Nashville-Davidson County Subdivision Regulations Audit Final Report and Recommendations

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1. Introduction and Background

In early 2004, the Smart Growth Leadership Institute and the Nashville-Davidson County Metropolitan Government agreed to work collaboratively on a review and audit of the county's subdivision regulations. Metro was contemplating a rewrite of its subdivision regulations, while the Smart Growth Leadership Institute (SGLI) had just launched its Smart Growth Technical Assistance program with funding from the United States Environmental Protection Agency. This document represents SGLI's final report to the Metro Planning Department, providing Metro with an assessment of the current subdivision regulations, as well as some Metro processes, and providing recommendations on how those regulations and processes might be changed and improved.

1.1. Background on the SGLI Technical Assistance Project

Smart Growth Leadership Institute, a project of Smart Growth America, was created by former Maryland Governor Parris N. Glendening to help state and local elected, civic and business leaders design and implement effective smart growth strategies. Funded by a grant from the U.S. Environmental Protection Agency Development, Community, and Environment Division, the Technical Assistance program provides assistance to a few select communities that have made a commitment to smart growth but are struggling with implementation, building support, identifying the most problematic policies, and other issues that typically accompany a major change in development practice. The team includes a group of experts from the University of Southern California and the University of Colorado.

The goal of the Technical Assistance program is to help communities implement smart growth, specifically overcoming obstacles by providing guidance in areas such as:

• Assessing codes and zoning ordinances to identify inconsistencies between smart growth policies and implementing codes that may still contain obsolete standards.

• Examining development approval processes to identify points in the process where redundant reviews can be eliminated, where timeframes can be shortened or where activities might be permitted to proceed concurrently.

• Identifying "smart sites," or potential locations for smart growth projects.

• Creating design standards and review protocol that will help achieve Smart growth objectives and deal with prospective neighborhood opposition.

This technical work will also help to shape a national "Smart Growth Implementation Kit" that will allow other communities around the nation to gauge whether their current policy and regulatory frameworks, their approval or review processes or design standards encourage and support smart growth.

In late 2003, SGLI selected nine communities, from more than 100 applicants, to provide implementation assistance. In addition to Metro, the communities selected were Anchorage, Alaska; Baton Rouge, Louisiana, Lawrence, Kansas; Lawrence, Massachusetts; Lithonia, Georgia; Mount Joy Borough, Lancaster County, Pennsylvania; Orange County, Florida; and Richmond, California.

1.2 Smart Growth Defined

Smart growth is defined by 10 principles:

- Provide a Variety of Transportation Choices
- Mix Land Uses
- Create Range of Housing Opportunities and Choices
- Create Walkable Neighborhoods
- Encourage Community and Stakeholder Collaboration
- Foster Distinctive, Attractive Communities with a Strong Sense of Place
- Make Development Decisions Predictable, Fair and Cost Effective
- Preserve Open Space, Farmland, Natural Beauty and Critical Environmental Area
- Strengthen and Direct Development Towards Existing Communities
- Take Advantage of Compact Building Design and Efficient Infrastructure Design

While this list of goals is broad, the core principals focus on the use of land: consumption, direction, density, form, and use. Smart growth is often understood as the opposite of sprawl, which is characterized as the predominant form of American land use. Where sprawl treats land as an unlimited commodity, smart growth sees land as a limited resource. Where sprawl develops at low density on raw land at the urban fringe (a pattern largely underwritten by government policy and practice), smart growth first directs growth to areas within the existing urban footprint (infill and redevelopment) and often seeks to permanently maintain open space at the urban edge. Sprawl develops at relatively low density with leap-frog development and separated land uses while smart growth emphasizes higher density with interconnected, compact, contiguous, and mixed-use development.¹

¹ Jerry Weitz and Leora Waldner, "Smart Growth Audits." APA Planning Advisory Service Report No. 512 (November 2002), p. 2.

1.3 Local Circumstances in Nashville-Davison County and the Audit Process

The Metro Planning Department asked the SGLI Technical Assistance team to provide an assessment of the county's subdivision regulations. Nashville's geography includes a wide range of environmental features and terrains. Likewise, through the sub-area planning process citizens have expressed interest in the full range of development typologies, from very urban to very rural. However, the character of Nashville's unique settings is being gradually eroded by development trends of the last several decades, influenced, in no small measure, by one-size-fits-all subdivision requirements. Most of Nashville's subdivision development standards reflect the conventional wisdom of the 1960s and 1970s, facilitating sprawling development patterns while inhibiting cost-effective development of urban and rural-character projects.

The Planning Department intends to reform its subdivision regulations around a continuum of contextual "transect" zones, so that ~ whether rural, suburban or urban ~ a subdivision can be cost-effectively designed and developed from a "kit of parts" that fit the community context in which it will be built. The SGLI recommendations will be one of many sources of information used to assist the Metro Planning Department in rewriting those regulations.

