

Orange County Policy and Code Audit Summary and Recommendations

William Fulton & Deepak Bahl
University of Southern California
Smart Growth Leadership Institute
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Table of Contents

1. INTRODUCTION	1
1.1 BACKGROUND ON THE PROJECT	1
1.2 SMART GROWTH DEFINED	2
1.3 LOCAL CIRCUMSTANCES IN ORANGE COUNTY AND THE AUDIT PROCESS	3
2. POLICY AUDIT AND POLICY RECOMMENDATIONS	6
2.1 COMPARISON OF POLICIES TO SMART GROWTH PRINCIPLES	6
<i>Principle 1: Provide a Variety of Transportation Choices</i>	<i>6</i>
<i>Principle 2: Mix Land Uses</i>	<i>10</i>
<i>Principle 3: Create a Range of Housing Opportunities and Choices</i>	<i>11</i>
<i>Principle 4: Create Walkable Neighborhoods</i>	<i>13</i>
<i>Principle 5: Encourage Community and Stakeholder Collaboration</i>	<i>14</i>
<i>Principle 7: Make Development Decisions Predictable, Fair, and Cost Effective</i>	<i>15</i>
<i>Principle 8: Preserve Open Space, Farmland, Natural Beauty and Critical Environmental Areas...</i>	<i>17</i>
<i>Principle 9: Strengthen and Direct Development Towards Existing Communities</i>	<i>17</i>
<i>Principle 10: Take Advantage of Compact Building Design</i>	<i>19</i>
2.2 REVIEW OF HORIZON WEST AND TND POLICY APPROACHES	22
2.3 USING THE HORIZON WEST AND TND APPROACH IN NEW DEVELOPMENTS	25
3. CODE AUDIT: SUMMARY AND RECOMMENDATIONS	27
3.1 CODE SECTIONS AUDITED	28
3.2 THE URBAN VILLAGE CODE STANDARDS	28
3.3 THE NEIGHBORHOOD DISTRICTS	30
3.4 THE R-1 ZONE	32
CONCLUSION	34
APPENDIX A: AUDIT OF POLICIES	35
APPENDIX B: AUDIT OF CODES	57

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1. Introduction

In early 2004, the Smart Growth Leadership Institute and Orange County, Florida, agreed to work collaboratively on a review and audit of some of Orange County's Comprehensive Policy Plan policies and some of the county's zoning code sections. The SGLI audit is part of a larger effort by Orange County to incorporate more Smart Growth ideas into its policies and codes. The county's effort is described in more detail in the next section.

1.1 Background on the 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 in part by a grant from the Environmental Protection Agency, the Technical Assistance program provides assistance to communities that have made a commitment to smart growth but are grappling 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.

Selected communities 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, and/or design standards encourage and support smart growth.

In late 2003, SGLI selected nine communities, from more than 100 applicants, to receive implementation assistance. In addition to Orange County, Florida, the communities selected were Anchorage, Alaska; Baton Rouge, Louisiana; Lawrence, Kansas; Lawrence, Massachusetts; Lithonia, Georgia; Mount Joy Borough, Lancaster County, Pennsylvania; Nashville-Davidson County, Tennessee; 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 Orange County and the Audit Process

Orange County is the largest jurisdiction in Central Florida, covering 1,004 square miles and serving as the local government for more than 600,000 persons who live in the unincorporated area. The County's jurisdiction surrounds Orlando, which is small by "central city" standards (185,000 persons), and includes a wide range of urban, suburban, and rural areas, ranging from Holden Heights, an older neighborhood of modest incomes two miles from downtown, to natural preserves on the edge of the metropolitan area.

Despite the County's past smart growth initiatives, the existing Comprehensive Policy Plan, zoning code, and development standards largely reflect and reinforce a traditional suburban and rural orientation for the County's land development. Many of the County's existing standards do not offer the County the tools to promote various types of suburban infill development with higher land use densities and intensities. Also, the County's plans, codes, and development standards have evolved over time, resulting in a mix of standards with varying purposes and uses.

Orange County is currently focused on the "retrofitting" of the County's development policies, which were traditionally suburban in nature, so that both infill development and large new development on raw land incorporate a mix of land uses and housing types and reflects Smart Growth principles. In recent years, Orange County has undertaken major planning policy changes and code revisions to deal with the revitalization with Holden Heights; construction of Avalon Park, an 1,800-acre Traditional Neighborhood Development; and Horizon West, a 38,000-acre master-planned development in the southwestern part of the county.

Orange County is currently working on the following project activities:

- Revise the Land Use, Housing and Urban Design Elements of the County's Comprehensive Policy Plan, and other relevant Elements as well, to promote housing diversity, infill development, and smart growth;
- Revise Orange County's zoning code for the Urban Village, Neighborhood Center, Neighborhood Activity Corridor, and Neighborhood Residential Districts to promote mixed-use infill development and for the R-1 District to promote single family residential infill development;
- Develop a new zoning district for townhouse development that enhances the livability and design features of townhouses and their appeal as infill housing; and

- Conduct a public involvement program for design, education, and communication about suburban infill and the benefits of Smart Growth.

This policy and code audit by the Smart Growth Leadership Institute is designed to assist these efforts. Orange County and SGLI agreed that the SGLI technical assistance team for SGLI would undertake the following activities.

1. Audit the County's Comprehensive Policy Plan for consistency with housing diversity and infill development goals;
2. Audit a series of specific sections of the zoning ordinance, including but limited to no more than the Urban Village, Neighborhood Center, Neighborhood Activity Corridor, and the Neighborhood Residential Districts ability to promote mixed-use, infill development and the R-1 District to promote single family residential to promote infill;
3. Identify inconsistencies between policies and codes that prevent smart growth development; and
4. Make recommendations as to how policies and codes might be amended to facilitate development of infill, mixed use or higher intensity developments

The SGLI Project Team consisted of William Fulton, Senior Scholar, School of Policy, Planning, & Development at the University of Southern California, and Deepak Bahl, Associate Director of the Center for Economic Development at USC. Additional support was provided by Harriet Tregoning, Director, and Jessica Cogan Millman, Deputy Director, of the Smart Growth Leadership Institute.

Beginning in April 2004, the Project Team reviewed all relevant materials, including, the Comprehensive Policy Plan policies and the relevant code sections, applying SGLI's policy and code audit process. In May 2004, the Project Team made a three-day field visit to Orange County to interview more than one dozen county staff planners, as well as developers and consultants in Holden Heights and Horizon West; and toured Holden Heights, Horizon West, and Avalon Park. The team then revised its audit and wrote these recommendations based on the field visit and subsequent interviews with county staff.

Because of the nature of this scope of work, SGLI bifurcated the analysis to discuss the Policy Audit more comprehensively in the context of the Smart Growth Principles delineated above. The Code Audit portion discusses the specific code sections in a more discrete manner, though their relationship to Smart Growth principles and to relevant Comprehensive Plan policies is noted. The two audits are attached as appendices.

The goal of the project is not to state that Orange County's planning and development policies are "wrong" or "right" with respect to municipal growth – the judgment about how to grow can only be made by the residents and their elected officials. Instead, these audits establish what the County has "on the books" in relation to the commonly accepted principles of smart growth listed above.

Since we were not able to review all of the planning documents that may apply and since our knowledge of the regional context is also limited, our comments are offered as a constructive and objective ~ but not necessarily comprehensive ~ critique of how the County might move more quickly and effectively toward smart growth principles.

2. Policy Audit and Policy Recommendations

Orange County's smart growth policy language is generally quite strong. It is important to note, however, that much of this language is contained in specific sections of the Future Land Use Element dealing with special situations, such as the Traditional Neighborhood Development alternative (1.6), the policies dealing with older communities such as Lee Road and Holden Heights (3.4), and the special policies devised as the basis for Specific Area Plans for Horizon West Villages (6.1-6.7).

One issue presented by the County's scheme of policies and codes is that in some cases, most notably Horizon West, there is an intermediate Specific Area Plan, while in other areas, such as Holden Heights, there is not. We will seek to address this issue in our summary comments at the end of the policy section.

2.1 Comparison of Policies to Smart Growth Principles

Principle 1: Provide a Variety of Transportation Choices

Findings

The actual provision of transportation choices in Central Florida is beyond the scope of the Orange County government and therefore recommendations about transportation facilities are beyond the scope of this audit. Options for transportation facilities, especially public transit facilities such as light-rail, are extremely limited given the fact that Orange County voters chose not to approve the Mobility 20/20 proposal in 2003.

However, it is reasonable to assume that some type of improved regional transit system will emerge. And the County can provide a set of land-use policies that support different types of transportation choices, including public transit, walking, and bicycling. In general, Comprehensive Plan policies in this area are quite strong. The Transportation Element, for example, calls upon the County to work cooperatively with LYNX to work on a "comprehensive multi-modal improvement strategy" among other items.

In addition, the Future Land Use Element contains a great deal of language encouraging development oriented around “centers” and encouraging the construction of residential areas in close proximity to commercial cities. All these policies are to the good. However, the County should consider how to plan for and support transportation choices, especially given the fact that Mobility 20/20 did not pass. This probably means land-use and mitigation policies oriented, somewhat more modestly, toward a bus transportation system.

Orange County supports increased land use densities and mixed-use to promote transit-oriented development (TOD). While the County strongly supports TOD, it does not offer any incentives to promote such development. TODs are instrumental in creating walkable, pedestrian friendly, and mixed-use neighborhoods that minimize individual auto use while achieve a jobs-housing balance. Simultaneously, TOD also provides a range of housing options and opportunities for revitalizing existing and/or new commercial retail and office developments. Chicago, Portland, San Francisco, Washington, and more recently Los Angeles are examples of metropolitan areas that have adopted TOD as a strategy for accommodating new growth and density. These cities have provided a variety of incentives to developers and residents to stimulate transit friendly developments.

Recommendations

1. *Use existing County policies to form the basis for a Transit-Oriented Development land-use strategy that ties to regional public transit.*

Despite the defeat of Mobility 20/20, a regional public transit strategy in the Orange County area is likely to emerge. The County cannot plan for or operate an express bus system or any other regional transit system on its own. However, the County can consider how to use its existing land-use policies to reinforce whatever regional transit system emerges. In particular, the County should consider how to strengthen its current policies using special centers-oriented land use policies (TND, Urban Villages, Growth Centers, P-D) to form the basis of a Transit-Oriented Development strategy as called for in Future Land Use Element 3.6.9 and Transportation Element 2.1.5.

This approach would, essentially, take existing centers-oriented land-use policies and use them as the basis for a policy on Transit-Oriented Development by introducing transit centers into Neighborhood and Regional Centers, and increasing the possibility of constructing housing within walking distance in these centers. The approach seems feasible in Orange County because new residential areas are becoming more centers-oriented and are increasing in density, and also because emerging job centers – especially the resorts – are extremely dense, meaning a transit alternative can be convenient. The County should consider creating a minimum density of 7 units per acre in Transit-Oriented Development districts, a density figure that is frequently cited as the minimum necessary to support successful transit service (however, note that 15 units per acre may be necessary to support premium transit service like light rail).

2. *Use lower parking ratios, density bonuses and transferable development rights to cluster development near transit centers.*

As stated above, the County's centers-oriented land-use policies provide an excellent starting point for developments that reinforce access to a regional public transit system. In creating a TOD-style set of land-use policies, the County must also provide powerful incentives and tools for developers to choose a TOD approach rather than a more conventional approach.

Lower parking ratios are the most obvious incentive. At present, the lower parking ratios that are contained in the county's policies and codes are not tied to public transit. A TOD option should be created with lower parking ratios. Also, tools such as density bonuses and transferable development rights could be used as incentives.

