designing the scale of uses"

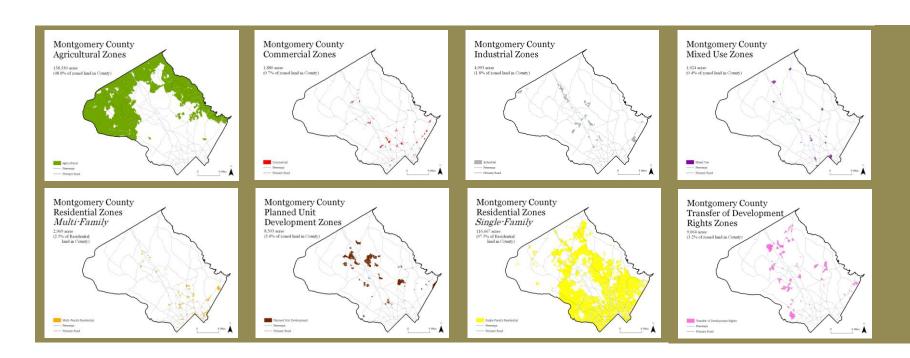
land area totals by zoning	type
----------------------------	------

category	acres	percent of	number
		total	of zones
agricultural	138,329.66	48.8%	6
commercial	1,880.21	0.7%	12
industrial	4,993.08	1.8%	6
mixed use	1,023.81	0.4%	16
pd	8,393.14	3.0%	26
residential	119,636.08	42.2%	20
tdr	9,064.03	3.2%	17
total	283,320.00	100.0%	103

There are 15 overlay zones and one MRR Zone, for a total of 119 zones

## discussion

Rethinking how we distinguish between uses and development standards is critical to simplifying the ordinance. If we continue creating new zones by changing for example, a lot dimension, we are facing an ordinance that in 20 years will be 2,000 pages with over 200 zones. This is an unthinkable situation, but it is simply a continuation of what has happened over the past 50 years when the number of zones and pages increased by 150 percent. In the past year alone the text has grown by about 100 pages.



A single-family home on a 6,000 or 9,000 square foot lot, is still a single-family home. One house is simply on a larger lot. The use of a property should be about what activity is occurring; is it a single-family home or a highrise, mixed-use building? Both are residential, but very different uses. Uses can be coded in a hierarchy, separate from the standards, creating use districts.





These single family homes are in three different zones, yet the use is the same— single-family residential.



Use districts should be defined separately from development standards. Decoupling the use from the standards will significantly reduce the number of zones and simplify the Code.

## residential use district hierarchy

R1 – single-family houses

R2 – single-family houses plus two attached houses

*R3 – as above plus townhouses* 

*R4 – as above plus low-rise multifamily buildings* 

R5 – as above plus high rise multifamily buildings

#### residential zones

In reviewing the 30 residential zones, it is apparent they are repetitive and redundant.

- R-40 and R-60 are similar, as are R-150 and R-200
- seven multifamily zones
- two mobile home zones that are not used anywhere the one mobile home park in the county is not zoned either of these
- five different townhouse zones
- 15 single-family zones
- ten residential TDR zones that repeat existing zones
- many of the residential zones are similar in terms of the uses permitted



This mobile home park is zoned R-30, R-90, and R-200, none of which permit mobile homes. The County's two mobile home zones are mapped but used for other purposes.

Many of these zones could be replaced with a simpler use based system to determine what uses are permitted where or with the use district approach described above. Use districts with the higher density would be cumulative, that is, they would include uses of the less intense districts, allowing for a mix of dwelling types.

#### non-residential zones

Many non-residential zones define transit, commercial, strip malls, or central business areas. However, why should there be a distinction? Should uses only be mixed at a transit station area or in a CBD? Until a few years ago hotels were not permitted by right in a CBD zone.

Sustainable thinking encourages mixed uses in any commercial zone. Large shopping malls across the country are being remade as mixed use villages far from transit. Shopping accessible only by car should permit mixed uses so people can walk to the same services enjoyed by urban dwellers.

There should no longer be any single purpose commercial areas.

current mixed use zones

- six CBD zones
- $\blacksquare$  TS-R and TS-M
- nine RMX zones
- two MXTC zones
- two TMOX zones
- the proposed TMX zon

These four commercial areas, Silver Spring, Takoma Park, Wheaton, and White Flint, should all have mixed uses—commercial at grade, offices and residential above. One use district could define the uses while separate density levels could determine the size and intensity appropriate for each neighborhood.

Commercial areas should share the following characteristics.

- mix of uses
- range of density
- simple development standards
- different requirements to reflect geography and use, such as lower parking standards in Metro station areas

Separating standards from uses opens the door to a simple commercial zoning designation. New Hampshire Avenue







through Takoma Park can be energized through low-scale, mixed-use redevelopment with buildings that have commercial uses at-grade and few floors above for office and residential



uses. The same principle applies in the White Flint area where the master plan is calling for mixed uses but at higher densities. The same use district could apply to both of these communities. Despite one being on a subway line and the other served by buses, transit is not the determining factor in deciding if a different zone is needed.

## agricultural zones

Cleaning up the agricultural zones is overdue and any effort should promote the primacy of agriculture in the agricultural areas. Pressure to build in the Agricultural Reserve and in greenfield areas should be redirected to the County's more than 14,000 approved but unbuilt residential projects.

There is also a need for design standards for non-agricultural development in the RDT zone. Currently there is no yardstick

## review of agricultural zones

- consider uses that support agriculture rather than add pressure to the primary use
- review uses and special exceptions to minimize conflicts in use
- add standards for non-agricultural development

to assess these uses that could have an impact on farming operations.

#### i d e a s

- Zones should distinguish between the permitted uses and the lot standards. Use districts would set out what permitted uses while the lot standards would be set out in a table or on the revised zoning maps.
- The zones should be reviewed and combined based on the uses permitted with a goal of creating one mixed-use district.

## tdr zones

There are 17 TDR (transferable development right) zones. When a master plan designates a TDR-eligible area, a new zone is created. The new TDR zone is often an existing zone with some different standards and the letters "tdr" tagged on. The designation doesn't change the underlying uses of the zone.

#### discussion

There is a better way to organize TDRs.

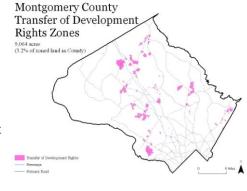
 Establish a Transferable Development Rights section in the Code that establishes the method for calculating the

- amount of TDRs, as well as areas of the County where they can be applied
- Include maps of each master plan area in the Code's definition section that notes where TDRs could be applied; the Code's TDR section would reference those master plan areas
- Add new TDR-eligible areas by referencing the master plan area referred to in the zoning definition

The current TDR receiving areas can be easily mapped, which helps create an easier way to organize them in the Code.

The map showing the relevant master plan area would be "zone free," that is, it wouldn't reference a zone, but only the area where TDRs could be applied. This format would

change nothing that already exists.



# benefits of reorganizing TDRs

- reduces the number of zones by 17
- fewer pages in the code
- simplifies implementing new TDR-eligible areas
- consistent and easier interpretation and implementation

#### ideas

- Reorganize TDR receiving areas to simplify the interpretation and implementation of the policy.
- Staff will evaluate using one TDR section in the Code's general provisions with the following components.

- each TDR receiving area would appear in the definition section and would be listed in the TDR section
- the TDR calculation would reflect work pending before Council to clarify the method.

## overlay zones

There are 15 overlay zones in the Code, all created after 1990. They provide restrictions and exemptions for certain land uses and development standards intended to achieve the planning goals and objectives for redevelopment in an area. For example, several of the overlays seek to preserve a particular suburban or rural character. Two of the larger overlay zones were created to protect an area's water quality and quantity by regulating impervious surfaces and land uses that could adversely affect the watershed. Overlay zones range from 4.02 acres to 7,689 acres in size.

Montgomery County

Overlay Zones

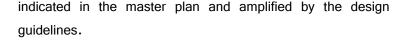
## overlay zones

An overlay zone is "a geographic area that constitutes a mapped district superimposed over the underlying base zone on the official zoning map. An overlay zone includes development regulations and standards that either add to or modify the requirements of the underlying zone."

—Code definition

discussion

In most cases, an overlay wouldn't be necessary if the zones themselves were less rigid. The desired mix of uses could be



That each overlay zone is structured differently adds to the Code's complexity. Each zone should clearly state the district's purpose, regulations, land uses, process, site plan contents and exemptions, and approval requirements. Ultimately, deleting overlay zones would provide greater certainty to the zoning process but it would take away some of the flexibility in the current process.

## ideas

- Review each overlay zone to determine similarities and differences, relevancy, and ways to consolidate the zones. Explore the potential to reduce the number of overlay zones from 15 to five categories, as follows:
  - employment-oriented
  - retail-oriented
  - retail and design-oriented
  - design-oriented
  - environmental
- Create a general section to consolidate the requirements that appear in each of the 15 overlay zones to eliminate repetitive provisions.
- If applicable, use a table to list land uses.