Prior to the field visit to Nashville, the SGLI Technical Assistance team began to develop an evaluation tool designed to "audit" a community's codes and provide a benchmark to assist communities in determining "how they're doing" relative to smart growth principles. In early March, three members of the SGLI team paid a two-day visit to Nashville: William Fulton, Senior Scholar at the USC School of Policy, Planning, and Development (the team leader); Harriet Tregoning, Director of SGLI; and Jessica Cogan, Deputy Director of SGLI.

During this visit, the SGLI team toured the Nashville-Davidson County area and met with planners, engineers, and developers who are deeply engaged in and knowledgeable about local planning and development processes. These included:

- Rick Bernhardt, Executive Director, Metro Planning Department
- Ann Hammond, Assistant Executive Director ~ Planning, Metro Planning Department
- Bob Leeman, Kathryn Fuller, Preston Mitchell, Jerry Fawcett, and Lee Jones, Metro Planning Department
- Mike Morris, Engineer, Water and Sewer Division, Metro Water Services
- Hank Helton, Director, Mayor's Office of Housing
- Charles Hasty, Engineer, Metro Public Works
- Tom Palko, Engineer, Stormwater Division, Metro Water Services
- David McGowan, Developer
- Danny Wamble, Consulting Engineer

Subsequently, the SGLI team refined its audit and synthesized its results into this report.

Although SGLI's charge from Nashville-Davidson County was to examine the Subdivision Regulations only, the nature of our audit process ~ as well as the experience of our field visit – caused us to view our task somewhat more broadly.

First, to complete our standard audit, we looked not only at the subdivision regulations but also at the underlying zoning ordinance and other development standards – so our audit (summarized in Section 3) and our recommendations (contained in Section 4) extend beyond the subdivision regulations as necessary.

Second, in the process of learning about how development regulations are applied in Nashville-Davidson County, we repeatedly encountered a number of issues having to do with the project approval process. These discussions led us to consider some recommendations about revising the project approval process as well. The process recommendations are contained in Section 5.

2. The Nashville-Davidson County Land-Use Regulatory System and Subdivision Regulations

The Nashville-Davidson County Subdivision Regulations are just one part of a larger planning and land-use regulatory system administered by the Nashville-Davidson County Metropolitan Planning Commission in cooperation with other Metro departments, including the Department of Public Works and the Department of Water Services.

Overall, planning and development in Nashville-Davidson County is governed by the Metro General Plan. Although some have called for an update of the General Plan, budget constraints make such an update impossible at this time. Instead, the three relevant departments have agreed to move toward consensus on a consistent policy approach toward development, and work toward changes in both policy and implementation that further that consistent approach. While awaiting update of the General Plan, changes in policy and implementation can be guided by the adopted sub-area and neighborhood plans. These plans are more frequently updated to reflect each community's development goals.

The Planning Department has advocated use of the "transect" – a continuum of development patterns ranging from urban to rural – as an overarching philosophical approach to planning the county. Using this approach, the Metro Planning Department has begun to use a classification system called the "Community Transect Zones," which divides the county into seven different types of development zones:

- Core
- Center
- Neighborhood
- District
- Suburban
- Rural Reserve
- Rural Preserve

This classification system has been proposed by the Metro Planning Department and used in developing a variety of planning policies, including the "Strategic Plan for Sidewalks and Bikeways." In recognizing that different parts of the county have different development patterns, the "transect zone" approach suggests that different development standards might be required in different parts of the county.

In addition, the Metro Planning Department has also moved forward on a series of neighborhood- and district-level plans that, on some level, embrace the transect approach. These include "Structure Plans," which provide overarching planning policies for the area, and "Detailed Neighborhood Design Plans," which articulate design principles specific to that neighborhood or district in considerable detail.

At the same time that these planning policies call for a differentiated approach, however, other aspects of the planning and development process call for a more uniform approach. For example, the stormwater regulations administered by the Stormwater Division of the Department of Water Services – which progressive by national standards – nevertheless encourages similar on-site stormwater detention in virtually all situations. More relevant to the discussion at hand are the Subdivision Regulations, which contain a uniform set of standards to be applied countywide.

It is difficult to discuss the Subdivision Regulations by themselves because development standards are also contained in the Metro zoning code, which was adopted most recently in 1998. Like the Subdivision Regulations, the zoning code too creates a set of standards that are meant to be applied countywide. However, the zoning code contains some flexible alternatives to the "one-size-fits-all" approach. These include:

- The Urban Zoning Overlay (UZO), which permits different setback and parking standards in downtown Nashville and the immediately surrounding area so that historic development patterns can be maintained;
- The Planned Unit Development (PUD) alternative, which provide some flexibility regarding "one-size-fits-all" standards; and
- The Urban Design Overlay (UDO), which allows developers to work with Metro planning staff usually in the context of an urban neighborhood to try out new approaches that can be applied in specific situations.

The following discussion focuses mostly on the Subdivision Regulations, which are the subject of SGLI's audit for the Metro Planning Department. However, of necessity the audit does "back up" to deal with zoning and stormwater regulations in some specific situations because that is where the relevant standards are located.