Density bonuses could be used to encourage developers to reallocate density within a large project from lower-density residential areas on the fringe of the development to higher-density areas near the center, where transfer centers and other transit amenities are likely to be located. The success of density bonuses is likely to be market-sensitive – that is, if all buyers want to purchase single-family homes on large lots then higher-density development will not succeed. However, a rule of thumb for density bonuses is simply that the developer's increased profit from the density must exceed the cost of additional obligations imposed on the developer. For example, if developers receive a lower per-unit profit from higher density development near a transit center – or if developers are required to provide transit center facilities in exchange for higher densities – the overall profit on the project must still be greater than it otherwise would be.

TDRs are currently used mostly to protect greenbelts in new developments. However, the TDR program could also be used to cluster higher densities near transit centers. The "greenbelt" sending areas would not change. However, developers could receive greater TDR credit – that is, more development rights – for moving density into a center, near a transit stop, than into a lower-density residential area.

3. *Link housing programs to transportation alternatives.*

Affordable housing is a major issue in Orange County. The County should consider linking some of its housing programs to the provision of greater transportation choices in TOD areas. In particular, the County might consider creating “Location-Efficient Mortgage” opportunities to first-time homebuyers who purchase residences within a TOD.

“Location-Efficient Mortgages” give homebuyers financial credit in the mortgage qualification process for living close to transit centers. A household’s lower transportation cost – either by driving less or having fewer cars – is calculated into the size of the mortgage for which the household qualifies, thus freeing up more household dollars for a home mortgage.

4. *Move toward more aggressive exactions and dedications on public transit*

Orange County has a long and strong history of ensuring adequate public facilities by requiring exactions and dedications from developers. The current Comprehensive Plan has some policy language regarding adequate public facilities regarding public transit. But as a regional transit system emerges and the TOD option is created, those policies should be strengthened so that public transit is regarded as a necessary piece of public infrastructure that must be provided. The County should set specific standards for transit-related facilities – as well as the cost of transit operations – in and around TODs and other new developments, and establish exaction and dedication standards to ensure that new developments meet this goal just as they meet other adequate public facilities goals. Vanpool and carpool efforts could also be included in these policies.

Principle 2: Mix Land Uses

Findings

Orange County's policy language on mixing uses is generally very strong. The core of these policies is contained in Objective 3.1 of the Future Land Use Element, which lays out basic principles (for example, that "continuous stretches of similar types and densities of units shall be avoided") and also provides specific policies regarding Urban Villages and Activity Centers.

A basic policy question regarding Orange County's mixed-use strategy has to do with the many different development contexts the County faces. A mix of uses is encouraged, in one way or another, in all settings from older urban communities such as Holden Heights to Growth Centers in rural areas. Our recommendations below are based on the assumption that existing language on mixing uses should be strengthened and that a mixing of uses is a desirable outcome in most new development projects.

Recommendations

1. *Provide incentives at the Comprehensive Policy Plan level for mixed uses.*

In most cases, developers will pursue a mixing of uses if they have sufficient incentive to do so. Therefore, the Comprehensive Policy Plan should include – or at least direct that the codes include – specific incentives to encourage a mix of uses. The two most important incentives would be the same as in the TOD recommendation – density bonuses and lower parking ratios. In the case of Holden Heights, for example, the lower parking ratios for mixed use are contained in the code but not called for in the policy.

2. *Strengthen policy language on mixed uses in existing urban neighborhoods.*

The policy language on mixing uses in Holden Heights (contained under Objective 3.4) is currently strong but needs to set more specific mixed-use targets. At present it permits and encourages mixed uses, which is good. However, the policy should be strengthened in several ways similar to the suggestions above. First, the concept of mixed-use incentives should be embedded at the policy level. Second, density bonuses should be provided in Holden Heights for mixed use. Third, the lower parking ratios that reflect shared parking facilities contained in the Neighborhood-level code to encourage mixed use should be acknowledged at the policy level. In general, the very strong language about mixing uses contained under Objective 3.4 should be augmented with stronger suggestions about implementation.

3. *Consider stronger mixed-use policies in older commercial strips.*

The County should consider stronger mixed-use policies for older commercial strips, perhaps partly by completing the Lee Road overlay. Maturing urban areas have seen a growing interest in mixed-use development along commercial strips, which can re-use under-utilized land, thus creating housing in close proximity to jobs and protecting the county's land supply in rural areas. One example is the City of Los Angeles' Residential Accessory Service (RAS) Zoning, which allows higher-density residential development with commercial on ground floor and residential above, or simply all residential. RAS Zone targets commercial corridors that are characterized by obsolete development, have marginal retail or are underutilized. Sites rezoned to RAS have an allowable FAR of 3:1, reduced setback requirements, and structures up to 50 feet in height. These standards may be too intense for Orange County, but the general concepts are worth considering. RAS Zone creates opportunities for adaptive reuse of existing structures and provides developers incentives of higher density and reduced zoning restrictions. It also serves to bring critical mass to commercial areas.

Principle 3: Create a Range of Housing Opportunities and Choices

Findings

In general, the Future Land Use Element and the Housing Element have strong policy language supporting a range of housing choices catering to various market segments at different price points. The Future Land Use Element sections for Horizon West, in particular, highlight both the need for and the desirability of a variety of housing types. The Housing Element calls for the adoption of a wide variety of programs designed to produce more affordable housing, including density bonuses.

However, some of these provisions can be strengthened or more broadly applied. The range of housing types could be extended to include accessory units and live-work units. Furthermore, the County should consider the impact that lot size requirements – both in policies and as-applied – are having on the affordability of housing.

Recommendations

1. *Strengthen and implement density bonus provisions.*

Housing Element Policy 1.1.1 calls on the County to, among other things, adopt density bonus incentives. As we have stated in many places in this audit, we believe that density bonus provisions should be both strengthened and aggressively implemented, especially if rising land prices make it more difficult for the private market to deliver a variety of housing types.

As stated above, density bonuses must provide a community benefit while at the same time providing increased profit for developers. Density bonuses typically range from 15% to 25%, with some communities offering up to 50% for specific kinds of units (e.g., senior affordable housing).

One good example of a density bonus program for affordable housing is Montgomery County, Maryland, outside of Washington, D.C. The county requires developers of 50 or more units to set aside about 12.5% of their housing in affordable categories. In return, however, the county grants density bonuses of up to 22%, thus ensuring the developer's own profit margin is protected.

2. Add more innovative housing types, including accessory units and live-work units, to the housing mix.

Housing types can be more than just a matter of single-family homes versus townhomes or apartments. Two additional housing types that can be valuable are accessory units (sometimes known as granny flats) and live-work space.

Accessory units have been the subject of discussion in Orange County, and in fact the county permits some accessory units in residential neighborhoods under implementation of the Affordable Housing Incentive Plan (AHIP) (Housing Element, page 86.) However, we would suggest that the County incorporate an accessory unit policy into the Comprehensive Policy Plan and, in particular, consider an aggressive accessory unit policy in future Specific Area Plans.

To a homeowner, the granny flat provides opportunity for additional rental income or extra space as a flexible addition that can be used as a home office or as a lodging for elderly family members, or as a private guest room. Accessory units offer higher density without making the street overbuilt and thus offer a potential developer option of providing affordable housing units and attract people from diverse income and age groups. It can also disperse affordable housing throughout a community and provide housing for low-wage service-sector workers, usually near existing jobs. Retrofitting accessory units into existing single-family neighborhoods can be politically controversial, but incorporating them into newly built neighborhoods is usually not difficult. The County should adopt policies specifying that large developments or Specific Area Plans should incorporate accessory units.

One possible mode in existing neighborhoods is the Accessory Dwelling Unit ordinance in the City of Santa Cruz, California, which seeks to encourage the development of small-scale neighborhood compatible housing and to discourage the proliferation of poorly constructed illegal accessory units.

The City allows accessory only on residentially zoned lots of 5,000 sq. ft. or greater, and must meet setback, height and parking requirements. But the City also provides homeowners with a Technical Assistance Program (including plan set books, manuals, video, technical assistance grant); a Wage Subsidy and Apprentice Program (wage subsidies to licensed contractors employing apprentice workers); and a Loan Program (offering loans up to \$70,000 through the Santa Cruz Community Credit Union).

Live/work units contribute to the development of a dynamic urban environment, help minimize trips, and reduce the job-housing imbalance. Adaptive reuse of older buildings, conversion of old industrial building into live/work lofts, and infill with live/work units has been a catalyst for sustainable community economic development in many a communities. The County should adopt a live/work policy for older neighborhoods generally and Holden Heights in particular, encouraging entrepreneurs, creative artists, and others to combine living and working space. This policy would be a logical complement to stronger mixed-use policies for Holden Heights.

3. Maintain affordability by widely adopting policies regarding maximum lot sizes and minimum densities.

As the price of land increases, large lot sizes and low densities will have an increasing impact on the affordability of housing. Thus, over time, smaller lots and higher densities will become an important component in maintaining the affordability of housing in Orange County.

The County already has some policies creating minimum densities in some areas. However, the County should adopt broader policies – in both the Future Land Use Element and the Housing Element – creating minimum densities inside the Urban Service Area. These minimum densities would logically be translated into maximum lot sizes in different residential zones. This issue will be taken up again in the Code Audit under the R-1 zone.

Principle 4: Create Walkable Neighborhoods

Findings

In general, Orange County's policies do an excellent job of calling for walkable neighborhoods. Once again, these policies are strongest in the "special area" policies, such as those for Horizon West.

Recommendations

We would make two minor but important recommendations.

1. Require sidewalks on both sides of the street

True neighborhood walkability requires a variety of components, but a sidewalk is critical. Sidewalks protect pedestrians from traffic by giving them, in essence, their own “right of way”. To be truly effective, however, sidewalks must be prevalent enough to be convenient and wide enough to be comfortable for at least two people walking side-by-side. If sidewalks are located on only one side of the street, or only in certain locations, pedestrians are required to take long detours and therefore will be discouraged from walking. We recommend requiring adequately sized sidewalks (5 to 6 feet at least wide) on both sides of the street. Sidewalks should not be narrower because pedestrian traffic is thought to be light or because more right-of-way is required for vehicular traffic. In each case, a vicious cycle will begin: Facilities discourage walking; so therefore people don’t walk; and then there is pressure to further diminish or remove pedestrian facilities.

2. Regulate curb cuts

Similarly, the number of curb cuts on a block can diminish the quality of pedestrian friendliness and physical and visual continuity. We suggest design guidelines to regulate the number of curb cuts allowed in different zones.

Principle 5: Encourage Community and Stakeholder Collaboration

Findings

Orange County’s basic policies to encourage community and stakeholder collaboration are above average. There is language in the policies to encourage public participation in planning processes and to encourage interaction and agreements with other local and regional agencies.

Recommendations

1. Strengthen high-level commitment to public participation.

The County should include strong policy statements in the Comprehensive Policy Plan that the county is committed to increasing the level of public participation. The Future Land Use Element contains one policy goal focused on public participation but includes only one implementation idea (making information available seven days ahead of time). The County’s policies should seek to encourage and involve nearby residents and countywide stakeholders in planning processes.

Principle 6: Foster Distinctive, Attractive Communities with a Strong Sense of Place

Findings

In general, we find that Orange County's policies do a good job of promoting distinctive communities with a strong sense of place. The use of names, gateways, entrances, and so forth provides context and form to communities. The centers-oriented nature of many planning policies – as well as the use of squares, greens, and other open space to reinforce that sense of place – is commendable. So is the clearly delineated hierarchy of places contained in the Comprehensive Policy Plan.

Recommendations

We have no recommendations to improve these policies from a smart growth point of view.