## land uses and tables

There are 425 residential, commercial, industrial, and institutional uses listed in the use tables. In some cases, the differences between the zones' permitted uses can be subtle, if not questionable. For example, the difference between RE1 and RE2 is that cemeteries are allowed in one zone and not the other.

Many of the uses are outdated like a millinery shop, shoe and hat repair, and variety and dry goods store. Because the Code is frequently very specific in naming an activity, use terms have become outdated or redundant.

#### discussion

For example, the term retail sales and service business could replace the current long list of retail businesses including florists, bookstores, garden shops, gift shops, specialty shops, just to name a few. The tables also list multiple variations of the same use, like 15 different types of offices that are worded differently yet are the same use.

The rewrite should also explore conditional uses where the use is permitted provided certain criteria are met. This approach could be an alternative to amendments that would add footnotes. In fact, this approach is similar to the footnote process except that the information is better organized and would result in a shortened process.

## changes to use terms

- blend categories of uses like commercial and service
- create a new institutional use category
- use broader use groups like retail sales and services
- delete outdated terms
- explore conditional uses to replace certain special exception uses

## ideas

- Use consistent subheadings in the use tables for every zone.
- Combine similar subheadings and add an institutional category.
- Clarify that public uses are permitted in all districts.
- Consider adding conditional uses to the Code provided criteria are met

## development standards

Development standards regulate the site layout, building placement, and size of structures. As discussed earlier, the Code attaches these to use types resulting in a proliferation of zones. By creating new districts that are use based, the standards can be simplified and organized into tables and in some instances like floor area, displayed on maps.

## development standards

- setbacks
- floor area
- height
- building coverage
- lot size and frontage
- parking and loading

development standards analyzed for possible reformulation

general category	specific standard analyzed
area requirements and	min/max tract area and gross acres
restrictions	min net lot size and width of building
	and street
coverage requirements and	max building coverage, min green
restrictions	area, open space, public use space,
	recreation space, public dedication,
	outside amenity area
density	max/min units per acre and percent
	of unit types
	max FAR, persons per area
yard requirements	setbacks, locations of structures
height	max building/structure height, number
	of stories
other requirements	allowances and review process

The current development standards are intended to regulate building scale and location. However, amendments to address isolated situations have crept into the Code. Scattered sets of development standards make the Code lengthy and complex. Subtle differences in standards for similar zones — such as the R-40 and R-60 zones, make little sense. In the case of the RDT zone, there are few development standards, making legal action difficult for certain activities.

This discovery analysis of repetition in the zones, not surprisingly, also revealed repetition in the development standards. Analysis also identified redundancies, inconsistencies, contradictions, atypical conditions, and extraneous requirements in the development standards.

## discussion

The County's zoning is based on older planning regulations that have passed their "expiration date." Other jurisdictions have moved forward, looking at compact development, infill regulations, and green zoning. This County continues with a system of convoluted amendments that have not kept pace with development trends and sustainable practice.

## comments on standards

- redundant standards—a standard requiring 20-foot side yard setbacks and that the sum of the side yard setbacks must be 40 feet
- poor organization—for example, structures adjacent to a national historical park must set back 200 feet, but there is only one such park in the County and the issue is better addressed through a buffer
- standards reflect development patterns contrary to smart growth—the setback in CBD zones is one foot for every six feet in height above 30 feet, which works against creating consistent street walls that define pedestrian spaces
- multiple terms for the same thing—green area, public use space, common open space, and building coverage are similar and should be consolidated
- consistent meaning—definitions are often changed in other sections like a parking facility defined as a facility for six or more spaces in the definitions, but three or more spaces under the parking standards

## regulating built form

The first zoning code in New York in 1916, included the basic tools still used today. Even the so called form based codes regulate use, height, setbacks, floor area, and building separation. It is important to remember what zoning can and can't do.

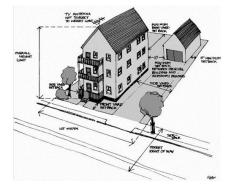
The County's pending master plans will emphasize built form to define better public spaces, both private and public. As the master plans evolve, the zoning ordinance needs to keep up.

This discovery analysis has revealed the potential for consolidating standards into tables, based on the use group: residential, mixed use, etc. The potential to consolidate provisions in tables will allow for easier and faster interpretation.

#### residential standards

## residential building size

The most predictable method for regulating the size and bulk of a building is through FAR (floor area ratio) in combination with yard requirements (setbacks). It is an old fashioned approach, but hard to improve. Tweaking these requirements through techniques like averaging ensures infill development relates to existing buildings.



## built form considerations

- floor area
- height
- setbacks
- building wall height
- building spacing
- coverage
- relationship to adjacent buildings

Yard controls define where on the lot the building can be sited, while a FAR allows so much floor area to fill that box.

FAR is common in the County's commercial zones. It is not generally used in residential areas. Garrett Park has an overlay zone with a maximum FAR of 0.375 times the lot area. The Town of Chevy Chase is considering an FAR limit that is more generous for additions than new construction. While this may encourage building retention, it would commit a zoning sin by creating a two tiered system for additions and new construction where buildings end up being different sizes, defeating the goal of consistency.

For decades, there has been a demand across North America for larger houses in established neighborhoods. This demand results in teardowns; residents call for controls and the regulatory system kicks in to create a maze of new regulations that may solve one problem but create others.

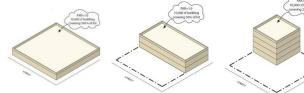
No zoning standard can anticipate all situations. A floor area ratio works with lot standards to define placement and size of a building. On larger lots, the FAR limits the building size while the structure's placement on the lot is more flexible.

On smaller lots the setbacks define a smaller space for locating the building. An FAR limit is the one constant related to lot size.

## residential floor area ratios

Floor area ratios relate the size of a building to the size of its lot. For example, if a lot is 10,000 square feet and the FAR is 0.50 then a building of 5,000 square feet is permitted. Lot requirements like front, rear, and side yard setbacks would then determine where on the lot the building could be located.





A building's floor area is related to lot size as a way of regulating building bulk. The FAR varies from .17 times the lot area to .48 times the lot area, resulting is house sizes ranging from 1,350 square feet to 2,900 square feet.

Many commercial zones have floor area limits. Staff is exploring the applicability of a floor area limit in the residential districts. Smaller lot infill will reflect the need for a floor area limit to ensure buildings are related to the size of the lot and the buildings around it.

Architectural flexibility generally increases with the size of the lot, particularly the width. In established areas it is common for the allowed building footprint to be larger than the actual house built on it. For example, a 70-foot wide lot may be

subject to five-foot side yard setbacks, allowing for a 60-foot wide house.

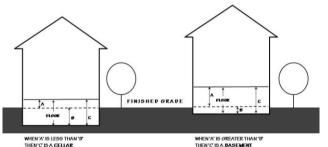
The existing houses may not be that wide, yet a newly constructed house might build to the full 60 feet, resulting in a bigger home than the existing houses. Setbacks and lot coverage simply define where on the lot a building can go. An FAR limit ties the bulk of the building to lot size. In this example, despite the flexibility of being able to build a wide house, an FAR limit could restrict the building floor area to an amount comparable to the adjacent houses. And this limit would apply equally to additions and replacement housing. The goal is to treat any building the same to ensure the street context is maintained.

## new construction vs. additions

It is critical that the same zoning standards apply to both additions and replacement houses, otherwise one building activity ends up being different in scale than the other.



In defining floor area, it is important to ensure loopholes aren't created by exempting certain space from the calculation. Commonly only cellars are exempted since they don't contribute to the building's overall size.



A clear definition between a cellar and a basement is necessary to ensure that FAR limits are equal between existing houses and new construction.

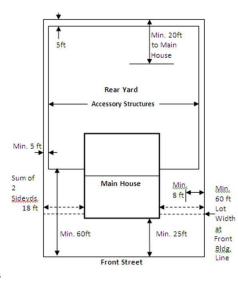
## ideas

Consider applying FAR standards in all zones.

## residential setbacks

Setbacks create separation from lot lines as well as defining where on a lot a building can be located. They can be minimums and maximums. Although this rewrite will continue the use of setbacks, there is some room for rationalizing the different requirements across many zones.

Some of the requirements reflect 1950s thinking, such as in the R-H Zone where the setback is dependent on the height. This approach was developed in the 1920s as the "tower in park"—tall buildings were surrounded by open space. But this pattern doesn't support safe and active public spaces.

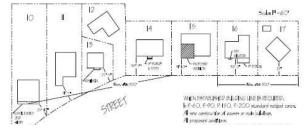


#### residential front setbacks

The Code offers two ways to determine the front setback of buildings in residential areas—using a fixed number or determining the "established building line" by averaging houses on the same side of the street for 300 feet in both directions.