3. Findings of the Subdivision Audit

The complete results of the audit of the Nashville-Davidson County Subdivision Regulations are contained in Appendix A. It is important to note that because it is derived from SGLI's standard land-use code audit sheet, Appendix A includes references to Nashville-Davidson County's zoning regulations as well as its Subdivision Regulations. We will limit this discussion to the highlights of the audit, focusing especially on the Subdivision Regulations. These highlights include the following:

3.1. The Subdivision Regulations embody a one-size-fits-all approach that is at odds with the "transect zone" approach contained in the county's planning policies.

In virtually all areas, the standards contained in the Subdivision Regulations are uniform – that is, they are meant to be applied uniformly everywhere in the county, no matter what the surrounding development pattern is. There are some exceptions; the Subdivision Regulations permit some different standards in both infill and rural settings. By and large, however, the predominant approach is "one size fits all".

3.2. The zoning code contains more flexibility and more recognition of the "transect zone" approach than the Subdivision Regulations.

As noted above, the zoning code does contain a series of more specific and/or more flexible standards, including the UZO, UDO, and PUD. In addition, the zoning code provides for a full range of use districts, including mixed-use districts, as well as flexible standards for parking, lot sizes, and a variety of other standards.

3.3. The street hierarchy and street standards are especially rigid in the Subdivision Regulations.

The Subdivision Regulations contain street and highway standards that are especially rigid and represent the "one-size-fits-all" approach. The street hierarchy is a very traditional arterial-collector-local hierarchy, although the Subdivision Regulations do also contain a "minor local" classification. The design speed standards (30 mph for a local street, 40 mph for a collector) are not unreasonable, although a more fine-grained street hierarchy might create more opportunities for streets with lower design speeds. However, the street widths are considerable – ranging from a required 46-foot right-of-way for a local street to 60 feet for most collector streets. Collector streets in high-density neighborhoods (9 units per acre or more) are required to be even wider – 72 feet. Such street widths may reflect the expected increase in traffic from a higher-density neighborhood but do not take into account the possible need for more pedestrian-friendly streets.

Street pattern requirements are a mixed bag. On the one hand, permitted block lengths (1000 feet for collectors, 1600 feet for local streets) are extraordinarily long compared to the norms for smart growth developments (though they represent typical suburban standards). On the plus side, the Subdivision Regulations do encourage street connectivity.

3.4. Parking standards, contained in the zoning ordinance, are more flexible.

While uniform street standards are contained in the Subdivision Regulations, more flexible parking standards are contained in the zoning code. These parking standards encourage tandem parking and parking ratio reductions in more urban settings – appropriate standards for a Smart growth approach.

3.5. Lot subdivision requirements in the Subdivision Regulations are also rigid and do not seem to promote a smart growth approach.

While specific lot size requirements are contained in the zoning code, the lot subdivision requirements are contained in the Subdivision Regulations. The lot size requirements appropriately call for the full range of lot sizes, ranging from mixed use to extremely large lots. However, these lot subdivision requirements present two problems from a Smart growth point of view.

First, the lot subdivision requirements allow considerable variation from the lot sizes prescribed in the zoning ordinance. Most specifically, lots can be up to three times the sizes specified in the zoning ordinance. Thus, while the maximum residential density follows the zoning district's standards, the minimum density is only one-third of the density envisioned in the zoning ordinance.

Second, new subdivisions in some circumstances are required to conform in size to surrounding subdivisions. Although "lot comparability," as this practice is called, is not required for lots on new streets in major subdivisions, it is required for lots fronting on existing streets. This is a problem specially called out by staff planners in the Metro Planning Department. While some neighborhoods in Nashville-Davidson County are earmarked for more intense development by the Structure Plans and Detailed Neighborhood Design Plans, actual implementation of these changes could become difficult in some cases if new lots on existing streets must have similar lot sizes to older subdivisions.

3.6. The bias toward onsite stormwater retention basins makes it difficult to accommodate new development in existing urban areas.

One of the most important advances in environmental policy in recent years has been a more aggressive approach to managing stormwater. When permitted to "run off" untreated into surface waters, stormwater can be a significant cause of poor water quality. Nashville-Davidson County's stormwater regulations (contained in the Department of Water Services Stormwater Management Division's "Stormwater Management Manual") requires onsite detention of stormwater for all new developments unless there is capacity in a regional stormwater system. Onsite detention is an excellent way to treat stormwater. However, requiring onsite detention can be a major obstacle to infill development. It is extremely difficult to accommodate dense, new development on small sites in existing neighborhoods if basins must also be constructed on such sites. The irony is that a developer will create much more impervious surface if forced to abandon the infill location and move to a suburban site instead.

4. Recommendations on Possible Changes to Subdivision Regulations and Other Land-Use Regulations

The results of the audit of Subdivision Regulations and some related land-use regulations provide a very clear picture: Whereas the direction of Metro's planning policies is toward more differentiation among different types of places, the Subdivision Regulations reflect a uniform approach.