Principle 7: Make Development Decisions Predictable, Fair, and Cost Effective

Findings

In general, the Comprehensive Policy Plan does a good job of connecting local government regulations, local actions, and the planning policies themselves. However, in some cases the link between plan and code is not as strong as it should be. The link between plan policies and codes is sometimes broken in two different ways. First, a specific policy goal, such as Traditional Neighborhood Development, is implemented through general codes rather than specialized codes. (Conversely, a specific development approach is promoted through a special code section, such as Urban Village, without centralized policy guidance in the Comprehensive Policy Plan.) Second, policies for a specific geographical area, such as Holden Heights, are implemented directly through the code with no intermediary Specific Area Plan or similar document.

Recommendations

1. *Link the Traditional Neighborhood Development option to a specific implementing code; and, conversely, like the Urban Village code to a specific set of Comprehensive Policy Plan policies.*

The Traditional Neighborhood Development option is an important component in the County's Development Framework as laid out under Goal 1 of the Future Land Use Element. However, it is not linked to specific code sections to implement it. Policy 1.6.4 simply states that TND "shall be implemented through the provisions, in the Land Development Code and developers agreements as necessary."

If the County is going to encourage a TND approach, the County should also create a series of code sections designed to implement the specific ideas contained in the TND section of the Future Land Use Element. This will ensure consistent application of TND ideas.

Another concern expressed by the staff has been the fact that the Urban Village code is not used by developers. This is the result of the converse problem – that there is no clear policy language (centralized in one place) which the Urban Village code seeks to implement. The County might want to consider marrying a revision of the Urban Village code to the need to create a code specifically for TND.

The Urban Village code is discussed in more detail in the code audit.

2. *Create a Specific Area Plan or equivalent for Holden Heights and consider the creation of similar Specific Area Plans for other areas.*

We previously recommended a Specific Area Plan for Holden Heights because of this disconnect between plan and code. We believe the County should establish criteria for situations when a Specific Area Plan is called for and when translation directly from the Comprehensive Plan to the code is appropriate.

Obviously, these recommendations raise the question of when and how to use both TND and Specific Area Plans effectively in dealing with newly developing parts of the County, especially outside the Urban Service Area. This issue will be discussed in Section 2.3.

Principle 8: Preserve Open Space, Farmland, Natural Beauty and Critical Environmental Areas

Findings

Orange County's policy language on all of these issues is very strong. The language encourages the creation of "edges" around built communities and using such techniques as transferable development rights.

Recommendations

We have no recommendations to improve these policies from a smart growth point of view.

Principle 9: Strengthen and Direct Development Towards Existing Communities

Findings

Dealing with development in existing neighborhoods is an issue that Orange County has begun to deal with in the last few years, and will be facing more often in the years ahead. It is an important issue for several reasons, including (1) the need to revitalize older neighborhoods such as Holden Heights, (2) the need to improve aging corridors such as Lee Road, and (3) the need to use land efficiently and make the best possible use of existing infrastructure to serve any new development.

In general, we find that the County's policy statements in this regard represent a good start. In particular, the Future Land Use Element policies regarding Holden Heights, and the three "Neighborhood" zoning districts that were adopted pursuant to those policies. However, the County should move forward in implementing other infill policies, and in the particular matter of stormwater retention we recommend that the County take a fresh look at the policy for infill areas.

*Recommendations**1. Prepare the Infill Master Plan called for in the Future Land Use Element*

Future Land Use Element Policy 3.3 calls for the creation of an Infill Master Plan to create incentives for the development of small, vacant parcels inside the Urban Service Area. We recommend that the County move forward in creating such a plan. It is our observation that, when the county's policies do not move forward, it is because an important intermediary planning document – in between the Comprehensive Policy Plan and the zoning code – does not exist. In the case of infill development, a “master plan” is required to create specific policies and incentives for the many smaller areas ripe for infill development that are under county jurisdiction.

2. Prepare a Specific Area Plan (or the equivalent) for Holden Heights

Holden Heights has been the subject of many important and apparently successful efforts at planning and infrastructure investment. However, the district's efforts are impeded by the lack of an overall strategic plan that coordinates all efforts and sets specific goals and objectives for this area alone. The County should prepare a Specific Area Plan (or, if this causes difficulty, an equivalent plan) to guide the revitalization of Holden Heights. This plan could then be used as a model for other infill areas countywide.

3. Complete the Overlay District proposed for the Lee Road Mixed Corridor District

The Comprehensive Policy Plan calls for a mixed-use corridor overlay district for Lee Road. The County has completed a community planning process but has not created the overlay district. The County should complete the overlay district and use that as a model for other older commercial strips in need of revitalization.

4. Create an infill-oriented alternative to onsite stormwater retention.

Orange County's efforts to implement stormwater runoff improvements to protect water quality have been laudable. Also, in new development projects, the County's efforts to marry onsite stormwater retention efforts with the need for water-oriented amenities has been successful in using one solution to solve two issues.

However, infill development requires a different approach to stormwater runoff, as onsite retention requirements often stand at odds with infill goals. In Holden Heights, for example, developers must devote up to half of their infill sites to onsite retention basins, even as they seek to achieve the County goal of high-density townhouse development. These stormwater efforts are not coordinated with the county's own efforts at onsite retention elsewhere in the neighborhood, where basins are being constructed in connection with the County's own sewer project that is also designed to improve the neighborhood.

Therefore, we would suggest that the County adopt an infill-oriented alternative to onsite stormwater retention.

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 – for example, converting an old shopping center to a townhome or condominium development – no additional runoff is created because impervious surface already covers the land. This should be acknowledged in the Stormwater Management Element. These smart growth concepts could, for example, be identified as a Best Management Practice.

In addition, however, the infill-oriented alternative should permit developers 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.

Principle 10: Take Advantage of Compact Building Design

Findings

Our findings in this area deal with two different but related concerns: density and parking ratios. Both are related to the larger question of how the County seeks to manage growth in the remaining undeveloped land available both inside and outside the Urban Service Area.

The County faces considerable pressure regarding whether and how to expand the Urban Service Area, and also faces concerns that if it does not do so, desirable development will move beyond the county line to surrounding counties. On a “macro” scale, this is one of the reasons why large-scale planning efforts such as Horizon West have been so important.

However, on a “micro” scale, if each new development can consume somewhat less land than would otherwise be the case, the existing land supplies – both inside the USA and in areas that might be targeted for development in the future – will last longer. Toward this end, minimum densities and maximum lot sizes can make more efficient use of available land. Lower parking ratios also allow more efficient land use. Both will help make existing land supplies last longer.

Recommendations

We find that the County has made a good start in both areas but can expand its efforts.

1. *The County should expand minimum densities and maximum lots sizes to all areas inside the Urban Service Area and in Rural Growth Centers.*

Minimum densities and maximum lot sizes should be highlighted in the Comprehensive Policy Plan as the foundation for conserving the County’s land supply for urbanization. We cannot say precisely what those minimums and maximums should be. They will inevitably vary from area to area. (We will address R-1 lot widths in the code audit.) However, a standard should be set – and stuck with – in all urbanizing areas.

2. *The County should re-examine parking ratios and, as a result, expand the use of lower parking ratios in as many parts of the county as possible.*

Lower parking ratios are already permitted in the Holden Heights neighborhood zones under some circumstances – to encourage mixed use, for example. The County should expand this practice based on fresh research about true parking demand and how that parking demand might be altered by land-use patterns.

New research suggests that actual parking demand may actually be much less than typical required parking ratios, at least in some settings. For example, retail parking demand is often below 4 spaces per 1,000 square feet, while the typical required ratio is 5 spaces per 1,000 square feet. Similarly, in townhouse and condominium developments where household size is small, resident demand for parking is far less than 2 spaces per unit, whereas the typical required ratio is between 2 and 2.5 spaces per unit.

These realities are being increasingly reflected in codes. A good example is the City of Petaluma, California, which significantly reduced parking maximums in its town center. Central Petaluma Specific Plan SmartCode recommends 1 space per unit for residential (including live/work); 1 space per room for lodging; and 1 space per 300 gross sq. ft. of building area for all other uses.

The County's centers-oriented land use policies hold many possibilities for shared parking or lower parking ratios. Central districts that combine office, retail, and civic uses can share parking because peaks come at different times. In addition, lower parking ratios should be one inducement provided to developers as part of the package of incentives offered in a TOD district (See Principle 1).

The County should consider reducing ratios, based on evidence of actual parking demand in such centers in Orange County and elsewhere. Although the parking reductions permitted in the Holden Heights "neighborhood" districts (15-20%) represent a good start, the County should consider review recent research and conduct updated parking studies to determine whether lower standard parking ratios – for example, 1.5 persons per unit in a condominium project – might be appropriate in some parts of the County.

2.2 Review of Horizon West and TND Policy Approaches

One of the most significant questions facing Orange County is how best to integrate smart growth ideas into large-scale new development projects, especially when the County is confronted with the question of whether to expand the Urban Service Area. In recent years, the County has taken two different approaches – the Traditional Neighborhood Development approach, which was used in the case of Avalon Park, and the Village Planned Development approach, which was used in the case of Horizon West. Both approaches are embedded in the Future Land Use Element.

The following is a review and a brief assessment of the relative effectiveness of Traditional Neighborhood Development (TND) and Horizon West policies of the Future Land Use element with respect to Smart Growth. We present similarities and differences between these policy elements and briefly discuss how both Horizon West and TND policies address smart growth issues.

The TND approach is contained in Goal 1 of the Future Land Use Element which calls for the County to “establish a development framework which provides for the longest term, cost effective provision of public services and facilities”. More specifically, TND is dealt with in Objective 1.6, which permits the County to designate land for “Traditional Neighborhood Development” as a means of alleviating sprawl. Specific policies are contained under Objective 1.6. The TND approach was used as the basis for the development of Avalon Park, but planning for Avalon Park required the creation of a Specific Area Plan as well.

The Horizon West planning policies are contained under Goal 6 of the Future Land Use Element, which calls on the County “to ensure sustainable, quality development in Southwest Orange County to allow a transition from rural to urban uses while protecting environmental quality.” More specifically, the Horizon West planning policies are contained under Objective 6.1, which calls on the County to “utilize a Village Land Use Classification to realize the long range planning vision” for the Horizon West area. Specific policies for two villages in Horizon West, Lakeside Village and Bridgewater, are contained under Objective 6.1. More detail for the development of these two villages was subsequently shaped in the Specific Area Plans for Lakeside Village and Bridgewater, which were called for in the Future Land Use Element.

General Approach of TND and Horizon West in Future Land Use Element

The Future Land Use Element deals with Horizon West in a fundamentally different and much more comprehensive way than TND.

TND is included as one aspect of the Development Framework goal (along with the Urban Service Area and Growth Centers in Rural Areas, among other topics); it covers only four pages and includes four policies. It is essentially offered as a permissible development pattern within the county. It contains a few basic requirements, such as mandatory employment centers and mixed-use town centers; and performance standards, such as maximum residential densities.

However, the Future Land Use Element's TND provisions do not direct the County to prepare a separate code when processing a TND. Rather, it states that TND shall be implemented through the existing Land Development Code and developers agreements.

In contrast to TND, Horizon West is not considered within the context of the Development Framework outlined in Goal 1 of the Future Land Use Element. Rather, it is the subject of a separate goal in the Land Use Element which specifically calls for a high-quality transition from rural to urban areas. The Horizon West components of the Future Land Use Element cover more than 30 pages and including more than 100 policies. Broadly speaking, the Future Land Use Element lays out a general policy plan for Horizon West and its two villages. It directs the County to prepare Specific Area Plans and regulations to carry out that policy plan. In doing so, the Future Land Use Element restates many fundamental principles that are embedded elsewhere in the Comprehensive Policy Plan, such as the principle of Adequate Public Facilities.