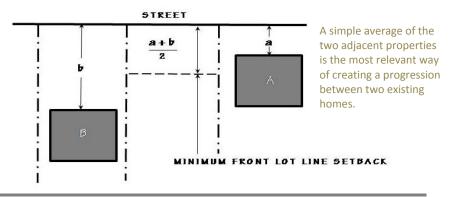
A front setback requirement should be simple to calculate and the results should fit in with the adjacent houses. The problem with averaging is that a new house could actually be located closer to the front lot line than the two adjacent houses because the average is taken over such a large area. Averaging also requires a greater expense in determining the front setback of so many houses in either direction.

Residential front setbacks are determined by measuring houses on the same side of the street in either direction for 300 feet.



#### discussion

Changes in front setback are localized. The most common way to do this is to take the average of the two adjacent buildings. This results in the most balanced progression for a building in between two existing buildings. Also, any survey includes the front setback of the two adjacent houses, resulting in less time and expense.



Averaging does not apply in all situations, such as when a greenfield is being developed or there are no adjacent lots. In these cases, a default front setback is necessary.

#### ideas

Consider averaging the setback of the two adjacent buildings, with a default in situations where there are no adjacent buildings.

residential rear setback - building depth

Some residential zones require a rear yard setback. There is no depth limit on the length of a building. As more infill happens, the distance a house extends into the rear yard may create overlook issues with neighbors. Rear yard setbacks alone cannot prevent this as lot depths vary.

#### discussion

The length a building extends back on its lot determines if a building overlooks the rear yard of a neighboring property. Limiting a building's length or requiring a minimum rear yard dimension would ensure privacy and can be achieved three ways.

- set a rear yard setback minimum
- average the depth of the two adjacent buildings to determine to create a progression at the back just as it is done for the front setback
- set an absolute depth limit to a building, measured from the front setback line

The first option is an absolute number, but not necessarily tied to what is on the ground. It doesn't provide the same degree of certainty as the other two approaches. Averaging would be tied to the norm created by adjacent buildings, while the third approach would require research into existing conditions.

#### ideas

Evaluate the need for limiting the depth a residential building extends onto a lot.

residential side yard setbacks

In the Code, side yard setbacks are the most varied standard among the residential districts. They are meant to provide a minimum separation from a side lot line and a building's main wall. MINIMUM SETBACK REQUIREMENTS

The current

method for

Rear setback,

doset distance

Side setback

Front setback

perpendicular to

discussion

determinin g side yard The side yard requirements setbacks. are redundant. For example, in some districts a side setback is required plus a total of the two side

combined must total 25 feet, leaving a difference of one

yards. The R-200 Zone requires a minimum 12-foot side yard while the two sides foot. This overlap is redundant.

Side yard setbacks work in conjunction with the other yard controls. For example, a five-foot side yard setback would seem insufficient if a building extended deep enough into a lot and overlooks the neighboring rear yard. But coupled with a depth limit, greater side yard setback past the depth limit will ensure the overlook situation is not an issue.

## ideas

Evaluate the current side yard setback standards

## residential height

The Code's height rule sometimes treats sloped and flat roof buildings as though they were the same height. Height is measured from two different points depending on how far the building is setback from the street.

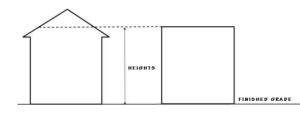
- less than 50 feet, height is measured from the curb
- greater than 50 feet, height is measured from the finished grade at the building's front wall

Height is also regulated through the number of stories, rather than a fixed number.

#### discussion

In most ordinances, height is measured to the midpoint of a sloped roof, between the eave and the peak. A flat roof would be permitted to extend to the same point. Since a sloped roof building tapers to the sides of lot it has the appearance of opening views to the adjacent property. A flat roof building has side walls extending higher than a sloped roof building of the same height.

Where height is measured from is also important, especially on sloped lots, where the same building height can result in a building that appears to be much higher than the neighbor located on the down side of the lot. The current method of taking the height from a different point based on a setback can create inequities for different building proposals.



Common method for determining height where the flat roofed building is deemed the same height as the midpoint of a sloped roof building.

#### ideas

- Prepare changes to the definition of height and how it is measured.
  - delete reference to stories and use a fixed number
  - redefine where height is measured so that flat roof buildings are equal to the midpoint of a sloped roof.
  - consider sloped lot issues

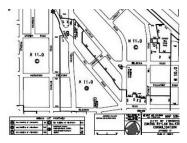
## residential lot size and frontage

The Code has many minimum lot size and lot frontage requirements. As with other standards tied to uses, this results in a new zone being created for the same use, adding to the Code's complexity. At a time when communities are either abandoning such requirements or reducing them, the current rules work against sustainability goals.

#### discussion

The current lot size and frontage requirements are excessive when considering a smart growth focus on future development. The Code should instead acknowledge the different lot size and frontage requirements rather than adding new zones for the same use.

The expanded use of the GIS mapping tool can add minimum requirements to the zoning maps. This means fewer zones, less text and confusion, easier Code maintenance, and easier interpretation for the public and staff.



GIS mapping can show minimum lot size and frontage requirements

#### ideas

Map the different lot size and lot frontage requirements using the new GIS zoning maps.

residential building coverage and open space

The Code's current coverage and open space requirements are inconsistent. Some residential zones have "common open space" requirements and others have "open space" standards that require a percentage of a lot to remain open. From an

opposite direction, building coverage restricts the ground floor size of a building. These rules should be applied consistently.

#### discussion

It is important to remember the various lot regulations and what they do best. Mentioned earlier are the checks and balances of the various standards. The role each standard plays can be blurred. The different standards should work together but not overlap. For example, the building coverage measurement is one dimensional and doesn't measure building bulk.

On smaller lots, setbacks and lot coverage work to limit the location of a building. On larger lots they have less definitive impact on size. Aerial tools exist today to calculate existing lot coverage and this tool can be used to evaluate current or proposed standards. It is common for a building coverage requirement to work with or replace a requirement for a minimum amount of open space on a lot.

## lot standards - purpose

- floor area limits and height determine building size
- setbacks define the placement of the building
- building coverage relates the size of the building footprint to the lot
- open space provides for a percentage of the lot to be "green"
- lot frontage determines the scale of the street

#### ideas

 Review how building coverage and open space requirements are determined and applied

## residential development standards summary

form and sustainability

In reviewing the current development standards, staff will be looking at ways to create development that is more visually appropriate and environmentally sustainable. The standards must work as a package where the individual requirements work together to define the built form and its relationship to the space around it.

## existing standards

The existing standards for single-family detached and townhouses, are as follows.

- minimum lot size
- dwelling units per acre
- lot coverage
- setbacks, main building and accessory
- height

The general issues with the current standards are as follows.

- minimum lot size determines units/acre, thus units/acre is redundant
- building coverage and height do not relate directly to the size of the lot and are not as effective at regulating building bulk as a floor area limits
- there is no link to environmental sustainability large setbacks are an inefficient use of land and encourage longer paved surfaces and unusable lawn space

#### proposed standards

Staff is evaluating the following direction for the standards to address the issues identified in the client outreach.

- retain minimum lot size
- rationalize setback limits
- use FAR to regulate building bulk
- minimum open space
- retain height limits with clarification

They would have the following advantages.

- floor area ratios relate directly to the lot size. This ensures a level of neighborhood compatibility.
- open space requirement replaces building coverage. Floor area requirements and setbacks define the building envelope, rendering coverage redundant. An open space requirement provides for a minimum of pervious surface, reflecting an environmental goal.
- consolidation of setback requirements will allow for fewer zones while maintaining neighborhood character. Staff will also use the opportunity to review standards for infill potential.
- height will be standardized with appropriate application to flat roofed buildings

## non-residential standards

Many of the current zoning rules for mixed-use and non-residential development actually work against creating walkable, sustainable neighborhoods. The review of these standards will look to best practices for shifting the County's auto-centered development patterns to start redeveloping in a more sustainable way.

#### non-residential floor area

Different FAR rules to regulate bulk apply in the non-residential zones. In CBD zones the density of a residential building is determined by the number of units per acre. If a building has ground floor retail the number of dwelling units is reduced. As a result, a new building on Bonifant Street in Silver Spring would have had to give up units. Instead, the developer decided not to add a retail component, leaving a void on a street known for restaurants fronting the sidewalk. This does not make any sense and in fact could result in different building sizes side by side. The goal should be consistency.



The Code's density rules discouraged at-grade retail in the condo building that will replace these retail uses.

## discussion

Controlling residential density by a unit per acre limit has no bearing on the bulk of a building. With no limit on the size of a unit, larger units mean a larger building. Commonly the average unit size is between 1,000 to 1,200 square feet. The focus should be the physical and visual impacts of the building on the space around it.