Metro's planning and development policies encourage an approach oriented toward "transect zones" that differentiates among different patterns of development in different parts of the county; and, to some extent, the zoning ordinance reflects this approach by providing flexible standards and different types of zoning standards for different settings.

Yet the Subdivision Regulations continue to represent a somewhat rigid approach and "one size fits all" approach to land subdivision. Both the audit and the field interviews in Nashville-Davidson County reveal that this approach is increasingly out of step with both the policy direction and the "on-the-ground" reality of development in the area.

The increasing use of the Planned Unit Development and Urban Design Overlay in new development projects, rather than the regular zoning ordinance, shows that a one-size-fitsall approach to new development is no longer sufficient in Nashville-Davidson County. These innovative alternatives require both Metro Planning and Metro Public Works to deviate from both zoning and subdivision standards – replacing those standards, in many situations, with planners' and engineers' judgment on a case-by-case basis. All Metro departments interviewed in the field visit, including Metro Public Works, agreed that it would be preferable to have several different sets of standards, rather than applying judgment on a case-by-case basis.

Based on the audit and the field visit, therefore, the SGLI team makes four recommendations regarding the Metro Subdivision Regulations and related codes.

4.1. Reorganize the Subdivision Regulations around the transect zones.

Metro's planning policies – including the Structure Plans, Detailed Neighborhood Design Plans, and policy plans such as the Strategic Plan for Sidewalks and Bikeways – increasingly use the seven transect zones as a core organizing principle. The Subdivision Regulations should be reorganized around these same transect zones to provide the opportunity to gradually move toward different sets of subdivision standards for each zone. Although it is outside the scope of this report to recommend formal changes to the zoning ordinance, we would suggest that the zoning standards too be reorganized around the transect zones. This will be relatively easy, as the zoning ordinance already has many different types of use districts and different sets of standards. It is just a matter of organizing and labeling those districts and standards appropriately – a matter that could perhaps be handled administratively.

4.2. Create several sets of subdivision standards for different contextual situations in the county.

Once the Subdivision Regulations acknowledge the seven transect zones as a guiding principle in planning and development in the county, the subdivision standards can gradually be reoriented around the requirements in each zone. For example, the Subdivision Regulations may create a more fine-grained street hierarchy with more than four types of streets – and, hence, more than four types of street standards. This street hierarchy could then be applied in a different way to each transect zone.

For example, the regulation may specify several different types of collector streets, including collector streets specifically designed for high-density urban neighborhoods. Those streets may not need to be as wide as high-density collector streets in suburban neighborhoods.

Similarly, lot conformity might have different requirements depending on which transect zone is relevant. In some neighborhoods, newly subdivided lots might appropriately be about the same size as existing lots. But in others, the transect zone specified in Metro's plans and policies may suggest a gradual decrease in lot size from the prevailing existing pattern. In those instances, lot conformity may have different standards permitting smaller lots than the existing pattern.

4.3. Use the flexible zoning classifications, such as PUD and UDO, as a "learning experience" to amend the Subdivision Regulations in the future.

We would not recommend that the Metro government undertake a wholesale revision of the Subdivision Regulations "up-front". Rather, we would encourage Metro's departments to use the existing flexible zoning tools, especially PUD and UDO, to try out and refine the new standards before those standards are placed into the Subdivision Regulations.

In most cases, PUD and UDO projects represent a deviation from current standards – both zoning and subdivision standards – because both the developer and the Metro government see the need to approach a specific situation differently than is called for in the code. Already, these projects as approved have led to the creation of many innovative tools that could be used elsewhere. The Metro departments should:

- 1. Catalogue the tools used in the PUDs and UDOs;
- 2. Assess which ones are effective in different contextual situations; and then
- 3. Translate those tools into new standards in the Subdivision Regulations (and, ideally, the zoning code as well) that are appropriate to each transect zone.

In this way, the regulations will represent not a rigid set of rules but, rather, a "kit of parts" that can be applied to different situations in an appropriate manner. Furthermore, the Metro departments should consciously use both the PUD and the UDO in the future to try out and assess further changes, and then incorporate successful ideas into the subdivision and zoning regulations in the future as a way of further refining the transect-oriented approach.

In this way, over time the "kit of parts" would be refined and focused on effective standards and strategies that reinforce solutions that are appropriate to each contextual situation.

4.4. Stormwater regulations should be amended to move away from a one-size-fits-all approach.

Like the subdivision regulations and the zoning ordinance, stormwater regulations should also be amended so that they do not unduly burden infill development projects or smaller parcels in suburban locations.

Onsite detention makes sense in suburban areas where more land is available. In existing urban locations, an onsite retention requirement can kill otherwise outstanding projects by requiring a large percentage of the property to be set aside for a detention basin.