Overall Policy Statements

Both TND and Horizon West espouse smart growth development through similar policy statements that strongly advocate for reduction of sprawl, jobs-housing balance, compact development patterns, mixed use development integrated with transit, provision of a range of housing opportunities including affordable housing, reduction in automobile use, and the creation of a stronger sense of place by developing pedestrian friendly neighborhoods, streetscapes, open space, and urban design.

Compact Development

Both Horizon West and TND encourage compact development patterns with specific guidelines on the intensity and density of development in accordance with Smart Growth Principles No. 2 (Mixed Uses) and No. 10. (Compact Building Design). For example, in the case of TND, residential densities shall not exceed 30 dwelling units per gross residential acre. In contrast, Horizon West plan allows for up to 24 dwelling units per net acre with Transfer of Development Rights (TDR). Similarly, Floor Area Ratios (FAR) for commercial (office and retail) and industry are delineated for both TND and Horizon West policies. In general, floor area ratios are higher in TND allowing for higher density development as compared to

Horizon West. Nevertheless, residential dwellings are permitted above ground floor commercial uses in both Horizon West and TND, a policy that encourages mixed-use at the neighborhood level.

Performance Standards

Both Horizon West and TND incorporate performance standards to ensure high quality mixed-use developments. These performance standards align themselves well with many of the 10 smart growth principles.

Urban Design

Urban design standards are an integral element of the TND. These standards address the building types to be included and related requirements for use, placement, density, height, parking, FAR, landscaping, etc. Horizon West has similar urban design standards as part of its policy framework ensuring the creation of interconnected walkable and bike-friendly neighborhoods with a strong emphasis on place creation.

Scale and Time Horizon

The differences in approach between TND and Horizon West reflect the differing sense of scale and planning time horizon that grew out of the genesis of each set of policies. As the name suggests, TND addresses smaller scale developments at the neighborhood level. In contrast, Horizon West is relevant at a regional scale and addresses uses that are transitioning from more rural to urban.

For example, TND establishes performance standards requiring the creation of town and village centers, supporting residential neighborhoods, and so forth. However, the TND provisions contain no requirement for the size and scale of a TND or its relationship to the surrounding natural environment.

By contrast, the Horizon West policies – although they contain similar smart growth principles – specify that Villages must be between 1,000 and 3,500 acres. The Horizon West policies lay out a land use mix; requires that town centers tie into a regional transit system; and calls for the use Transfer of Development Rights mechanism to protect greenbelts and preserve other important agricultural areas, water reuse area, Floridian aquifer recharge, wetland connections and wildlife corridors

2.3 Using the Horizon West and TND Approach in New Developments

The question of how best to approach large new development projects, especially when an expansion of the Urban Service Area might be necessary, is related to the question posed earlier about how Comprehensive Policy Plan policies are best translated into the development code and, subsequently, into actual projects “on the ground”. On the one hand, the TND approach was integrated into the existing Development Framework and, according to the Future Land Use Element, used current development code techniques, such as Planned-Development, to implement the plan. On the other hand, the Horizon West approach was created outside the Development Framework as a separate goal in the Future Land Use Element and contained much more specific policies in that document, which directed the creation of Specific Area Plan and a development mode.

Our recommendation is that the County consolidate these two approaches in a way that can establish a big-picture framework for large-scale development, as the Horizon West approach does, but still maintains the Village-oriented development pattern, which is a characteristic of both approaches.

Despite the significant differences in the approach at the plan level, the actual planning process followed by Avalon Park (TND) and Horizon West was not so different. In each case, the Future Land Use Element was amended to accommodate the basic ideas. A Specific Area Plan was created to flesh out those ideas and create detailed plans. In the case of Horizon West, a separate set of development code sections was created as the Future Land Use Element called for. In the case of Avalon Park, the Specific Area Plan was implemented through the Planned-Development sections and other sections of the existing development code. The Smart Growth principles contained in each project were quite similar, though Horizon West was built to a somewhat more “suburban” scale with a greater range of housing densities. Indeed, perhaps the best way to think of Avalon Park is as a small (1,800-acre) village, compared to the two large (4,000- to 5,000-acre) villages in Horizon West.

Our recommendation, then, is to combine these planning approaches in the Future Land Use Element by taking the following steps:

- Integrate Goal 6 (“to ensure sustainable, quality development in Southwest Orange County to allow a transition from rural to urban uses while protecting environmental quality”) into Goal 1 (the County’s development framework). In essence, the village-oriented approach contained in Goal 6 would be a “bridge” between the Rural Growth Centers and the more urban areas located deep inside the Urban Service Areas, which would be the focus of the infill efforts discussed elsewhere in this policy audit.

- Build on Horizon West’s two-level planning approach for very large areas (5,000 acres or more) that are likely to contain two or more Villages.
- At the “macro” level, include performance standards for the overall project, including integration into the regional roadway and transit system and the project’s overall contribution to regional housing and employment needs. These standards might be placed into an overall subregional plan such as the one for Horizon West.
- At the “Village” level, combine the plan-level principles contained in both the TND option and the Horizon West approach. Although they are contained in different parts of the Future Land Use Element, these two approaches have Smart Growth principles. The Future Land Use Element would retain the current standard that Villages be between 1,000 and 3,500 acres in size. FLUE would prescribe a set of performance standards and mix of land uses for any Village similar to those prescribed for Horizon West.
- Again at the Village level, consider adopting a minimum residential density threshold as was done in Horizon West. The minimum density could vary depending on the character of the residential neighborhood. We have already proposed 7 units per acre for Transit-Oriented District. In other locations, minimum density for more suburban districts has been in the vicinity of 3.5 to 4 units per acre.
- Require Specific Area Plans for all Villages, and the creation of a development code specific to each Village.

A development project consisting of only one Village – essentially, an Avalon Park-type development – need not engage in the “macro” planning. But it is inadvisable to attempt to use either the Planned-Development code or an existing and more specific code, such as the Urban Village code, to implement a Smart Growth-oriented Village Specific Area Plan. An revised Urban Village code (discussed in more detail in the Code Audit) might serve as the basis for the development code deriving from a Village Specific Area Plan, but it is simply too big a leap to implement a specialized Specific Area Plan of 1,000 to 3,500 acres via a standardized code, even one that contains Smart Growth principles. The revised Urban Village code should be revised for smaller projects (100 to 1,000 acres), as described in the next section.

3. Code Audit: Summary and Recommendations

At the same time that Orange County has pursued Smart Growth principles in its planning policies, the County has also sought to incorporate Smart Growth principles in its code as well. It is very common for a jurisdiction seeking to adopt Smart Growth ideas to work on policies first and codes later; and it is not always easy to “line up” codes and policies. While policy language is often crafted by the planning department, codes are often written – and, especially, implemented – by a wide variety of other departments that may have other priorities or different orientations. In this regard, Orange County is no different than many other jurisdictions.

The challenge in Orange County is made greater, however, by the regional nature of a county’s charge and the traditionally suburban nature of development in unincorporated Orange County. Like many counties, Orange County must deal with a wide range of development contexts across the county, from very rural to very urban. Many codes are traditionally “one size fits all,” meaning they do not adapt to different contexts very easily.

We were charged with auditing only certain discrete components of the Orange County zoning code – most specifically, the Urban Village code; the Neighborhood Center, Neighborhood Activity Center, and Neighborhood Residential codes; and the R-1 code. This task was unlike our task in smaller, less complicated jurisdictions, where our task was to conduct a more comprehensive audit of both the policies and the codes.

The code audit tool measures the standards contained in a jurisdiction’s codes against a normative set of smart growth principles devised by the Smart Growth Leadership Institute team. The full audit is contained in Appendix B. Before moving on to a summary of findings, it is important to make note of two specific points about interpreting the results of a code audit.

First, not all of the applicable standards are contained in the code sections specifically reviewed. In some cases we have had to backtrack into other sections of the zoning code, especially when the code sections we audited were silent. In other cases, especially with regard to Horizon West, we have reviewed some code sections outside our scope in order to address that came up in both the policy and code audits. This is not unusual to Orange County, but it is especially important in the case of the scope of work for Orange County because we were charged with auditing only certain very specialized code sections.

Second, not every item on the rather lengthy checklist is applicable to every part of the code that we audited. This was more true in Orange County than in other locations where we have worked because of the specialized nature of the code audit we conducted.

3.1 Code Sections Audited

Under our scope of work, we audited three different areas of the code, including one area where we examined three very similar code sections. The three areas were:

Article XVI: Urban Village District, a section of the zoning code created in 1992 specifically in anticipation of accommodating new development projects that might seek to create a more traditional style of development.

Article XVII: Neighborhood Districts, a section of the zoning code created recently to create three different neighborhood zoning districts specifically aimed at facilitating new development in older communities such as Holden Heights.

The R-1 zone, contained in Section 38-276 et. Seq. of the zoning code.

It is important to note that there were some code sections that fall outside our charge but that, nevertheless, provided us with important insight into how Orange County seeks to implement smart growth ideas. These code sections included Article VIII, the “Planned Development” code sections, and Section 38-1380 et. seq. of the zoning code, which are the specific code sections that create development standards for the Horizon West development.

3.2 The Urban Village Code Standards

The Urban Village code section was created in 1992 specifically to deal with development projects that may seek a more traditional design. This section was included in our scope of work in spite of the fact – or, perhaps more accurately, *because* of the fact – that it has been rarely, if ever, used. In our interviews, the planning and zoning staff attributed this to the fact that legal staff encourages the use of the Planned Development code sections in order to deal with school capacity issues. One question that the Orange County planning staff sought to examine was whether changes to these code sections might encourage more developers to opt to use the Urban Village code, especially in infill locations.

The Urban Village code standards are, by and large, divided into two parts: standards for the “Village Center” (a mostly commercial and mixed-use center), and standards for residential areas. The standards for “Village Center” were among the most smart growth-oriented standards we found anywhere in the Orange County code. They included a discretionary parking ratios than can deviate from standard parking ratios, for example, and a requirement for very wide sidewalks.

However, the residential development standards are little different from standards elsewhere in the county code. Indeed, in many cases, the Urban Village code refers back to the standard residential development standards. Furthermore, the Urban Village code anticipates use in a fairly large development project. For example, it requires the creation of a “village green” of at least five acres, which would be impossible for all but large developments to comply with.

Based on the code audit and these considerations, we would make the following recommendations:

- *Reconsider the Urban Village zoning in the context of mid-sized infill projects.* Redevelopment of fully developed urban communities can be handled by the neighborhood districts discussed below. Development projects of 1,000 acres or more should be handled, as stated above, as Horizon West was. The Urban Village zoning should be reconsidered as the preferred regulatory tool for smaller Greenfield projects and also for “passed over” property or redevelopment of older suburban shopping centers – perhaps 10 to 100 acres – likely to become available for development in the future.
- *Steer developers to the Urban Village when schools are not an issue.* The Urban Village zoning has fine standards. If developers are steered away from it because of the school capacity issue, case planners should encourage developers to use it in situations where school capacity is not an issue.
- *Create more flexible open space standards.* Most traditional neighborhood development projects will benefit from proximity of both residential and commercial areas to open space. However, it may not be feasible to revolve a project around a five-acre Village Green. Given the recommendation above to reconsider the Urban Village code in light of smaller greenfield and infill development projects, the County should consider creating more flexible standards that allow developers to integrate open space into more traditional communities. We would suggest several alternative options, depending on project size. A five-acre Village Green probably makes sense for large (1,000-acre) projects. But the Urban Village code should also contain other, smaller options – such as plazas, greenways, or smaller “Village Greens” contained in smaller “Village Centers” – for smaller projects. This change would encourage more developers to use the Urban Village option.