Providing a mix of uses to achieve smart growth principles should be reinforced. Recent development on Rockville Pike south of Montrose Road is a good example of how this approach results in better growth. Several recent condominium

buildings have retail uses at the street level and now there are people walking along the street to the subway and the new grocery store. This is a new activity for the auto-oriented strip.

Establishing a mixed-use requirement will lead to better infill development across the County, particularly the many strip malls where the current zoning doesn't allow for a mix. Even strip malls located well away from transit could benefit from redevelopment with mixed uses.



New mixed use development on Rockville Pike has led to new street activity and is the beginning of the rethinking of what the street can be.

Master plans should set out the maximum building size and call for a range of uses. The zoning ordinance then defines the mix through a hierarchy of floor area limits not exceeding the master plan limit. This type of density system can help redevelop car-centric spaces into walkable places. One zoning category could be used to set out the permitted uses for all commercial areas and the FAR limits would promote a mix of residential and non-residential uses.





## possible FAR approach in non-residential districts

- set a total FAR limit for all uses
- set FAR limits for both non-residential and residential uses that combined cannot exceed the total FAR limit
- allow flexibility in planning neighborhoods and the mix of housing and jobs
- applicable to all commercial and mixed use areas

New development in the Wheaton CBD replaced car-oriented retail, resulting in higher density at the transit station with full services within a walkable distance. More development of this nature will soon transform the area from a car-centric space, to a walkable place

Such a density system could have prevented the recent development decision on Bonifant Street. Rather than discouraging the use mix as the current rules do, this approach would set maximums for each use—residential and non-residential—as well as a total of the two.





Varied FAR levels create a diverse community. A small component of commercial uses could have added activity in a Silver Spring condo building. Whole Foods in Silver Spring could have included housing.

#### recommendation

 Determine a method that sets FAR limits on commercial and residential uses to achieve mixed uses that better promote smart growth.

#### non-residential setbacks

Currently, commercial buildings are permitted to be set back on a street. This invites the front of the building to have car parking, erasing any opportunity for interaction of a building and the public space. Walkable spaces, animation, and safety are enhanced through windows and doors directly on the sidewalk.

Setback requirements between commercial and residential areas are expressed both as absolute numbers and as a ratio. Two different ways to calculate adds unnecessary complexity to the Code.



The Germantown library fails to animate the street. The building is set back from the street and, with a ground floor depressed below the sidewalk, no sidewalk interaction results. The siting also raises accessibility issues. By comparison, buildings across the street are pulled up to the sidewalk with lots of windows and doors resulting in street activity.

## public comments

- "If you want first floor retail, setbacks hurt visibility for that. It seems the zoning code requirements don't give us what we want"
- "The Fenton Village overlay .... is designed to be pedestrian friendly, but the zoning doesn't require retail on the first floor"

#### discussion

There should be minimal, if any front setback requirements in commercial areas. The primary concern instead should be separation from adjacent residential areas. To create better

pedestrian spaces and minimize auto use, buildings should not allow parking in the front. Commercial and mixed use buildings should come to the edge of the sidewalk, creating an active pedestrian environment and improved safety.

With buildings pushed to the back of their lots, the County commercial streets lack any character or definition of public space that are important to defining a neighborhood commercial focus in both urban and residential communities. Bringing buildings forward is key to creating better public spaces. Imagine downtown Bethesda if it had developed like Rockville Pike.

The opportunity exists to rethink how our commercial spaces are built. Staff will be looking at how the current setback requirements can define a better commercial environment and ensure an adequate interface to residential areas adjacent to commercial corridors.

#### ideas

 Examine current setback requirements to ensure they encourage smart growth in commercial and mixed-use areas.

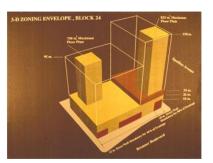
## non-residential height

Height in commercial areas is measured in different ways—sometimes from the front curb, and as in C-1 zones where height must be less than 30 feet, it is measured from all four sides to the highest point of a flat roof.

#### discussion

Some aspects of the C-1 measuring system are helpful. A clear, simple one system application should be used. Staff will also look at simply using the finished grade at the front wall of the building.

The width of a building is also an important factor in the perception of how tall or bulky a building is. A wide tower has greater physical and visual impacts and has considerable shadow impacts on surrounding areas. The shadow is wide and moves slowly across any single point on the ground. By contrast, a taller, narrow floorplate building casts a longer shadow that move faster across any single point on the ground. Adjacent areas are impacted for less time.



Taller buildings have a base, preferably without setbacks to the street, which establishes the street wall. In that base there should be a minimum amount of activity to animate the sidewalk. The podium level defines the height of the street wall as well as acting to deflect wind that accelerates down the face of the taller portion of the building. The width of this tall portion would be restricted to minimize the shadow impacts and be located anywhere within the box defined by the height limit.

As sector plans like White Flint proceed, they are focused on how these building elements work to improve pedestrian spaces. For example, many of the recent taller buildings in Silver Spring have huge floorplates that impact the surrounding area. Large walls create wind issues and few of these buildings are designed with podium levels to deflect this wind from pedestrian spaces.

These recent highrise buildings are not well designed for enhancing public spaces and views.



#### ideas

- Review how height is calculated for non-residential buildings and develop a single consistent rule that applies to all situations
- Develop built form goals that create buildings and spaces that create walkable neighborhoods.

## facing distances - residential and non-residential

The distance between two buildings on separate lots or the distance between two parts of the same building on the same lot is considered a facing distance. A minimum distance should be provided to allow for adequate light and privacy. The current standards vary by zone.

#### discussion

In high density areas the separation between building faces on the same lot is an important factor in providing privacy to rooms with windows fronting each other. This increases in importance with taller buildings. A separation distance of 30 to 35 feet is common.

Another situation would be where a side yard setback is required, but an existing building is built closer to the lot line. Should any new building on the adjacent lot have to

make up the deficiency of the existing building? Generally this situation is left to the Building Code which provides for fire and safety matters.



External facing walls of the same building should be spaced to meet minimum requirements for light and privacy.

#### ideas

 Explore facing wall separation requirements. For higher density environs the minimum should be at least 30 feet.
 A smaller distance would be appropriate in lower density situations.

## general provisions

The following discussion highlights requirements that would appear in a general provisions section of the Code, applicable to more than one use type or multiple zones. Rather than repeat the same provision many times, it gets listed once in this section and the same methods are applied across zones.

### general provision topics

- street-oriented retail
- open, recreation, and amenity space
- parking and loading
- bicycle parking
- big box retail
- standard vs. optional density calculations

#### street-oriented retail

The Code is generally silent on requiring at-grade retail to encourage active public spaces. There are few examples of model pedestrian friendly streets, with Bethesda being the prime example. A key to achieving walkable, pedestrian oriented spaces is to create interaction at the sidewalk with activities in the buildings that frame the sidewalks and publi spaces. Our current commercial areas and corridors are characterized by strip malls, accessible only by vehicles.



Bethesda Row is a good example of how concentrated retail animates a space.

#### discussion

Staff has been looking at areas of the County where priority retail streets should be identified. The new White Flint plan includes a priority retail map. A common requirement is for a minimum of 65 percent retail frontage. The success of this policy includes identifying uses that consume large amounts of building frontage and only create one entrance. The worst

examples are banks, pharmacies and big grocery stores, with long frontages and few windows and only

Encouraging street-oriented retail should not mean long frontages with only one entrance such as these banks in DC. The goal is to have many storefronts with multiple entrances and windows creating pedestrian activity. These D.C. banks do little to activate the street and they create security issues at night.



Priority retail streets can be identified by master plans and by examining existing commercial areas where street-oriented

the smart growth principles.





PRIORITY RETAIL STREET



Priority retail areas can be identified in a master plan, these maps show how a zoning ordinance would define where on a block at-grade retail would be required for some percentage of a building face.

#### ideas

 Consider a requirement for street related retail activity in strategic locations in commercial corridors and areas.

### open, recreation, and amenity space

The CBD zones require open space and amenities. The residential zones provide open space in a different manner. In the CBD zones there are separate requirements for public use space (PUS) and public facilities and amenities (PFA).

The requirements are intended to achieve space for people to use for recreation or other activities.

*public use space* – 10 percent of the net lot area required for standard method projects and 20 percent for optional method projects, to be provided on site

*public facilities and amenities* – in optional method projects, are typically provided off-site, for example, through streetscaping

A recent amendment in the CBD zones allows developers to pay a cash equivalent in lieu of the required space. The payment funds an indentified off-site project. This sensible change encourages urban activity and prevents ill-conceived open spaces that create dead areas along the sidewalk.



A good example of open space contributing to an active streetscape in downtown Rockville. The space is fronted with active uses, taller buildings provide overlook and the space is enclosed on three sides adding to the active use of the space rather than simply providing it as an afterthought.