Simply by their nature, higher densities and infill development already serve as an important stormwater runoff strategy. Such development causes urbanization of less land than would occur in lower-density situations. In the case of converting previously urbanized land to a new use, no additional runoff is created because impervious surface already covers the land. Infill developers should be permitted to "pool" their stormwater management efforts so that retention can occur on the neighborhood level, rather than for each individual site. One good example is San Diego, which has introduced flexible regulations to allow infill developers to contribute to basinwide controls that serve a whole group of redeveloped properties. This method is called the "localized equivalent area drainage" method. By pooling resources, infill development is estimated to save \$40,000 per acre, which will help reduce the price of housing created in infill locations.

The SGLI Team also recommends using Low Impact Development (LID) techniques to help manage stormwater. LID aims to mitigate stormwater issues associated with new development by mimicking the pre-development hydrology in post-development. The approach emphasizes the integration of site design and planning techniques that conserve natural systems and hydrologic functions on a site. LID permits the developer to use an array of storm water management devices that are both cost-effective and environmentally sound. LID has been proven to reduce development and infrastructure costs, minimize operations and maintenance costs, and improve the marketability of projects.

5. Recommendations on Possible Changes to Subdivision Review Process

During the course of our field visit, the SGLI team repeatedly heard participants in the planning and development process voice another, related concern – not about the actual policies or standards in place, but, rather, the process by which subdivisions are designed, processed, and approved in Nashville-Davidson County.

The approval of new subdivisions ultimately requires the cooperation of three different departments: the Metro Planning Department, which processes the land-use application; the Metro Public Works Department, which focuses mostly on the design of streets, roads, and other public infrastructure; and the Metro Department of Water Services, which is responsible for implementing regulations to minimize stormwater runoff.

As the process was described to us in the field visit, all these departments do receive and comment on subdivision proposals at the "front end" of the process prior to Planning Commission approval. However, many of our interviewees described a process that seemed frustrating and time-consuming and makes it more difficult to consistently implement any set of policies, whether oriented toward Smart growth or not. According to those we interviewed, the Public Works Department sometimes makes changes to street and road requirements at the construction drawing stage, after Planning Commission approval.

Furthermore, the Department of Water Services does not enter into discussions with applicants about stormwater retention until after the Planning Commission has approved the subdivision. The stormwater retention requirements sometimes trigger changes in the subdivision – often reducing the number of lots – and triggers a new round of Planning Commission approval.

The SGLI team recommends that this process be changed to either require or encourage complete resolution of public works and stormwater issues prior to Planning Commission approval. Ideally, all three departments should meet with the developer in a "pre-application" meeting where road and stormwater design matters can be discussed and dealt with. Such a pre-application process might be difficult to implement now, because both public works and stormwater engineers must assess so many different issues on a case-by-case basis. But if the recommendations in Section 3 above are implemented, resolution on these issues will be easier at the pre-application stage. By adopting and then applying a different set of standards for each transect zone, both public works and stormwater engineers should be able to resolve more issues efficiently at the front end of the process, requiring less "tweaking" after Planning Commission approval.

The creation of a consistent set of transect-specific standards across planning, public works, and stormwater also ought to provide greater confidence that the case planners can coordinate the project and take the lead in moving it forward to the Planning Commission with engineers from the other two departments providing input and review.

This pre-application process could take one of two forms. It could be mandatory, meaning every subdivision applicant would be required to follow it. Or it could be a "fast-track" permitting option, allowing applicants to "jump to the head of the line" and move to Planning Commission review and approval faster. One alternative approach would be to make the entire transect-based set of standards optional, but use the pre-application process to provide "fast-track" permitting for those who choose it.

Appendix A: Audit Results

The SGLI audit that follows is based on a template that was designed for widespread use nationwide. Not all of it is applicable to Nashville-Davidson County, and therefore some sections are left blank. The basic task was to audit the subdivision regulations. Wherever necessary, we have "backed up" into the zoning ordinance and other development standards to find the necessary standards.

Community:

Connect	Connectivity/Circulation										
С	1.00	Alleyways	Yes	No	DNA	Comments	Suggested Standards				
С	1.10	Are alleyways allowed?	Yes			2-6-2-2-F. "May be required where appropriate ion all comm;/ind districts. Permitted in rez zones when needed "to provide adequate lot access or where justified by topographic conditions	Require alleys to limit number of curb cuts on streets.				
С	1.20	Are there restrictions on their use?	Yes			Seems permissive, with conditions.					
с	1.30	Are width standards established?		No		Do not appear in subdivision regulations; however, Public Works says 20' is standard.	Use should dictate width. In commercial zones, alleys can function as drive aisles for off-street parking lots and as fire lanes.				
с	2.00	Bicycle/Multi-use trail facilities	Yes	No	DNA	Comments	Suggested Standards				
С	2.10	Are bicycle lanes required?				Don't think so.	Provide for a network of bicycle routes, lanes, or shared-use trails to promote bicycle use in all zones.				
С	2.20	Are bicycle lanes accomodated?				Not sure	Bicycle lanes can be retrofitted by changing the way on-street parking is accomodated.				
С	2.30	Is bicycle parking required?				Don't think so	Require bike parking facilities in commercial and industrial projects to encourage the use of bikes as alternative transportation. Provide for both short and secured long-term parking within convenient distances of building entrances, varying standards wi				