- *Create more smart growth-oriented residential standards specifically for Urban Villages.* Most of the Urban Village code currently deals with the Village Center standards. These standards do call for smart growth-oriented residential neighborhoods. However, outside the Village Centers, the Urban Village code falls back on the underlying residential development standards. Especially considering the recommendation to reconsider the Urban Village code for smaller projects, the “fallback” to standard residential standards should be eliminated. For small infill projects (old shopping centers, for example), the Village Center residential standards should be retained throughout. For larger greenfield projects, the Urban Village code should be revised to encourage a variety of housing types outside the Village Center, focused on townhomes and on single-family neighborhoods with alley-loaded units on 50-foot lots – a smart growth standard that has been successfully used in Horizon West.
- *“Go to school” on the Horizon West zoning districts.* As the previous recommendation suggests, Horizon West has served as an excellent testing ground for many Smart Growth ideas in the County context. The Village Planned Development Code (Section 38-1380 et seq.) should be reviewed not only for its own adherence to smart growth principles (which is high), but also for ideas that could be used in the Urban Village code. For example, the townhouse/apartment district standards (Section 38-1387) could be included in the Urban Village code to cover areas outside the Village Center. Similarly, some of the innovative parking code provisions, such as the including of on-street parking and shared parking (38-1389, -4f & g) in the Village Center district could be incorporated into the Urban Village’s Village Center standards.

3.3 The Neighborhood Districts

The three neighborhood-oriented – NAC, NC, and NR – were introduced very recently to deal with the goal of facilitating new development in Holden Heights. The three districts all have very similar standards, except for the allowable residential densities and the relative commercial and residential orientations of the different districts.

These Code Audit comments are a follow-on to the comments about Holden Heights and other infill areas in the Policy Audit. They should be read in the context of the previous recommendations that (1) a Specific Area Plan be created for Holden Heights, and (2) both planning and code efforts in Holden Heights be used as a model for other infill areas.

The standards common to all three districts are generally good as far as they go. For example, all three districts require bicycle parking facilities in proportion to the required vehicle parking ratios. Also, reductions in parking ratios are permitted for mixed-use developments, joint parking, and so on.

However, as a result of our analysis, we would make the following suggestions:

- *Residential densities.* The three districts permit maximum residential densities of between 25 and 40 units per acre, which are high by Orange County standards and perfectly appropriate in view of the Holden Heights goals. However, the minimum densities are very low by urban standards – four units per acre – and the range of densities is very broad. Although some streets will likely stay at four units per acre, the county may want to consider creating a narrower range of higher densities to encourage townhouses only in specific locations. The Neighborhood Residential area should retain a four-units-per-acre minimum, mostly to accommodate existing development. But the Neighborhood Center and Neighborhood Activity Corridor zones should be changed to have a much higher minimum density (probably in the range of 12 units per acre) to help stimulate townhouse development.
- *Mixed use.* The Neighborhood Districts allude to mixed use and provide reduced parking ratios to encourage mixed use, but they do not seem to provide a specific mixed-use zoning district. Such a district would permit a more “tailored” set of standards for specific types of mixed-use projects. It would be easier to create a better mixed-use code if the policy-level recommendations on Holden Heights mixed use concepts were adopted, as these would provide a basis.
- *Transit orientation.* Parking ratios are reduced for a wide variety of purposes in the Neighborhood Districts, including mixed-use. Given the urban location of the neighborhood and its proximity to downtown Orlando, it would certainly make sense to tie lower parking ratios to transit stops as well. Perhaps parking ratios could be reduced for projects that are in close proximity to major bus stops in Holden Heights. At a minimum, the reduction for transit should be the same as the reduction for mixed use (15%).
- *Stormwater requirements.* The Neighborhood Districts are intended to encourage a new generation of relatively high-density urban development in older neighborhoods such as Holden Heights. Both open space and parking standards are reduced to encourage this development. However, developers are held to the same stormwater standards and implementation techniques – such as onsite detention basins – as developers in more land-rich locations. Interviews with developers in Holden Heights suggest that onsite stormwater solutions represent an enormous barrier to development. The county should consider cost-effective alternatives to onsite detention solutions in infill locations such as Holden Heights, perhaps by creating a combined, district-wide stormwater effort that includes both public and private retention efforts. This would free up more development potential on specific locations while still solving the stormwater runoff problem within the district.

3.4 The R-1 Zone

The R-1 zone contains a typical set of single-family residential development standards. The major issue here from a smart growth point of view is lot size – which is usually expressed in Orange County’s codes and development practice as lot width.

As stated above, the question of lot size is directly related to the question of the County’s land supply, as well as to affordable housing. If the County increases lot sizes – either as a matter of policy or on a case-by-case basis – then the County will consume the land supply inside the Urban Service Area more quickly, thereby increasing pressure to either increase the USA or to develop outside the county altogether. In addition, as land becomes more expensive, larger lots sizes increase the cost of housing, thus making starter homes more difficult for County residents to purchase.

The R-1 zone requires a minimum lot size of 5,000 square feet and a minimum lot width of 50 feet. There are no maximums, and in practice, political pressure discourages approval of projects meeting the minimum sizes. This makes it difficult for projects containing R-1 zoning to meet smart growth goals.

Although smart growth often encourages higher densities, Smart growth goals do not foreclose the possibility of some single-family neighborhoods, or even of larger lot sizes. But those neighborhoods must be designed and constructed carefully and in close proximity to commercial districts and other residential densities. This permits residents to realize the benefits of mixing uses and housing types.

Given the County’s desire to shift toward a smart growth orientation in order to conserve land supply, retain affordable housing, and create a vibrant mix of uses, we would suggest that the County alter the code to make the R-1 zone with a 50-foot lot as the “default” zone for single-family development. However, this would require some changes in policy language as well.

At the policy level, the County should articulate that 50-foot lots are the most desirable form of single-family development in most cases, for the reasons articulated above – land supply, affordable housing, and smart growth benefits such as proximity and transportation alternatives. Implementation of this policy language – either at the plan level or the code level – could take a variety of forms.

The County could acknowledge the need for some larger lots by specifying that a certain amount of new development countywide – perhaps 20% – could occur at lower densities than the 50-foot lots permits. This would require an allocation of these lots to different development projects throughout the county.

Alternatively – or perhaps in addition to this requirement – the County could provide developers with incentives to conform to the 50-foot default R-1 zone. The most powerful alternatives would probably be (1) a decrease in required offstreet parking for 50-foot lots; and (2) lower impact fees for projects with 50-foot lots. Both of these alternatives would require the County to make politically difficult judgments at the policy level. For example, lowering the parking ratio would probably require the County to adopt a more widespread policy to count onstreet parking in residential neighborhoods. Lowering impact fees would require the county to find other revenue sources or spread the cost differently for new infrastructure. Nevertheless, these would be powerful incentives to use a 50-foot R-1 zone, which in turn would help maintain the land supply inside the Urban Service Area for a longer period of time.

Such an R-1 alternative should also be tied in the zoning code to the Urban Village designation discussed above.

Conclusion

Like many county governments located in fast-growing metropolitan regions, Orange County must deal with a wide range of development patterns ranging from rural to urban. The County has sought to adopt smart growth principles in both its policies and codes to help manage new development, especially in light of the County's need to maintain a sufficient supply of land for future growth.

The County already recognizes these differences in its Development Framework (Goal 1 in the Future Land Use Element). However, over time, the County's policies and codes have been changed incrementally to accommodate a variety of timely and important issues in specific parts of the county, including Horizon West, Avalon Park, and Holden Heights. In recent years, the TND section has been added to the Development Framework of the Future Land Use Element; the Horizon West sections have also been added to the Future Land Use Element; language was added to both the plan and the code regarding Holden Heights; the Urban Village sections were added to the code; and on and on.

Each one of these steps has improved Orange County's efforts regarding smart growth. But each one has also created a more incremental and less comprehensive approach. This is not surprising – indeed, it is typical of how planning policies and codes evolve over time.

The bottom line regarding the recommendations in this report is simply to smooth out the “bumps in the road” created by these incremental changes so that the County and its developers will have a clear path toward future smart growth development.

It is our view that the County should recognize more directly, in the Comprehensive Policy Plan, that smart growth efforts are being channeled into different policy contexts in different ways – through extremely large-scale master plans as in Horizon West; through village-oriented developments as in Avalon Park; and through infill development in older commercial strips and in older neighborhoods such as Holden Heights. Then, the County should create a clear, smart growth-oriented path from the policy level through Specific Area Plans to the codes for each of these development contexts.

These changes probably require more revisions to the policies and codes than we have been able to suggest given the scope of our audit project. However, we believe that if the County follows this general course, the result will be a win-win-win for the County, developers, and residents.

Appendix A: Audit of Policies

	SMART GROWTH POLICIES	ORANGE COUNTY POLICIES	MATCH		
			L O W	M E D	H I G H
	Provide A Variety of Transportation Choices	Provide A Variety of Transportation Choices			
1	Encourage transit-oriented and transit friendly developments	[T1.6.10] The County shall encourage increased land use densities and mixed uses, consistent with the Future Land Use Element to enhance the feasibility of transit and to promote alternative transportation modes. [T1.7.5] In order to complement existing land uses and transit oriented design (TOD), the County shall utilize flexible design standards when constructing intermodal stations to accommodate future rail systems. [T2.1.4, L3.6.11] Orange County shall encourage the use of new urbanism concepts, such as but not limited to Traditional Neighborhood Development, Urban Villages, and Transit Oriented Development and incorporate such concepts into the Land Development Code, in order to reduce urban sprawl, decrease trip lengths, promote internal capture and promote multi-modal travel. [T2.1.5, L3.6.9] Orange County will support land use policies that reinforce effective transportation management. This includes support for activity centers, transportation-oriented developments, and sector planning. [H1.3.11] By December 31, 2005, the Land Development Code shall include criteria to coordinate the location of housing with public transportation for persons with physical or developmental disabilities and senior citizens.			X
1	Offer TOD-promoting incentives such as down payment assistance, reduced transit passes, and location efficient mortgages.		X		
1	Grant density bonuses in transit or mixed use districts		X		

1	Address jobs and housing balance in the General Plan	[L1.2.6E] A ratio of permanent residential to seasonal lodging/residential in order to encourage a housing balance of permanent residential based on the area's employment opportunities. [L Objective 6.1] The Village land use classification has been designed to address the need to overcome the problems associated with and provide a meaningful alternative to the leap-frog pattern of sprawl now occurring in western Orange and eastern Lake County; create a better jobs/housing balance between the large concentration of employment in the tourism industry and the surrounding land uses; create a land use pattern that will reduce reliance on the automobile by allowing a greater variety of land uses closer to work and home; and, replace piecemeal planning which reacts to development on a project by project basis with a long range vision that uses the Village as the building block to allow the transition of this portion of Orange County from rural to urban use through a specific planning process that utilizes a creative design approach to address regional, environmental, transportation, and housing issues.		X	
1	Link land use and transportation choices at the local and regional levels.	[T2.1.9, L3.6.8] The County shall work with LYNX to coordinate routing of the regional service and location of facilities with the location of activity centers as identified in the Future Land Use Element. [T4.1.14] Development orders shall not be approved if funding sources are not identified for the scheduled financing of capital improvements, or where necessary facilities are not guaranteed by the developer in an enforceable development agreement pursuant to Section 163.3220, or to Chapter 380 Florida Statutes. This agreement must guarantee that the necessary facilities and services will be in place when the impacts of the development occur. This shall be interpreted to include all transportation facilities and services, including mass transit. [L1.2.6.3I, L6.1.1J (Village)] The Growth Center/Resort/P-D shall be designed to encourage and accommodate linkage with the regional transit system where practical. [L.1.6.4E] An application for TND approval shall include specific mechanisms to ensure the development will be connected to a regional mass transit system.			X