#### discussion

Open, recreation, and amenity space generally take three forms. Open space is publicly accessible. Recreation space usually is for building occupants. Amenity space comes in lots of ways, both public and private. Multi-unit residential buildings may provide all three types of space. Personal space is often provided in the form of a balcony or sun room. The shared space is a an exercise room or a common room for functions often adjacent to an outdoor space increasingly provided on the roof of a building.









Three types of space provided in a residential building. Open space is provided in front of the building, a common space party or common room and a small fitness room, and personal recreation space provided as balconies and sunrooms.

Some jurisdictions tie the common outdoor space to a building's street frontage, where frontage on multiple street results in a larger requirement. These spaces are accessible to the public and frequently include indoor space. A strong site plan review process is necessary to ensure that quality space with direct access to a sidewalk.

There are several examples in the County of poor location and design. These spaces include plazas at the front of buildings that are windswept and void of any life except office workers smoking during breaks. These spaces break up any attempt to create a consistent street wall with retail shops bringing activity to the street. A review of how we

approach urban open space through the zoning rules is needed.



Unsuccessful outdoor space in downtown Silver Spring. Nobody uses the space and it generates very little street activity.

### open space rules questions

- where a project provides additional affordable housing, should there be a reduction in the open space requirement?
- in more dense areas should the requirement be less, considering factors such as proximity to parks and achieving activity along streets?
- are the requirements too high, particularly for optional method projects when the requirement doubles not being proportional to the floor area increase?
- should only residential uses be subject to "internal space" requirements for "common" and "personal" space?
- what are the costs of providing open and amenity space relative to other exactions?

#### ideas

- Use a best practices search to review the current open and amenity space requirements.
- Review the definitions to create a consistent set of terms.

### parking and loading

The parking and loading requirements reflect suburban standards developed many years ago. The standards tend to be excessive and don't reflect current factors like smaller household size. Structured parking is expensive to provide which partially explains the more than 7,000 acres of surface parking lots in the County. The Growth Policy update has

identified these lots as likely areas for redevelopment. The required parking for new uses would then be provided in structures. The higher the cost of land, the more practical parking structures become.

#### discussion

The County has plenty of examples where surface parking and garages dominate the street view. Many jurisdictions are exploring how to take back the visual impact on public areas by requiring infill on the surface lots. Parking structures are either underground, internal to the project, or fronted at-grade with active pedestrian uses. It is not uncommon to ban parking in front of commercial buildings to achieve a pedestrian environment. The latter works well in our emerging sector plans where buildings will be required to locate at the property line facing a sidewalk. These concepts need to be explored.

New development in Wheaton internalized the structured parking so that it is not visible from the street. The Wayne Avenue garage in downtown Silver Spring failed to animate the sidewalk by not locating uses on the ground floor opening onto the sidewalk.

Wayne Avenue Garage



Reducing parking requirements would help to reduce building and housing costs. Any reductions should be done strategically, primarily in areas of mixed use and transit accessibility. Car sharing located in buildings and accessible to tenants and the public can help reduce the need for spaces.





We can do better than fronting our public spaces with surface parking. Retail and mixed-use buildings should be pulled up to the sidewalk and parking located to the side or rear. The difference in the quality of the environment is obvious.

### strategies to reduce parking

- lower parking requirements in transit station areas
- set parking maximums
- using parking stackers
- *allowing for parking requirements to be met off site*
- peak hour/off hour sharing allowing evening activities to use spaces after regular work hours
- smaller spaces to reflect growing small car ownership
- less parking for retail uses rather than basing standards on the day after
   Thanksgiving



Car stackers allow two cars to park in one space, reducing the area needed for parking. They cost from \$7,000 to \$10,000 rather than the more than \$22,000 for constructing an underground space that would retail for over \$30,000.

It's important to work with builders and lenders to understand what parking trends they have been experiencing. Lenders may restrict funding for projects they believe don't meet a perceived parking need. Some education is needed.

The uses required to provide parking should be reviewed. In high density areas it may be that some uses, like

restaurants, should not provide parking given the existing spaces for daytime users are vacant in the evening.

The loading standards have recently caused problems for infill projects on small lots in CBD areas. For a small building on a small lot, full sized loading bays should not be required if doing so would mean the front of the building would be a loading dock. The size, number and access to loading bays should reflect the changing nature of where buildings are being constructed.

This proposed small residential project in Bethesda was held up for many months over a loading issue. The County was requesting a loading space at the front of the building that would create a hole at the edge of the sidewalk. The builder

had offered a smaller loading space accessed from an alley. The County requirement was excessive for loading that would have been used infrequently.

Drive through facilities, typically for fast food restaurants, are another area that should be reviewed, especially in the CDB areas. They consume lots of land and push buildings back from the sidewalk. They also result in large amounts of impervious surface and add to the heat effect in urban areas. Staff will explore alternatives, such as requiring the drive aisle to be at the rear of the property.

#### ideas

 Research best practices to compare parking and loading standards.

### bicycle parking

As new development fills in the surface parking lots along the existing traffic corridors and as new mixed-use areas emerge in White Flint, Germantown and Twinbrook, the opportunity to create alternate means of mobility grow. All the new sector plans call for bicycle routes to help connect people between where they live, work, and shop.

As more mixed-use projects improve the jobs-housing ratio in infill areas, the need for bicycle commuting will increase.

## regulatory strategies for increasing daily cycling

- reducing parking spaces
- secure bicycle parking at work and in multi unit buildings
- showers at work places
- temporary bike parking



Bicycle parking is an important building amenity that can be designed into a project.

#### ideas

 Consider requirements for bicycle parking facilities at places of work above a floor area threshold.  Residential buildings should also provide storage space for bicycles.

### big box retail

The current zoning rules do not specifically identify big box stores. They are permitted in many zones and are subject to floor area limits. Big box stores are moving deeper into built up areas as suburban locations become saturated. As they move closer to urban locations, their impact on retail diversity is a concern. Many communities have developed zoning rules to limit the negative impacts of these uses.

### big box issues

- 160,000-square foot single story buildings are an inefficient use of land
- huge surface parking lots are largely vacant
- environmental concerns include runoff, heat island effects, and traffic congestion
- *short lifespan of the use*
- the single purpose nature of the use leads to sterile environments

With future development headed for infill of existing sites, the County should not want to have these large, car-centric uses eating up the remaining redevelopable land.

Examples of big box uses constructed on smaller floorplates, multi-levels and mixed uses on upper floors have overcome much of the criticism and negative effects of the big box stores. They are even better when they are built with other uses.





A Vancouver multi-use Home Depot store with residential townhouses and green space above. The new power center in Washington has several big box retailers in an urban form.

A good example of the need to consider regulations for big box stores occurred in Germantown where an applicant sought to build a 160,000 square foot store on one of the County's few undeveloped sites across the street from a MARC station. A critical site like this cannot be used for a large single purpose when access to transit is needed for higher densities with a positive jobs-housing balance.



This vacant site in Germantown was considered for a 160,000-foot big box store directly across the site from a MARC station. Planning staff prepared this alternative with the same retail floor area and several other uses including

residential to create a mixed-use area that could make better use of the MARC station.

#### ideas

 Review options for regulating big box stores in areas where mixed uses are preferred, possibly tied to zoning categories.

### standard vs. optional density calculations

The standard method of development allows by right development to proceed without going through certain processes and without providing certain levels of public amenities. The optional method applies to development above a set density limit, and requires other processes like site plan review, an increased open space requirement, and other negotiated benefits, proportional to the density increase. This system is not that different from other communities, although the County often requires site plan at a much earlier stage and requires it of some standard method development.

Certain criteria are set out for both options such as conformance with the master plan requirements under the optional method.

### optional method findings

- project plan and site plan required
- findings
  - conformance with standards
  - conformance with master plan
    - design guidelines
    - amenity requirements
  - compatibility with adjacent properties
  - more amenities than provided under the standard method

There are arguments for and against the current system.

- optional limits—at what floor area level does the optional method start?
- standard method—quality development is not coming out of the standard method and more should be done to set the bar higher
- open space requirement—the open space requirement doubles from 10 percent of the site area to 20 percent once the optional method is selected. There is no progression from the 10 percent to the 20 percent
- physical form rules—the same bulk rules do not apply to each option. The issue should be the physical impact of a development and the same rules should apply under either scenario
- linkage—there is no clear set of standards linking floor area to a menu of public benefits for the density increase (this is a common issue across North America)
  - some of the benefits are measureable
    - MPDUs at 12.5 percent of a project's total units
    - workforce housing based on the number of units
    - building lot termination costs linked to floor area
  - other benefits like providing green roofs, energy efficient buildings, day care, etc., are more difficult to quantify

#### discussion

Two options that can be explored for dealing with public benefits.