С	2.40	Are standards established for bicycle lane width?				Probably, see B ikeway plan Appendix C	On new roads, a minimum lane width of 6' is suggested. A minimum width of 5' is suggested for retrofits. Where a shared lane for bikes and parking is provided, a minimum total lane width of 12' (7' for parking and 5' for bikes) is suggested.
С	2.50	Are standards established for bicycle lane surface?				Probably, see B ikeway plan Appendix C	Grade differences between gutter pans and street surface should be eliminated. Uniform, smooth surfaces should be specified.
С	2.60	Are standards established for separation of bike lanes from motorized vehicle lanes?				Probably, see B ikeway plan Appendix C	
С	2.70	Is a multi-use trail provided for or planned?				Subdividers have the option of proposing a pedestrian trail or greenway trail meeting Metro Greenways Design Standards instead of sidewalks. Relief from sidewalk requirement is permitted. 2-6-1-D	
С	3.00	Parking standards	Yes	No	DNA	Comments	Suggested Standards
С	3.10	Is on street parking allowed?				Yes, in some places, apparently, and reduction are permitted for these.	Among other benefits, on-street parking encourages pedestrian traffic, and can act as a buffer between pedestrians and moving vehicles. Design is important.
С	3.20	What relationship is dictated between parking spaces and the street?					Avoid diagonal parking on streets with bike lanes or routes and on heavily traveled streets.

С	3.30	Are there provisions for shared parking?	Yes 17,20,100	Shared parking should be encouraged.
С	3.40	Are there provisions for joint parking?		Joint parking should be considered where conditions warrant.
С	3.50	What basis is used to establish parking requirements?	No of units in residential areas; square footage in non residential areas	Zone and use specific parking requirements should be established and should take transit facilities into consideration.
С	3.51	District type?	Yes	
С	3.52	Building type?	No	
С	3.53	Use?	Yes	
С	3.60	Are minimum requirements set?	Yes	
С	3.70	Are maximum requirements set?	No	
С	3.80	Are there provisions that allow reductions in requirements along transit routes?	Yes 10%	Reductions for transit availability should be allowed.
С	3.90	Are reductions allowed in exchange for bike parking?	Apparently not	
С	4.00	Street hierarchy	Comments	Suggested Standards
С	4.1	What street hierarchy is in place?	Traditional 3-level hierarchy (arterial, collector, local), except there are also "minor local" streets in rez neighborhoods less than 9 u/a. (Correct?)	Divisions within categories will permit a finer grained street system (e.g. differentiate between variousl widths of arterials, major and minor collectors, commercial and residential local streets).

	4.11	Are design speed standards used?	Yes	2-6-2-1-I. 30 MPH for a local street, 40 MPH for a collector.	Use design speed standards to establish pedestrian and bicycle friendly environments. Designing streets for higher speeds encourages speeding even through lower speed limits are set and often necessitates retrofitting traffic calming features.
С	4.12	What standards are set for width, intersection and corner radii for neighborhood access streets?		2-6-2-1 Table 2 Local/minor colal require 46 ROW/23 pavement, ex Local in higher- density can require 50-60' ROW "Rural" streets have wider ROW and less pavement requirements (not sure where to put this) another note: 2-6-2- 1 D, 4 moving lands discouraged on local streets	Vary required r.o.w. to reflect the nature of the district (see street widths below). Consider using design speeds of 25 mph for residential access streets.
С	4.13	What standards are set for width, intersection and corner radii for neighborhood connector streets?		2-6-2-1 Table 2 Collector streets? 60 ROW, 37 pavement ffor below 9 u/a 72/49 in higher dnsities	Tighter curb radii shorten pedestrian crossings and require vehicles to make turns at lower speeds. Limit curb radii to 4 to 15 feet. Require a 25' clear zone to accommodate the wider turning radii required by emergency vehicles. Consider using design spe

с	4.14	What standards are set for width, intersection, and corner radii for regional access streets?				Arterials not specified in subdivision regs	Where wider streets are desired, require center medians to maintain a pedestrian- friendly environment. Consider using design speeds of 40 mph on major collectors and 30 mph on minor collector streets. Arterial design speeds should be no greater than 50 mp
С	5.00	Street pattern	Yes	No	DNA	Comments	Suggested Standards
С	5.10	What block lengths are dictated?				2-4-6. Maximum block length 1600 feet; minimum 200 feet or 4 lots widths, whichever is less. Collectors & arterials, 1000 foot minimum blocks	Excessively long blocks discourage pedestrian traffic. Limit block perimeters (e.g. 1600 ft.). Limit block face lengths (e.g. 500 ft.)
С	5.11	Do these differ by zone?				By street hierarchy, though reference is made to design with "due regard" to zoning as to lot sizes. 2-6-2-1-E	
С	5.12	Are cul de sacs allowed?				Unclear. 2-6-2-2-E deals with deadend streets. But this may not deal with cul de sacs as such.	Limit use of cul de sacs, and limit length (e.g. to 300') when they are allowed. Where allowed, consider requiring pedestrian and bicycle access between adjoining neighborhoods.
С	5.20	Are there provisions to ensure street connectivity between neighborhoods?				2-6-2D states that "the use of an interconnected street system shall be encouraged"	Require mid-block pedestrian passages in commercial and mixed-use zones (e.g. at 250' maximum intervals).
С	6.00	Street width	Yes	No		Comments	Suggested Standards
С	6.10	Do street width requirements vary by type of zone?	Yes			Yes, see above. But note that centerline radius of curved segments must be 110 feet.	Vary required r.o.w. to reflect the nature of the district.
							Major arterials - 110' with center median