1	Encourage public transit use by integrating multimodal use and connectivity (Park and Ride lots, transit centers, etc.)	[T2.1.1] Where there are opportunities Orange County shall ensure that existing and new residential developments are connected by roadways, bikeways, and pedestrian systems that encourage travel between neighborhoods and access to transit without requiring use of the major thoroughfare system. [T1.6.7] Orange County shall work with LYNX to evaluate the feasibility of incentives for promotion of private ridesharing programs and other transit services. [T1.7.4] The County shall support a balanced multi-modal system accomplished using intermodal stations that facilitate transitions between appropriate travel modes, including pedestrians, bicycles, rail, bus, and automobiles. [T2.1.1.2] Internal streets connecting residential subdivisions shall be designed to discourage non-residential traffic from using the facilities for through movements that should be accommodated by major thoroughfares. [T2.1.1.4] Orange County shall require the local street network to be designed to promote interconnectivity and to allow access between neighborhoods. Proposed gated communities and private streets will be evaluated on a case by case basis for appropriateness. [T3.2.2] Orange County shall continue to coordinate with the LYNX, METROPLAN Orlando, the FDOT, and other local governments to identify and designate strategic locations for additional park and ride lots. [T3.2.4] To reduce reliance on automobile travel and encourage greater use of transportation alternatives, The County shall coordinate with the GOAA, the City of Orlando, LYNX, and the FDOT to promote increased alternative transportation opportunities at the OIA and OEA. [L1.2.6.3C] Wherever possible, as many activities as possible shall be located within an easy walking distance of existing or designated transit stop or private shuttle or bus service. [L3.1.14] The Activity Center Strategic Development Plans shall include a transportation circulation strategy which integrates different modes of transportation to minimize individual vehicular movement. [U1.2.5] Vehicular and pedestrian connections should be provided between adjacent neighborhoods, with measures to prevent excessive cut-through traffic and excessive speeds on neighborhood streets.			X
1	Plan or maintain high-occupancy vehicle (HOV) lanes	[T1.3.2] To maximize the efficiency of interstate system, the County will support and encourage improvements to I-4 that may include measures such as High Occupancy Vehicle (HOV) and High Occupancy Toll (HOT) lanes.		X	

1	Encourage the formation of vanpools and carpools	[L4.2.2] The growth management strategy of promoting the use of multi-occupant vehicles (carpools, transit) to minimize emission impacts to air quality shall be facilitated by the Land Development Code and conditions of development approval for Developments of Regional Impact, where appropriate.	X		
1	Provide transportation choices to densely populated areas as well as major employment centers	[T1.6.1] Orange County shall work with LYNX to develop a comprehensive multi-modal improvement strategy, which includes the connection of employment centers to residential areas and the eventual connection of high density and intensity land use areas to each other by appropriate modes. [T1.6.9] The County shall ensure the provision of transit centers, super stops, and other facilities necessary to support transit in metropolitan activity centers and to facilitate transfer of passengers to and from the regional transit system. [L1.1.5D] To discourage urban sprawl, the travel distance between the proposed residential property and identified employment centers shall not exceed the ten miles/twenty minute travel distance as referenced in the Department of Community Affairs' Housing Demand/Supply and Need Methodology. [L3.1.16] By September 1994, Orange County shall develop a comprehensive mass transit improvement strategy which includes the eventual connection of employment centers to residential areas and the connection of Activity Centers to each other.			X
1	Change roadway design standards to support transit and non-automotive modes.	[T2.1.6] The planning, design and construction of all road widening and extension projects shall be sensitive to adjoining residential areas. Through the RCA process the County will seek public involvement to determine measures to mitigate adverse impacts to established neighborhoods. [L6.2.22] The street network shall be designed so that streets encourage connectivity between uses within the Village and allow connection of major streets to existing or planned streets outside the Village. The distance between intersections and the roadway cross sections shall be designed to create walkable streets.		X	
1	Locate new development, especially public, in areas supported by balance transportation network.	[T1.4] The County will maintain a concurrency management system which ensures that transportation facilities and services needed to support development and redevelopment are available concurrent with the impacts of such development. [T2.2.6] In association with construction of any County roadway at the collector level or above, Orange County shall coordinate mass transit needs with LYNX. [L3.6.1] The design function of roads shall be maintained by coordinating land use, Level of Service Standards, and the functional classification of roads. [L3.6.2] The Future Land Use Map shall reflect a correlation between the densities and intensities of			X

		development, and the capacity of the transportation system.			
	Mix Land Use	Mix Land Use			
2	Designate appropriate areas for mixed-use developments	[L1.2.6.3D] The Growth Center/Resort/P-D shall have a center focus that combines commercial, cultural, and recreational uses. [L3.1.5] To create a community/village like setting, the residential areas within each Urban Village shall be focused around a town center that contains neighborhood retail uses, personal services, and open space. [L6.2.16] The Village Development Code shall require a mixture of residential, commercial, office, and public, civic and parks uses in the Village Center.			X
2	Encourage mixing of uses at building, site, and neighborhood levels	[L1.2.6.10E] Residential dwellings above ground floor commercial uses will be permitted/encouraged. [L1.6.4A] TND shall allow for a mix of residential, retail, office, green space and public uses at a scale and relation which is attractive to pedestrian and cycling activity as well as at an intensity which makes transit a viable alternative to the automobile. [L3.1.1] Continuous stretches of similar types and density of units shall be avoided. A diverse mix of land uses, housing types, and densities shall be promoted. [L3.8.8] A mixture of land uses shall be encouraged within activity and commercial centers. Office and industrial land uses shall be located to provide a balanced land use mixture, in addition to commercial uses. [L6.1.1A] Each Village must adhere to the following Community Planning Principles: Planning for the Village shall be in the form of complete and integrated neighborhoods containing housing, shops, workplaces, schools, parks and civic facilities essential to the daily life of the Village residents. In accordance with the Public School Facilities Element and the Parks and Recreation Master Plan, the co-location of facilities should be pursued at all levels. [U1.1.4] Educational facilities should be located as near as possible to existing and proposed community facilities, including parks, recreational centers, community centers, galleries, libraries, and health centers. [H1.4.6] By December 31, 2002, the Land Development Code shall include buffering criteria to ensure compatibility between residential and non-residential uses in mixed-use projects. [S2.1.1] Encourage the location of parks, recreation and community facilities			X

		in new and existing communities in conjunction with school sites.			
2	Allow for home/office use in residential areas		X		
2	Encourage residential uses in the downtown districts		X		
	Create A Range of Housing Opportunities and Choices	Create A Range of Housing Opportunities and Choices			
3	Allow for accessory housing within single-family residential zoning districts		X		
3	Provide for a wide range of housing types	[L1.1.5.1A] The County shall give priority consideration to the following factors when evaluating projects for inclusion within the Urban Service Area. Whether the proposal will consist a Traditional Neighborhood Development (TND), sector plan, or mixed use planned development that use neo-traditional planning concepts, including minimum residential densities, school-centered design, diversity of housing types, and price ranges reduce vehicle dependency, protect natural environmental features, and create a sense of community and place through urban design principles and the arrangement of land uses. [H1.1.9] Affordable housing is allowed within all residential zoning categories. [H1.3.1] The County shall continue to coordinate with all housing assistance programs, which are designed to provide housing opportunities for the population with special needs by providing technical assistance. [H1.7.1] The County shall develop regulatory incentives, to be included in Land Development Code, for mixed use/density projects to provide the consumer with as many housing alternatives as possible. Innovative development standards and the continued use of the P-D zoning district shall be used as tools to achieve this policy.			X
3	Meet housing needs for all income groups	[L1.6.4C] The residential component of a TND shall be a mixture of building types, densities, costs and ownership patterns. [L6.1.1C] A Village shall contain a diversity			X

		of housing types to enable citizens from a wide range of economic levels and age groups to live within its boundaries.			
3	Allow live/work units		X		
3	Meet or exceed the regional fairshare housing allocation for both market-rate and affordable housing	[H1.4.2] The 2000-2020 Future Land Use Map shall include sufficient acreage to accommodate the anticipated need between 2000 and 2010 of 146,418 single-family residential units, 118,632 multi-family units, and 12,293 mobile homes. Mobile homes shall be allowed in low and low medium density residential land use categories. [H1.4.3] The County shall use policy statements found in the Future Land Use Element to direct the density, intensity, and location of residential land use. [H1.4.4] The County shall monitor its inventory of acreage, and type of land suitable for future residential development on an annual basis to ensure sufficient land for housing is available for the population.			X
3	Allow minimum lot-sizes low enough to accommodate all income groups		X		
3	Allow local zoning flexibility in housing sizes (smaller dwelling units)	[L6.2.10.3] To ensure adequate housing diversity, each neighborhood must contain a variety of lot sizes.			X
3	Encourage mixed income housing developments	[H1.1.11] Orange County shall support and provide incentives for the location of affordable housing in mixed use projects to encourage development patterns, which physically integrate rather than isolate very low, low and moderate income and special needs groups from other sectors of the community.			X
3	Provide density bonus to increase housing/affordable housing	[L1.1.13] The Land Development Code shall provide, a density bonus, not to exceed 25 percent of the otherwise maximum density permitted by the Future Land Use Map, to development participating in the Orange County Affordable Housing Density Bonus Program. Only development within the Urban Service Area, or Growth Centers shall be eligible for such density bonuses. [H1.1.1] The County shall adopt mechanisms, such as, but not limited to, streamlining the permitting process, providing technical assistance and incentives to include density bonuses for the provision of affordable housing. This is necessary to encourage the participation of private sector and nonprofit agencies in housing programs designed to provide affordable housing to households with very low, low, and moderate incomes and to provide housing for special needs groups. [H1.1.10] Orange County shall either amend all residential zoning districts in the Land Development Code or utilize other mechanisms to incorporate performance standards and incentives for the provision of affordable			X

		housing. [H1.1.13] Orange County shall encourage the development of affordable housing projects in the Urban Service Area, Activity Centers, Rural Settlements consistent with Future Land Use Policy 2.1.10, and designated Community Development Target Areas by establishing and continuing to seek innovative incentives such as incentives to include density bonuses and transfer of development rights. [H1.1.21] Orange County shall encourage the provision of affordable housing through the implementation of an Affordable Housing Density Bonus Program designed to encourage on-site affordable housing opportunities or encourage developer contributions to the Orange County Trust Fund for Affordable Housing in exchange for incentives to include density bonuses. All contributions to the Trust Fund shall be used to facilitate the provision of affordable housing. [H1.5.3] Orange County shall evaluate, and if appropriate adopt, local regulatory incentives in the Land Development Code, including, but not limited to, transfer of development rights, density bonuses, and other similar incentives to encourage the development of affordable housing. [S4.1.3] Consider development incentives (i.e. density bonus, expedited development review, etc.) for residential properties that are located within ½ mile of an existing elementary school that has a school enrollment below 100% of the permanent core capacity, excluding portables, and the residential property is located in the subject school attendance zone. No development incentives shall be granted that would result in the school enrollment over 100% of the permanent capacity.			
3	Encourage traditional neighborhood residential patterns, such as diverse housing types- large family homes, cottages, boarding houses, duplexes and small apartments, in new ways such as town homes, condominiums and apartments				X
3	Encourage live-work homes, which need zones to permit businesses to operate from home, unlike "home occupations" must allow office use by non-residential employees and visitors, except retail, and include everything from professional to		X		