- Keep the current standard and optional methods but clarify at what point optional method begins and relate the benefits to the floor area being built. Require more attention to built form and use of the standard method to achieve better buildings and public spaces.
- Create a graduated scale for public amenities starting at zero. The larger a project the more benefits provided. At a minimum, require more basic amenities at the outset such as street dedication, streetscape, and environmental features.

Each of these approaches has issues. The quantitative approach values floor area above a base level and requires benefits equal to a percentage of its value at current market rates. This does not avoid a two step process however, and still involves negotiation. It does bring everything to one base condition—floor area.

#### density bonus terminology

- conventional development build and you get what the standards say
- TDR incentive development huv TDRs and get a density honus
- MPDU/workforce housing development provide needed low- and moderate income housing and get a market rate density/height bonus
- public amenity incentive development provide open space, art, and community amenities or pay into an amenity fund and get a density/height bonus
- green buildings provide a LEED Silver or higher and/or green site and get a density/height bonus
- cluster development save rural, low-, or mid-density open space and get a density bonus and more unit type and development flexibility

Whichever method is used, it must address the current problem—it is easier to build a bad development under the standard method than it is to build a well designed optional method project. Optional method projects in CBD zones that went through the site plan review have resulted in better design. The new Code should ensure that regardless of method, all buildings of a specific size are required to go through the site plan process.

If a standard method project doesn't go through site plan review, the County misses the opportunity to influence the outcome. This is one reason for requiring optional method at a lower threshold. The County's "green tape" process expedites optional method projects and this advantage should be extended to all well designed projects with specific public benefits.

The myriad rules that apply to standard vs. optional method are confusing. Even if a two step process remains, the findings and the processes must be standardized to make the system more equitable, to achieve better projects, and to simplify implementation.

Developers will say that amenities are required at a threshold that is too low. Residents and sometimes planners will say many requirements, such as streetscape should be automatic, and a low threshold is the right approach. A graduated, one option system could address this issue depending upon the level of benefits being requested.

Public amenities in exchange for increases in floor area are a difficult issue for any jurisdiction. Planning staff is researching best practices to identify ways to improve our current method.

### components of a good floor area bonus system

- clarity, equity, and predictability
- results in well designed projects
- *direct links more density generates a bigger need for services*
- *large menu of benefits to choose from*
- *clear base requirements expected of all developments*
- treats all buildings of similar use the same in terms of building mass and site planning

#### ideas

 Review best practices to assess the current floor area bonus method and ways to improve it.

#### definitions and terms

There are currently 354 definitions in the Code. Of these, 25 (seven percent) are not used and many others are outdated, referencing terms no longer used. Planning staff has begun reviewing the definitions against the following criteria.

- is the term used in the Code
- is the term relevant
- are the terms broad enough to accommodate future activities without requiring a zoning change
- can the term be illustrated to simplify interpretation
- can terms be combined, do they refer to the same thing

- will definitions be out of date quickly because an industry is constantly changing
- can we simplify or delete terms

A review of the Code's definitions has found undefined, repetitive and sometimes contradictory terms that make interpretation difficult. For example, there are 13 different ways to classify an office but only three are defined. The definition of general office includes an insurance claim office yet both terms appear in the land use tables. Is an insurance office such an important use that it must be highlighted separately?

A drive-in restaurant includes any restaurant offering food to go, but most restaurants will provide take- out orders if asked. There are zones that allow take out restaurants but only through a special exception. Discrepancies like this need to be resolved.

#### dlscusslon

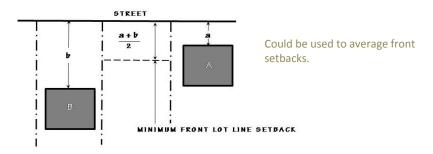
There are 425 use terms, both defined and not defined, in the Code. Staff has arrayed them into a matrix showing what zones they are listed in to check for overlap (see appendix). The goal is to simplify and reduce where possible, such as the office example given above.

### flexible definitions

The pending Gaithersburg West Master Plan uses the term "life sciences district." This is a constantly changing industry and if a zoning change is needed to permit each new technology, the County will not be competitive.

### definitions that could use graphics

- height
- dwelling types
- setbacks
- sector plan areas
- loading space size requirements
- grade



#### ideas

- Delete unused definitions.
- Review current definitions for obsolete terms.
- Create definitions that can grow as technology and trends evolve.
- Review all terms for overlap, contradictions, and streamlining opportunities.
- Check for legal consistency.

#### footnotes

There are approximately 480 footnotes in the Code covering subjects of use, standards, definitions, and exceptions; topics that are regulated elsewhere in the Code. Footnotes started in 1958 and have grown exponentially. Several comments were made in the public outreach that footnotes are "sleeper legislation," hidden policy that should be fleshed out fully in

the text. They are a disorganized way to deal with amendments.

### footnotes are used to—

- add clarification
- repeat definitions
- reference a master plan
- refer users to other provisions
- provide further standards for a use
- add detail to non-conforming uses or structures
- clarify that a use remains conforming after an amendment

#### discussion

The fundamental question to consider is the purpose of footnotes. They are not a common zoning tool and the County uses them excessively. They have become an incorrect tool for dealing with obscure issues, such as regulating a chancery. Interpreting the complex rules for a chancery takes time, for a use that is really not creating a problem. The rewrite will probably eliminate footnotes in favor of a better way to present the information.

### alternatives to footnotes

- *in definitions*
- attached to the use tables
- as exceptions
- as conditional uses

Regulations are sometimes hidden in footnotes and users report they are not confident of finding all relevant requirements. Footnotes may include general standards that apply to the same zone classification across the County. For example, two footnotes regulate commercial vehicle parking

which should be in a general provision dealing with County wide parking requirements. Organization is a critical element to the review.

There are many footnoted uses that could be permitted by right if certain conditions are met. In these examples a hearing adds little to the process. These footnotes could be handled as conditional uses, where the use is linked to specific requirements. Conditional uses could occur in one of two ways.

- as of right if the conditions are met as determined by the Department of Permitting Services
- approved by the Planning Board as part of the site plan process

Either option would shorten the process from the lengthy, multi-level approval and expensive special exception process.

#### i d e a s

- Review the footnotes for the following characteristics, with the intent of reducing their numbers and possibly deleting them entirely.
  - drafting comprehensive grandfathering provisions that would replace many footnotes
  - eliminating footnotes that only refer readers to other parts of the Code or, to special exception provisions, or to requirements for compliance with State or County regulations

- eliminate footnotes that repeat other parts of the Code.
- Consider a conditional use category with requirements for development by right or approved through the site plan process.
- Create a better system for organizing footnotes, taking advantage of the GIS mapping system for layering detailed information linked to parcels and addresses.

### special exceptions

Special exceptions are permitted uses that require a public hearing and meet general and specific standards. The Code describes 98 special exception uses designed to ensure compatibility with permitted uses in a given zone. Applications for special exceptions must comply with the public hearing process and must demonstrate that all applicable requirements are met.

### special exception monitoring

There are 1,846 special exceptions, which the Department of Permitting Services is required to monitor. Six hundred (more than a third) of the applications are for accessory apartments. The administrative process created by these actions is onerous and the required monitoring is often of questionable value.

### public comments on special exceptions

- "it would also be worthwhile to explore consolidating some of the special exceptions" and "some special exceptions should not be special exceptions"
- "when granting special exceptions, look at impact and ability to be enforced; sometimes it's unenforceable"
- "establish fewer but more flexible zones, without need to go for special exception"
- "special exceptions allow for citizen input. If it is decided within an agency, you lose this

- special exceptions require a finding of need, but need has never been really defined. The need requirement should be defined better"
- "some services are creating an impact on the neighborhood; the community should have the right and opportunity to comment on the use"

There are special exceptions for blacksmiths, family burial sites, and meeting centers, yet not one application has been filed for any of these uses. There is also an opportunity to blend several exceptions where the conditions apply to multiple uses.

#### discussion

Many of the exceptions regulate obscure differences. It would seem farmer's markets are as much of a problem as the recent issue over Christmas tree sales given the number of rules that apply. Is it really necessary to require parking for an abattoir on a minimum lot of 20 acres? Twenty acres should be enough land that parking would naturally be provided, especially considering an abattoir is not located in built up areas. These exceptions fall into the unnecessary category.

The special exception process can be time-consuming, expensive, and discourage activity common to a maturing county. The repetitive steps should be reviewed to evaluate if the current process is necessary or could be shortened to better serve the public. Staff has reviewed the 98 special exceptions and found that 15 of them could easily be dealt with as a conditional use as described above.

### special exception process

- application submitted to the Board of Appeals then transmitted to the Planning Board
- staff reports at a Planning Board hearing and their recommendation is sent to the Hearing Examiner
- Hearing Examiner holds another public hearing and submits a report and recommendation to the Board of Appeals
- final decision is rendered by the Board of Appeals



The special exception process.