Town center streets - 88' to 60' depending on whether center median, bike lanes, and/or angled parking are included in design.

Neighborhood streets - 50' to 60'.

С	7.00	Streetscape features	Yes	No	DNA	Comments	Suggested Standards
с	7.01	Are crosswalks allowed?					Crosswalks should be allowed, and required on long blocks to provide access to commerical areas, schools, places of worship, transportation and recreation facilities.
с	7.02	Are pedestrian controlled crosswalk signals required?					Crosswalk signals increase pedestrian safety and encourage walking.
с	7.03	Is landscaping of medians or curbsides required?					Landscaping softens the street environment and makes it more attractive to pedestrians.
С	7.11	Are sidewalks allowed?	Yes			Yes 2-6-1	Sidewalks promote walking and contribute to pedestrian safety.
с	7.12	Are sidewalks required?	Yes, but			2-6-1-b-7, all nonresidential zones and all lots of less than 20,000 square feet 2-6-1-c, relief may be granted outside various process under some circumstances, but in-lieu payment is required	Sidewalks should be required in urban and suburban areas to provide for pedestrian safety.
с	7.13	Are sidewalks required on both sides of street?	Yes, but			See above, relief. No sidewalk on one side will be permitted if no sidewalk on one side within quarter-mile radius. Same code section.	Sidewalks should be provided on both sides of the street in commercial and industrial zones, and on at least one side of internal residential subdivision streets.

С	7.14	Is a minimum sidewalk width established?	Yes			2-6-1 B. 5 feet. 4 foot parkways required when curbs are in place Should be a separate question?	Sidewalk minimums should take into account the nature of the street and the anticipated volume of pedestrian traffic.
С	7.15	Is a maximum sidewalk width established?	No			No	
С	7.16	Do sidewalks provide access to amenities such as parks and open space?					Pedestrian facilties should provide uniterrupted routes to public amenities such as parks, libraries, schools, etc.
С	7.20	Are standards set for curb cut frequency?		No			Limiting curb cuts limits the potential conflict between pedestrians and vehicles, and increases pedestrian safety.
С	7.30	Are impervious surfaces minimized?					
С	7.40	Are provisions made for street lighting?					
С	7.50	Are provisions made for traffic calming?					Where street design speeds encourage speeding, traffic calming features should be allowed to create conditions conducive to walking and bicycling, and to discourage the routine use of local residential streets by through traffic.
С	7.60	Are different streetscape features applied to different districts (e.g. transit districts)?					
С	8.00	Transit Zones	Yes	No	DNA	Comments	Suggested Standards
С	8.10	Are transit zones specifically established?			DNA		

с	8.11	How is their location determined?			DNA		
С	8.12	Are park-and-ride facilities provided for?			DNA		
с	8.13	Is a nodal-approach or a systems-approach used (I.e. transit oriented development or transit corridors)?			DNA		
С	8.14	Are HOV lanes in use or planned?			DNA		
Infrastr	ucture						
Ι	9.00	Infrastructure	Yes	No	DNA	Comments	Suggested Standards
I	9.10	Are impact fees established for new development?		No			Where impact fees are established, lower fees should be established where excess infrastructure capacity exists to encourage compact development.
Ι	9.11	Schools?		No			
I	9.12	Water?	Yes			Limited by consent decree to \$500 per unit.	
Ι	9.13	Sewers?		No			
Ι	9.14	Park facilities?		No			
I	9.20	Are differential impact fees established to encourage infill or brownfield development?		No			Infill and brownfield development should be encouraged in areas where unused public facility capacity exists. Fees in these areas should be lower than those imposed on greenfield developments. Differential impact fees are justified by the cost of providin