	small manufacturing that can be located at home				

	Create Walkable Neighborhoods	Create Walkable Neighborhoods			
4	Allow for reduction of street widths to promote walkability and bike friendliness	[T1.6.8.1] Bikeways shall be included in all new County roadway, improvements to existing roadways, and resurfacing projects unless demonstrated to be not appropriate. [L1.2.6.3G] Local and collector streets, pedestrian paths and bike paths shall contribute to a system of fully-connected routes. Their design should encourage pedestrian and bicycle use by being spatially defined by buildings, trees, and lighting; by discouraging high speed traffic. [L1.6.4G] The TND design criteria shall include street design criteria which promotes construction of an interconnected road system. Cul-de-sacs shall be avoided. [L1.6.4H] The TND design criteria shall include requirements for pedestrian and bicycle systems. [L3.1.17] Pedestrian and bikeway linkages between residential areas, open space, and employment areas within the Activity Centers shall be provided. [L3.6.10] Neighborhood, community, and regional shopping centers shall include bicycle parking areas, and where appropriate, bus bays or shelters to encourage alternative transportation modes. Such requirements shall be referenced in the Land Development Code. [6.1.1D] Wherever possible, as many activities as possible shall be located within an easy walking distance of an existing or designated transit stop. [L6.2.24] The Village Development Code shall establish street cross sections and maximum block lengths in order to promote walkability and create a sense of neighborhood community. [U1.4.4] Arterial and collector roads should be designed using performance criteria, rather than prescriptive standards, for traffic movement, safety and beauty. Arterial and collector roads in Orange County should be designed, or redesigned, with a comprehensive cross-section that includes building setbacks appropriate to the structural environment and right-of-way sufficient for the following. [S2.2.5] Support and coordinate with School Board efforts to locate new elementary schools within reasonable walking distance of the dwelling units served by the school. [S3.1.4] Provide interconnected pedestrian access between neighborhoods to allow direct access to school sites and bus drop-off locations.			X
4	Adopt traffic-calming measures and pedestrian-controlled traffic signals to encourage bike and pedestrian friendliness	[T2.1.1.3] Orange County shall discourage arterial traffic on local streets in residential neighborhoods by implementing traffic calming measures and improving traffic flow on major thoroughfares. [U1.2.1] Community programs should be targeted to achieve more attractive, pedestrian friendly neighborhoods that serve the needs of the existing and future residents. [U1.4.2] The County should encourage flexibility of design regulations and innovation for quality projects to develop an appropriate mix of the following elements: pavement widths, curb			X

		and gutter, mailboxes, landscaping, sodding, entrance signs, street and pedestrian way lights, signs, brick pavers, and sidewalks. Thoughtful consideration of right-of-way width, function and the blending of aesthetic elements should be pursued. If necessary, additional easements areas could be considered to supplement the right-of-way width. [U1.4.6] Sidewalks, bikeways, lighting, crosswalks, narrower pavement widths, signs and signals should be used to help slow traffic, encourage walking and return the streets to pedestrian-friendly uses.			
4	Regulate curb cuts	[L3.2.14] Strip commercial land uses shall be defined as commercial uses adjacent to roadways that are located outside the reasonable zone of influence of the intersection to which they relate. They are characterized by individual curb and median cuts and lack visual landscaped buffers. Strip commercial land use patterns shall be avoided by requiring a transition of land uses, or the incorporation of a buffer into the development's design.		X	
4	Require sidewalks on both sides of the street	[U1.4.3] The Land Development Code should be amended to include incentives for providing canopy street trees between sidewalks and vehicular travel lanes along all proposed residential streets at a minimum of every fifty (50) feet.	X		
4	Connect sidewalks to amenities such as parks and open space	[L3.2.20] Educational facilities shall be accessible from sidewalks and bikeways. [6.1.1H] Local and collector streets, pedestrian paths and bike paths shall contribute to a system of fully connected and interesting routes from individual neighborhoods to the Village Center and to other villages. Their design should encourage pedestrian and bicycle use by being spatially defined by buildings, trees, and lighting; and by discouraging high speed traffic. [U1.2.4] Elementary schools, adjacent neighborhoods, parks and neighborhood shopping should be accessible to neighborhood residents by tree-lined sidewalks and bikeways. [S2.1.6] Link schools, parks, libraries and other public facilities with bikeways, trails, and sidewalks. [S3.1.2] Coordinate with the School Board to ensure that both existing educational facilities and proposed school sites are accessible from and integrated into a planned system of sidewalks, trails, and bikeways.			X
4	Establish minimum and maximum block length standards	[L6.2.10.2] To encourage appropriate residential neighborhood design, the Village Development Code shall establish maximum block lengths and require mixing of block sizes and regulate on-site parking for residential uses.			X

4	Establish a trail system or other non-motorized public access to amenities	[T1.6.8.3] Orange County shall continue to pursue a countywide multi-use trail system through implementation of the Orange County Bikeways, Trails and Greenways Master Plan. [6.2.25] Pedestrian and bike paths shall be an integral part of the Lakeside Village, and shall be incorporated within street cross sections and located within utility corridors. Upon completion, the system of pedestrian and bike facilities shall form a hierarchical system of connections to promote walkability within the Village. [U1.4.15] Bikeways and pedestrian systems should be planned as transportation facilities, as well as recreation facilities.			X
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	Encourage Community and Stakeholder Collaboration	Encourage Community and Stakeholder Collaboration			
5	Support and implement incentives for adoption of comprehensive plans and Capital Improvement Plans prior to imposition of local land use regulations and controls.	[T3.3] Orange County shall provide the opportunity for the public to participate in the transportation planning process through participation at public meetings, public workshops, small group meetings, and other public forums. These meetings shall be scheduled as needed in accordance with county guidelines. [P1.1.3] Orange County shall promote and educate the public, through public seminars, dissemination of information and media presentations, about mass transit, car-pooling, bikeways, park-n-ride lots, and other alternative transportation modes in order to reduce automobile emission pollution, as proposed in the Traffic Circulation and Mass Transit Elements. [U1.7.1] The Urban Design Element shall serve as a visionary tool to educate and inspire the community on the value of high-quality urban design. To implement the vision of improved aesthetics and a stronger sense of place, a considerable public participation process is necessary to build consensus. This public participation process shall include property owners, developers and a wide range of citizen groups to further develop the strategies for implementing this goal.		X	
5	Strengthen state, metro, and regional institutions to facilitate multi-jurisdictional decision-making and problem solving.	[T3.1.2] Orange County shall continue to integrate its public transportation planning with LYNX, METROPLAN Orlando, the FDOT, and other local governments in order to coordinate transportation on a regional basis. [T4.1.7] The County will continue to participate in interlocal agreements and Joint Participation Agreements with other local jurisdictions and private developers as a means of funding necessary transportation improvements. This will be based on a mutually agreeable formula. [L6.1.14.1E] Orange County shall include participation by local governments and state agencies impacted by the Horizon West land use as part of the Southwest Orange County Transportation Alternatives Study scheduled to begin in June 1999. Such involvement shall include, but not limited to, participation on technical committees and in the various related community workshops. As part of the study, possible extrajurisdictional impacts, mitigation and joint projects may be identified. [P1.1.4] Orange County shall regulate businesses and industries, which have an impact on air quality and ensure that proper pollution control devices are utilized and maintained. This policy shall be achieved through Interlocal Agreements with the Department of Environmental Protection. [S5.1.9] Coordinate neighborhood planning and community development activities with school based faculty, school advisory committees and neighborhood groups.			X

	Foster Distinctive, Attractive Communities with a Strong Sense of Place	Foster Distinctive, Attractive Communities with a Strong Sense of Place			
6	Public and private development should improve the character of existing neighborhoods, avoiding or removing factors that cause instability or create barriers, and enhancing the sense of neighborhood identity	[U1.2.3] Every new and existing neighborhood should have a name and an identity with an entrance or gateway to establish a sense of place. [U1.7.3] The Land Development Code shall be amended to provide for more performance-based design guidelines. These design guidelines shall promote architectural and site design treatments that enhance the visual appearance of development within the community.		X	
6	Neighborhoods should include places for interaction among residents, such as parks, community centers, schools, commercial areas, churches and other gathering places.	[L1.2.6.3E, L6.1.1F (Village)] The Growth Center/Resort/P-D shall contain an ample supply of specialized open space in the form of squares, greens, and parks whose frequent use is encouraged through placement and design. [L1.6.4B] A TND shall include one or more core commercial areas which are centrally located to residential components. These core areas shall include uses such as, but not limited to, retail, office, light industrial, day care centers, and public uses such as a post office, library, or village green.			X
	Make Development Decisions Predictable, Fair, and Cost Effective	Make Development Decisions Predictable, Fair, and Cost Effective			
7	Consistency between local government regulations, local actions and the comprehensive plan.	[L6.2.4] The Lakeside Village SAP shall also demonstrate consistency with policies 6.1.1, 6.1.3 and 6.1.4 by providing a compact, integrated development pattern with neighborhood centers generally located within a 1/2 mile walking distance of the residences, and by establishing a population density for each neighborhood that can support the neighborhood school. [C1.1.3] The Capital Improvements Program shall be consistent with and act as a means of implementing the County's comprehensive plan.		X	

	Preserve Open Space, Farmland, Natural Beauty and Critical Environmental Areas	Preserve Open Space, Farmland, Natural Beauty and Critical Environmental Areas			
8	Establish guidelines to regulate development in critical areas such as wetlands, fish and wildlife conservation areas, frequently flooded areas, and geologically hazardous areas	[L1.2.6.3F, L6.1.1G (Village)] The Growth Center/Resort/P-D shall have a well-defined edge, such as greenbelts or wildlife corridors permanently protected from development. [L4.2.6] The Land Development Code shall provide regulations for the protection and conservation of wildlife listed as endangered, threatened, or species of special concern, and their occupied habitat; floodplains; and the natural function of wetlands. [L4.2.9] Orange County shall promote, through land development regulations and/or acquisition, the protection of rare upland vegetative communities. Such regulations may include, but shall not be limited to, cluster developments, transfer of development rights, buffering sensitive areas, and the identification and designation of wildlife corridors to discourage fragmentation.[L4.2.10] Orange County shall continue to protect wildlife corridors, rare upland vegetative communities wetland vegetative communities through the adoption of land development regulations or by utilizing other mechanisms such as transfer of development rights; development exactions; development incentives; or acquisition (by use of possible bond issues, existing tax dollars, or the Conservation Trust Fund). [L61.1I] Wherever possible, the natural terrain, drainage and vegetation of the area shall be preserved with superior examples contained within parks or greenbelts. [P1.4.1] Orange County shall continue to adopt regulations which protect and conserve wetlands. Such regulations shall include criteria for identifying the significance of wetlands. [P1.4.7] Orange County shall protect identified wetland areas and existing wildlife habitat through the control and maintenance of invasive non-native (exotic) plants on County owned environmentally sensitive lands. [P1.7.3] Orange County must establish on an ongoing basis, an education and incentive program to encourage private landowners to use environmental management practices that protect habitat for plants and wildlife listed as threatened, endangered, or species of special concern.			X
8	Establish codes to guide environmentally compatible development in coastal communities		N/A		