#### ideas

- Staff should review each special exception to determine:
  - if the use and standards are current
  - whether special exceptions such as hospitals, domiciliary care homes/nursing homes, and gas stations can be reviewed as permitted or conditional uses in more intensive zones.
- Consider a conditional use category in which certain uses may be approved or denied by the Department of Permitting Services or the Planning Board through the site plan review process.
- Analyze language to eliminate redundancies and repetition. Compare general conditions required for all special exceptions with specific standards for a particular use. Ensure consistent terms from land use charts to the special exceptions section and throughout the Code. Evaluate inherent and non-inherent findings, clarifying the term "adequate" in determining compatibility, and improving the section's organization and numbering system.

### grandfather clauses and non-conforming uses

The ordinance has many grandfather provisions enacted when amendments were passed. These rules generally exempt certain activities from complying with the new rules.

#### discussion

The zoning rewrite will result in a new code for the County. New regulations may impact legally established uses, and structures and uses allowed under the old ordinance should be dealt with through non-conforming provisions. A rewrite offers the opportunity to delete the grandfather clauses and replace them with one clause dated to when the new ordinance is enacted.

Analysis will explore the following questions.

- would grandfathering be determined by filing date, approval date, permit application, or approval date
- when and if the use or structure needs to come into conformance with the new zoning ordinance
- should a certification process be required once a use or structure is determined to be non-conforming
- how would special exceptions and variances be impacted?

#### ideas

 Consult with legal staff on the best approach to the issue of non-conforming uses when enacting a new Code.

### green zoning

There are many zoning strategies for encouraging green land use. From smaller lot sizes to siting buildings for environmental advantages, code requirements can help reduce carbon emissions.

Green roofs have significant environmental benefits

discussion

land development patterns

There is a growing field of literature that traditional subdivision growth may be the next area of deteriorating quality of life. Oversized homes on oversized lots become too expensive for shrinking households to maintain. With densities far too low to support public transit, these areas are only reachable through automobile. Transportation costs will consume increasing percentages of monthly expenses.

Across the country these are the housing markets hardest hit in the recent housing crisis. The sales slow down in this County indicates that Montgomery is not immune. This model is unsustainable by any measure and we need more sustainable development through infill and on undeveloped land.

Huge houses on equally large lots on farmland represent very unsustainable housing.

### impacts of current suburban growth patterns

- not very green
  - lots are too large, consuming undeveloped land
  - more maintenance requirements causing emissions
  - huge infrastructure requirements to serve fewer people over larger areas
- carbon emissions from oversized homes
- increase in vehicle miles travelled
  - adds to congestion
  - even simple trips to school or a store require a car
- decreases housing affordability

#### cottage housing

An emerging strategy for sustainable housing is called **cottage housing**. Smaller homes on smaller lots are built on land using about half as much area as traditional lot sizes. The homes front small community space lawns, offering recreational and social space in a visible location, especially good for children and seniors. The home size reflects smaller household size across the country. Small lot development reduces the environmental impact of new homes, reflecting reduced household size and need to reduce carbon emission.





In this "pocket neighborhood" located on a quiet street with a mix of one, two, and three bedroom houses, each home is on a private lot arranged around garden courtyards functioning as common recreation space.

Towns in the Pacific Northwest have adopted cottage housing zoning, using different approaches to regulate it, including conditional uses with rules for lot pattern and building size. The goal is to create sustainable housing using less land and material, generating a greater sense of community. This model follows a European strategy used for hundreds of years.

### cottage housing goals – Redmond, Washington

- respond to changing household sizes: retirees, smaller families, singles
- *affordable detached single family homes*
- useable open space: smaller yards greater common space
- growth management: greater land efficiencies
- compatible land use

Infill and greenfield situations similar to Kentlands or the infill townhouse projects on Georgia Avenue offer another model, albeit one that has existed for 100 years. Kentlands is a successful greenfield model that our County ordinance wouldn't permit. The Code should be doing better than requiring out-of-date development patterns.



Many new urbanist communities allow smaller lots and accessory units, usually above the garage. Varied house sizes allow for different sized households.

#### energy advantages

A small town in British Columbia requires new subdivisions to orient buildings to take advantage of the sun. Smart buildings maximize south facing windows to let in the warmth of the sun during cold months. A cornice above the window then blocks the angle of the sun during the summer months when the sun is higher in the horizon, reducing the need for air conditioning. These are simple techniques for reducing the energy consumption of buildings, which create more carbon emissions than automobiles.

The windows of this Houston office building let in the sun during winter to warm the building. Overhangs on each floor block the high summer sun, reducing cooling costs.



The technology exists for buildings to do many things including harnessing

the suns energy through solar panels and generating electrical power through wind turbines. Reflective surfaces are simple solutions to reducing energy costs.

This single room occupancy building in Chicago offers small units (370 square feet) for transitioning homeless people to permanent housing. The building's



innovations include rooftop wind turbine energy production and 40 solar panels to preheat water. The building's design and environmental features have become a national model.

### code strategies for green design

- lower lot size
- limits on house size
- building orientation
- reduced front yard setback
- lower parking requirements
- minimum standards for pervious cover
- requirements for onsite energy production

#### processes

The code already has environmental overlay zones intended to protect water resources. There has been some criticism that the requirements of the zone add to the length of the process.

#### ideas

 Investigate best practices for green zoning ideas related to standards, processes, and technology.

#### industrial zoning

A healthy industrial policy is key to achieving a balanced local economy. While the County is not a market for smokestack industrial uses, making sure land is available for light industrial uses in built up areas provides employment opportunities and keeps delivery and service mileage and times to a minimum.

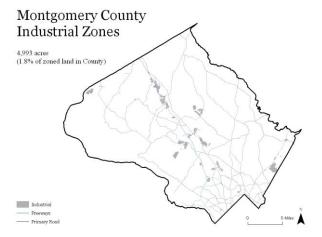
The Code's industrial zoning is archaic, using terminology abandoned by the industry in the late 1980s. The 1997 North American Industrial Classification System (NAICS), adopted by the United States, Canada, and Mexico defines and regulates industrial activity.

### discussion

Planning staff has started outreach with industrial property owners to understand the County's niche in the industrial marketplace. Rent structures have increased to the point where some light industrial users have migrated to other counties where rents are considerably cheaper. Understanding

the marketplace, who the users are and how much industrial land is zoned, and whether or not the zoning allows for these uses, is important to an improved industrial policy.

Jurisdictions around the country are struggling to maintain industrial land under the pressure to convert it to housing. This has recently happened in the County where housing was proposed in I-3 zones and would put people closer to where they work. However, none of the industrial land is close to transit and with what little industrial land there is, it should be reserved for industrial uses. Also, productivity housing is already allowed in that zone and has produced no units.



Compared with its regional neighbors, the County has the least amount of land zoned for industrial uses, less than one percent, and some of that land is not used for industrial activities.

#### ideas

- Update the industrial terminology to reflect the NAICS terms, the current industry standard.
- Study current industrial uses in the County and emerging industrial tenants and revise the zoning policy uses and standards to make best use of the County's limited industrial land.
- Establish a rational hierarchy of industrial zones that address urban industrial services, office parks in I-3 zones, and industrial uses that support agriculture, among other issues.

### signs

The Code also regulates signs, a difficult subject in any community, addressing size, location, height, and construction of all signs placed for public view. The Code states that any sign not listed as permitted is prohibited and, in a feat of redundancy, includes a subsection listing the types of signs that are prohibited. There is a separate listing of definitions not included in the main definitions section that relate only to signage.

### types of signs

- permanent signs intended for long-term display
- limited duration signs non-permanent signs displayed for more than 30 days
- temporary a sign that is displayed on private property for less than 30 days

NO (0/0)

PARKING

ANY

TIME

EAST OF HERE

All signs, except temporary signs must have a permit. There are specific types of signs that are exempt from regulation if they are two square feet or less, and others that are exempt regardless of size.

#### discussion

Sign regulation is a growth industry. The temptation is to get involved in the minutiae of sign control, leading to a never ending series of amendments to regulate unintended signs. At a minimum, the rewrite should rationalize the types of signs and the definitions as well as clarify the variance process.

Diagrams are used to show how to calculate sign area. This is one of the few examples of diagrams being used in the Code.

The signage rules and process should be simple to understand.

#### ideas

- Review best practices in sign regulations, particularly those dealing with changes in sign technology like digital signs.
- Ensure the regulations are in compliance with federal law.
- Clarify the authority regarding sign variances.
- Consolidate information and use tables and charts.

# organization

Throughout this discovery, organization has been cited as an issue. A primary goal of the rewrite is to better organize the Code.

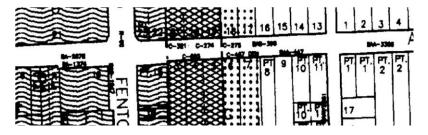
### mapping

The zoning maps are the legal record of zones applied to land parcels throughout the County. Combined with Code's text on permitted uses, development standards, footnotes, etc., they are the source of relevant zoning. Zoning maps also provide information on past zoning actions, including special exceptions, variances, and rezonings.