S	9.00	Land Subdivision	Yes	No	DNA	Comments	Suggested Standards
S	9.11	Are a wide range of lot sizes allowed within each zone?	Yes, but			2-4-2D Lots must not exceed 3x minimum lot size.	Establishing large minimum lot sizes effectively precludes a mix of housing types and affordibility levels within neighborhoods.
S	9.12	Are a wide range of lot sizes allowed within each subdivision?	Yes, but			2-4-2D Lots must not exceed 3x minimum lot size.	Allowing a wide range of lot sizes permits a variety of housing type and range of affordabilty which facilitates residents' remaining in their neighborhoods as their needs and circumstances change (life cycle planning).
S	8.20	Are various parcel configurations allowed?	Sorts			2-4-2 A No flag lots 2-4-2 C 24' buffer next to arterials and collectors References "additional yard requirements" in zoning ord 2-4-3 A Double frontage lots discouraged	Dictating large minimum frontage requirements contributes to sprawl. Allowing various parcel configurations and clustering of structures promotes the efficient use of space and limits infrastructure requirements.
Zoning							
Z	10.00	Use (Zoning) Districts	Yes	No	DNA	Comments	Suggested Standards
Z	10.10	Is development allowed in floodplains?					
Z	10.11	Under what conditions?					
Z	10.21	Are minimum lot sizes established?	Yes			Yes. Single- and two-family residential zones range up to 5 acres. Table 17.12.020	Large minimum lot sizes discourage a mix of uses, and contribute to sprawling land use patterns.
z	10.22	Are maximum lot sizes established?	No, but			No. But there are maximum lot coverages for all residential zones. These vary from 0.20 in the very large lot zones to 0.60 in the smallest-lot zones (3750	

				square feet). Table 17.12.020
z	10.23	Are small single-family lots permitted?	Yes	Yes. Several residential zones permit 3750-square-foot lots. Table 17.12.020
z	10.24	Are Rural Residential, Residential Estate, or Suburban Residential lots of an acre or more allowed?	Yes	Yes. Residential districts range up to 80,000 square feet. Ag zoning with residential use permitted at 2 and 5 acres. Table 17.12.020
Z	10.30	Are residential uses encouraged in the CBD or other business/commercial districts?		There are several MXD districts in the zoning code Allowing a full mix of compatible development provides for round-the-clock use of the CBD and other business and commercial districts.
Z	10.40	Are distinctions made between infill or brownfield and greenfield development?		Not usually. There is an urban overlay district Infill and brownfield development should be encouraged using mechanisms such as transferable density credits, streamlined permitting, reduced development fees.
Z	10.50	Are density standards established?		Meaning what?
z	10.60	Are second units allowed?		Only in agricultural and rural Second units can provide affordable life-cycle housing options for extended families.
Z	10.61	By right?		Only in agricultural and rural residential zones
Z	10.62	By use permit?		

z	10.70	Are manufactured homes allowed in all zones?				In ag zones and in MHP zone	Manufactured housing can expand affordable housing options.
Z	10.71	By right?				In ag zones	
Z	10.72	By use permit?				In MHP zone. MHP is supposed to be in good proximity to collector streets and transit	
z	10.80	Are minimum residential square-footages established?				Don't think so	Minimum residential square-footage requirements may preclude building affordable housing.
Z	10.90	Is fast-track permitting provided for accessory units?				N.A	
SUD		Special Use Districts					
MUD	11.00	Mixed-Use Districts	Yes	No	DNA	Comments	Suggested Standards
MUD	11.10	Are provisions made for Mixed-Use districts?	Yes			Yes Tablel 17.12.020C	
MUD	11.11	Do set-back requirements severely limit lot usage?	Yes			Rear-yard setback is 20 feet. No sideyard setback	
MUD	11.12	Do Floor Area Ratios severely limit lot useage?	No			FARs range from 0.60 to 5.00, with bonuses available.	
MUD	11.13	Are building frontage standards established?					
MUD	11.14	Is vehicular and pedestrian connectivity to adjacent neighborhoods required?					
MUD	11.15	Are density bonuses granted in mixed-use zones?	Yes			Yes	
MUD	11.16	What parking standards apply?					

MUD	11.16	Are parking standards customized for zone?	
MUD	11.16	How?	
MUD	11.16	Are there provisions for shared parking?	
MUD	11.16	Is centralized parking allowed?	
MUD	11.17	What standards are set for development scale or design elements?	
MUD	11.18	Do landscaping standards preclude efficient lot usage?	
MUD	11.19	Is private open space required?	
MUD	11.20	Is consideration given to open space connectivity?	
MUD	11.21	What uses are permitted in open space areas	
MUD	11.21	By right?	
MUD	11.21	By use permit?	
MUD	11.30	Are view corridors considered?	
MUD	11.40	Are provisions made for cluster development?	
MUD	11.50	Are compatibility standards established?	
MUD	11.51	For home occupation?	As accessory use
MUD	11.52	For commercial ventures?	Most by right

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MUD	11.53	Do safety codes (primarily fire codes) restrict or effectively disallow commercial or home occupation uses?		
MUD	11.54	Is consideration given to the zone's relationship to other zones?		
MUD	11.55	Are restrictions placed on signage?		
MUD	11.56	Are space ratios (e.g. residential square footage to work area) established?		
MUD	11.57	Is the number of employees per square foot of work space regulated?		
MUD	11.58	Are there provisions for transitions between zones?		
MUD	11.59	Are there provisions for design compatibility with adjacent structures?		
MUD	11.60	Are there provisions for the preservation of historic structures?		