### mapping facts

- the maps are at 200-foot scale
- there are 650 zoning maps
- the official maps are paper copies on 25" x 25" paper
- not all the maps have been converted from hand drawn copies
- maps that are converted to digital, are done in AutoCAD

The official copy of the zoning map is kept in the Planning Department's offices and copies are made on request. The historical information on the maps, the zoning case history, is a frequently requested item.



An example of a current zoning map showing references to historical information.

Prior to 1994, the zoning maps were hand drawn. Since that time the architectural rendering program AutoCAD a software program for 2D and 3D design and drafting has been used to computerize the drafting process. Of the 650 official maps, only 383 have been digitized using AutoCAD. The remaining maps are hand drawn.

#### discussion

AutoCAD displays information on layers and the amount and types of data that can be recorded and displayed is limited. The primary information mapping tool that has emerged over the past 15 years is the Geographic Information System (GIS).

GIS is a property database program that creates layers of information that can be turned on or off, displayed in different patterns or colors, and manipulated in any combination of factors. It can enhance the ability to manage large amounts of information, tied to parcel file information, with great accuracy. GIS creates mapping that becomes a universal tool for all County departments who manage information tied to individual parcels.

For example, the Planning Department would create a file of specific zoning information, case history, and parcel dimensions, while a forestry file could also be maintained showing tree cover or permits for the same property. At the flick of a switch, different layers can be displayed.

### possible zoning map information layers

- zoning
- tax account numbers
- property address
- applicant information
- zoning change history
- links to case file history

The Planning Department has started creating a parallel mapping system based on GIS. These are not the County's official zoning maps, but are being used as a better way to display information. Planning staff is also working fact check all historical zoning case references, a long and tedious process of going through files and microfiche. This is being done to ensure zoning case histories are accurately shown and that information is tagged to the right parcels.

zoning case history

case type	total	interactive	need Info	completed since june 2008	percent interactive
special exceptions	4536	3615	921	347	87%
variances	3999	3566	433	210	94%
zoning Cases	6162	0	6162	0	0%

Zoning case history work currently under research for accurate representation on the zoning maps

### limitations with the current AutoCAD maps

- they are not database files
- people need to visit the office to see the maps
- online capability is non-existent
- difficulty tying information to parcels
- redrawing individual maps is needed to add layers of information

GIS can overcome the AutoCAD map handicaps. Once property ID tags are created in a spreadsheet, any information can be programmed into a system linked to those ID numbers. Maps don't have to be redrawn. A user connects to the webpage then selects information on a drop down menu. At the click of a button a map is generated. Aerial photography as well as links to other information sources like Google maps is possible.

The GIS maps offer a clearer, more accurate, and faster method of generating maps. They offer enhanced access for the public and the ability to link infinite layers of parcel level data.

the the the

Another GIS advantage is the information layers build as the data is entered. Emergency services can access information for a specific

property and enhanced permit review can occur from remote locations. Planning staff have noted the advantages in plan review of having case histories linked to a property file. Finally, GIS can generate indexes that can be searched online, greatly improving access to information.

#### ideas

- Convert zoning maps to GIS technology and adopt them as the official zoning maps.
- Continue reviewing zoning case histories and convert it to GIS layers.

### indexing

Keeping the general provisions general—organizing the exceptions, footnotes, and other amendments is key to maintaining the Code's framework. The database advantages of mapping will support the indexing effort to keep track of what is in the Code.

Subsequent legislators will amend any revised Code. While we hope that these amendments will be for a higher purpose, the "Christmas tree factor" will happen (referring to the prohibition on tree sales prior to December 5). With the GIS capabilities, indexing amendments will be simple, organized by parcel and address. Anyone using the Code will benefit from this type of organization.

#### i d e a s

The revised ordinance should include indexing to help Code users find all zoning matters relevant to their property.

### outreach

Facilitator-led outreach sessions have included civic and community groups, County staff and land use attorneys, developers and other people who use the ordinance on a regular basis. To date, a series of small group discussions with more than 100 participants and an online survey gathered input about the Code rewrite have helped record public input.

Public comments included-

- the code is difficult to use and understand
- we need to change from a suburban focus to a mature community embracing infill and redevelopment
- there is no need to have so many different land use zones
- let's not be so rigid on uses, we need to promote mixed uses to reduce car trips
- the code is so negative to smart growth development, that it encourages unsustainable sprawl
- improve access through less legalese and through interactive tools and diagrams

The discussions confirmed opinions about the Code's complexity and uncoordinated policies.

online survey results

The Planning Department webpage has the results of the outreach sessions posted as well as all comments and suggestions at www.mcparkandplanning.org/info/zoning\_ordinance.shtm

Public workshops are planned for early 2009 and will be held throughout the rewrite process to obtain feedback and encourage discussion on new concepts that are being explored.



# implementation

### diligence

The work to improve the Code will strive to create an organization and format that is clear, accessible, and easy to understand. It will discourage zoning to meet extreme circumstances or applying the solution for a minor issue to the entire County. We don't want to repeat our current "patchwork" approach that results in complexity rather than clarity.

With a strong framework, the Code can be updated without losing the power of its vision for the County.

Zoning should be an organized system of regulatory tools that can establish development parameters to achieve an overall vision. The County's vision is to grow strategically, enhancing mobility and as a result, achieve sustainably. The Code must look forward, beyond the past years of subdivision planning, to the future when most new development will be infill and compact.

Staff will examine the Code, considering the reasoning behind a provision and whether it is still relevant. Recommendations will be examined and tested. Simplification and ease of use will be a driving force to create a document that addresses development and redevelopment today and into the future.

### stages

Staff is considering the best way to implement the changes. The overwhelming opinion is that the document must be replaced. It can be replaced in different ways from completing everything at once to making the changes one use district at a time. With several sector plans being presented in 2009, we have the opportunity to bring in a new mixed-use district consistent with the discussion in this report. This could be the first part of the Code revision.

The links among the Code's sections and topics means amending it a district at a time will require changes in many sections. For example, streamlining the many mixed-use districts would impact the following topics.

- definitions
- uses
- general provisions like parking
- footnotes and special exceptions dealing with mixed uses

Staff is identifying every section of the Code by subject and use. As each section is completed, the impact of the recommendations can be considered for all provisions. As sections of the Code are amended, the structure will begin to take on a new shape and organization. Some sections, like the general provisions, would impact more than just the one use category, so the amendment may take on policy beyond the one use.

For example, amending the mixed-use zones may address open space and parking requirements that apply in other zones. So amendments may require the scope to go beyond the mixed-use connections to create a table of requirements that apply to all uses.

Changes will create new zone categories for some areas as the number of zones is reduced. Master plan compliance will be considered in the context of a text amendment to deal with any transition.

New GIS maps will support this effort by linking new information in the text to the maps. Shifting all the maps at once into the new format would make amendments based on use easier to prepare with the data layers constructed at the outset.

#### timeline

The general milestones in the Code review process are as follows.

discovery phase - fall 2008 through mid-2009

- anlaysis
- outreach
- code diagnosis

idea development and drafting – early 2009 through mid-2010

development

- sampling new ideas
- engaging user groups
- completing the mixed use, agriculture, industrial districts
- grandfather clauses
- outreach

drafting - early 2010 through early 2011

- new GIS maps
- definitions
- general provisions
- footnotes and exceptions
- process
- outreach

final stages - fall 2011

- residential districts
- cleanup of linkages

Staff has already analyzed, researched, and tested a number of standards and uses including a use matrix mapped against the zones and a chart of development standards. This work is the foundation for moving ahead on individual components. Because topics are linked, it's difficult to apply a fixed schedule for an individual topic. However, staff is developing a matrix of all of the tasks that need to be completed.

The Planning Board has endorsed the approach outlined in this report. As a result, staff is moving forward with the task matrix and assigning timelines based on subject material. Each task builds on the one before it.

Making this schedule is dependent on budget levels. Retaining outside help could impact the schedule and the FY2010 budget will be an issue. A committee of legal, planning, and design professionals who have experience working with the Code will help advance the policy recommendations.

Planning staff has moved forward in exploring a number of ideas to form the foundation for zoning reform.

# emerging ideas

- expanding the use of **floor area ratio** to residential districts
- using technology to create new zoning maps and expanding their capabilities
- reducing the number of zoning categories
- defining zones by their use, not development standard such as lot size
- collapsing the subtle differences between standards and processes
- rethinking footnotes to accommodate exceptions to the general rule without compromising the Code's general intent
- using illustrative techniques to clarify the requirements

# zoningdiscovery

montgomery county council PRESENTATION TO PHED COMMITTEE



m o n t g o m e r y c o u n t y p l a n n i n g d e p a r t m e n t The Maryland-National Capital Park and Planning Commission

000000829