8	Establish mechanisms such as transfer of development rights (TDR) and financial incentives to protect, preserve, and maintain natural assets	[L5.1.11] By 1995, Orange County shall consider the feasibility of, and then pursue, all appropriate mechanisms to encourage the preservation of archaeological and historic resources. Such mechanisms may include easements, protective covenants, purchase of development rights, rehabilitation tax credits, tax increment financing, and revolving funds. Other measures that can be adopted to foster preservation include marker awards or similar types of community recognition of important historic resources. [L6.1.10] In order to encourage the implementation of the greenbelt requirements in Policy 6.1.8, preserve other important uplands, agriculture areas, water reuse area, Floridan aquifer recharge, wetland connections and wildlife corridors, Orange County will allow the Transfer of Development Rights from these sending areas to receiving areas in Orange County. To provide rights-of-way for limited expressways or principal arterial roadways necessary to support the villages, Orange County will allow Transfer of Development Rights (TDR) from the rights-of-way to developable receiving areas. Transfer will be limited to the property on which the right-of-way is located or within 1/4 mile of the right-of-way sending area, whichever is greater. Net density in Village Centers and the Town Center may be increased from 5.0 DU/net acre up to 16 DU/net acre where TDRs are utilized. [P1.7.8] Orange County shall also consider incentive programs such as density bonuses, transfer of development rights, acquisition, or purchase of development rights as a means of preserving these areas.			X
8	Establish open space and farmland protection programs	[L2.1.2] Every effort shall be made to preserve the existing character of the Tangerine, Clarcona, Christmas, Zellwood, and Gotha Rural Settlements as part of Orange County's heritage and historic preservation. Rural Settlements may be designated as Preservation Districts for the purposes of municipal annexation pursuant to the Orange County Charter, Article V. [L6.2.21] In addition to the parks and civic use areas shown on the Lakeside Village SAP a minimum of five percent of the gross land area of any development project shall be permanently allocated to open space tracts for neighborhood parks or squares. These areas should be centrally located accessible to the public and designed to create a focal point for the development. [P1.4.8] Orange County shall continue to seek out innovative partnerships and opportunities to preserve and conserve its natural resources in a balanced approach that ensures multiple and compatible uses of those lands while providing just compensation to the landowner.			X

8	Develop guidelines to preserve historical sites	[L5.1.7] Orange County shall preserve archaeological and historic sites and structures discovered on County owned land which are worthy of preservation. Less significant sites shall be mitigated through data recovery.			X
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	Strengthen and Direct Development Towards Existing Communities	Strengthen and Direct Development Towards Existing Communities			
9	Promote brownfields redevelopment for housing and/or mixed-use		X		
9	Establish minimum clean-up standards associated with brownfield proposed land uses		X		
9	Establish land use strategies and incentives for redevelopment/brownfields redevelopment	[L3.4.4] In order to promote the redevelopment of blighted communities, the County shall establish the Neighborhood Center, Neighborhood Activity Corridor, and the Neighborhood Residential future land use designations. These land uses shall be designated on the Future Land Use Map through an amendment to the Comprehensive Policy Plan to implement strategies to physically and functionally integrate a mixture of land uses in a specified location.		X	
9	Establish regulations that promote greyfields redevelopment for housing and/or mixed-use		X		
9	Establish an urban growth boundary	[L1.1.1] Urban uses shall be concentrated within the Urban Service Area, except as specified for the Horizon West Village classification, Growth Centers, and to a limited extent, Rural Settlements.			X
9	Establish tax credits/incentives or other policies to encourage infill over greenfield development	[L3.3.1] With the adoption of the Development Framework Element, Orange County shall adopt an infill master plan to identify the small vacant parcels suitable for infill development. The plan shall identify appropriate land use and intensities, and address the provision of services to accommodate the proposed development in the Urban Service Area. In addition, the plan shall identify incentives such as, but not limited to, density bonuses to encourage infill and redevelopment. [H1.2.5] The continued use of code enforcement condemnations shall be encouraged as a source for infill affordable housing.			X

9	Discourage sprawl and sprawl generating subsidies (such as funds for suburban highway and road construction, water, and sewer facilities and service) in place of structured incentives for urban infill or TOD	[L1.1.5E] To discourage urban sprawl, the proposed development shall be contiguous to the existing Urban Service Area boundary and shall not extend into the Rural Service Area in a ribbon like manner or create enclaves or pockets of the Rural Service Area. [L1.1.5F] To discourage urban sprawl, the proposed development shall be compatible with existing or planned development on adjacent parcels. [L1.1.5G] Noncontiguous expansions of the Urban Service Area shall not be permitted. A proposed Urban Service Area expansion shall be contiguous to or made to be contiguous to the existing Urban Service Area. [L3.4.3] It is Orange County's goal to promote quality infill land uses through the redevelopment of an economically viable Mixed-Use Corridor District (MCD) in the Lee Road Corridor target area. New development or redevelopment in the Lee Road target area will be conditioned upon buildings and streetscape which incorporate considerations for transit and pedestrian amenities, screening or reduction of outdoor storage, limited expansion of demonstrated nuisance-generating uses, and crime prevention through environmental design. The County supports flexible incentives for redevelopment to promote a pedestrian friendly environment and redeveloped mixed-use nodes along the Lee Road corridor. Businesses which are useful to residents, and residential uses which will help to support viable businesses, shall be encouraged through flexible setbacks, densities, intensities, building heights and parking requirements. Orange County will implement this policy through the creation of a Mixed-Use Corridor District (MCD) zoning overlay to be drafted by December 1997, and effective by June 1998. [L6.1.8] In addition to requirements for formal parks and neighborhood greens, greenbelts surrounding each Village and the Town Center averaging 500 feet in width shall be required at the perimeter of each Village. This greenbelt must be provided to discourage sprawl by creating a definable Village and provide a permanent undeveloped edge, except as set forth in Policy 6.1.9, so that planning a Village within limited spaces takes on meaning. [H1.1.14] Orange County shall examine the feasibility of reserving and/or extending infrastructure capacity for infill affordable housing projects within the Urban Service Area. [S5.4.4] Orange County shall consider providing incentives (such as but not limited to, density credits, priority with capital improvement projects and development approval preferences) to developments that donate land (or cash in lieu of land), for new public school sites.			X
9	Encourage regional tax sharing to discourage fiscalization of land use and destructive sales tax competition		X		

9	Regulations that support land reuse and require new urban growth to be coordinated with provision of infrastructure capacity	[T4.1.5] The County shall use revenues generated from Transportation Impact fees to provide new road capacity. [T4.1.6] In addition to paying Impact Fees, new development and redevelopment shall be responsible for the costs on all internal subdivision roads, as required by the Land Development Code, and any necessary access improvements at project entrances. [L1.1.5C] In order to ensure new development pays for growth related impacts, the developer shall pay for the full cost of initial services and facility expansion, unless excess infrastructure/service capacity exists. [L3.5.3] A concurrency management system shall be developed and adopted on or before December 1, 1991, which ensures that public facilities and services needed to support development are available concurrent with the impacts of such development.			X
9	Favor the use of existing infrastructure over new and new development either is self-paying or consciously subsidized	[C1.4.1] Orange County shall continue to impose impact fees as a means of establishing and paying for future development's proportional cost of capital improvements. [C1.4.2] To the maximum extent feasible, the "user pays" philosophy shall be incorporated into the revenue structure of all major public improvements and infrastructure systems which do not provide substantially equal benefit to all County residents on a County-wide basis. [C1.6.1] Orange County shall assess impact fees on new development to cover a fair share of the capital cost to provide those services to new growth.			X
9	Encourage infill development with specific zoning ordinances.	[L3.3.3] Subsequent to the adoption of the Infill Master Plan, the Land Development Code shall provide for, and establish, incentives to promote increased residential density on infill parcels through innovative subdivision design (including zero lot line and zipper lots) or other mechanisms such as flexible level of service guidelines in order to allow a balancing of otherwise inconsistent plan policies, objectives, and/or goals (e.g., allowing an otherwise unacceptable level of service on a road in order to promote infill). [H1.1.7] In order to stabilize and improve existing neighborhoods, Orange County shall continue to support compatible infill development in existing neighborhoods where infrastructure already exists. The optional Community Revitalization Element identified in Future Land Use Element Policy 3.3.1 shall provide a vehicle for implementation of this policy.			X

	Take Advantage of Compact Building Design	Take Advantage of Compact Building Design			
10	Allow for reduction in parking requirements in TODs		X		
10	Utilize the full development capacity (density or floor area ratio)		X		
10	Reduce parking requirement or parking maximums		X		
10	Provide for shared parking		X		
10	Allow for conversion of existing underutilized and/or abandoned non-residential sites into housing and/or mixed-use developments		X		
10	Establish minimum densities for higher density development	[L1.1.10] The Future Land Use Map shall reflect the most appropriate maximum densities for residential development. Residential development in designated Activity Centers, the Horizon West Village classification and Growth Centers shall include provisions for maximum and minimum densities. The densities in the International Drive Activity Center shall be those indicated in the adopted Strategic Development Plan. Densities within the existing Growth Center in southwest Orange County shall be those as adopted on July 1, 1991. [L1.1.11] Residential densities* within the Urban Service Area are as follows: Low Density Residential: Up to 4.0 DU/Acre; Low Medium Density Residential: Up to 10 DU/ Acre; Medium Density Residential: Up to 20 DU/Acre; High Density Residential: Up to 50 DU/Acre. [L3.1.43] Maximum residential density in the Community Village Center (CVC) shall be limited to ten (10) DU/Acre. Minimum residential density shall be one (1). [L3.4.6] Maximum residential densities shall be limited to forty (40) DU/Acre in Neighborhood Center, 25 DU/Acre in Neighborhood Activity Corridor and 20 DU/Acre in Neighborhood Residential. The minimum residential density shall be four (4) DU/Acre. Densities less than four (4) DU/Acre shall be allowed for the protection of natural resources. [L6.2.10] The Village Development Code shall establish Residential Performance Standards as follows: Estate Home District, minimum average net density of 3.0 dwelling units per acre; Village Home District, minimum average net density of 6.0 dwelling units per acre; Townhouse/ Apartment District, minimum average net density of 12.0 dwelling units per acre.			X

10	Encourage reduced lot guidelines to encourage higher density	[H1.1.17] The County shall encourage innovative housing designs through the Development Advisory Board (DAB), Urban Design Commission (UDC), Development Review Committee (DRC) and Affordable Housing Advisory Committee (AHAC) such as but not limited to zero-lot-line and increased densities, to provide very low, low and moderate income families with alternative housing opportunities.		X	
10	Allow density bonuses along transit corridors		X		

Appendix B: Audit of Codes

Urban Village Zone

Connectivity/Circulation								
C	1.00	Alleyways	Yes	No	DNA	Comments	Suggested Standards	
C	1.10	Are alleyways allowed?	x			38-1704-d. One-way alleys only permitted.	Require alleys to limit number of curb cuts on streets.	
C	1.20	Are there restrictions on their use?						
C	1.30	Are width standards established?	x			16-20' (38-1704-d)	Use should dictate width. In commercial zones, alleys can function as drive aisles for off-street parking lots and as fire lanes.	
C	2.00	Bicycle/Multi-use trail facilities	Yes	No	DNA	Comments	Suggested Standards	
C	2.10	Are bicycle lanes required?		x		Generally: Bike lane requirements follow land use plan, not zoning	Provide for a network of bicycle routes, lanes, or shared-use trails to promote bicycle use in all zones.	
C	2.20	Are bicycle lanes accomodated?		x			Bicycle lanes can be retrofitted by changing the way on-street parking is accomodated.	

C	2.30	Is bicycle parking required?		x		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	
C	2.40	Are standards established for bicycle lane width?		x		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.	
C	2.50	Are standards established for bicycle lane surface?		x		Grade differences between gutter pans and street surface should be eliminated. Uniform, smooth surfaces should be specified.	
C	2.60	Are standards established for separation of bike lanes from motorized vehicle lanes?		x			
C	2.70	Is a multi-use trail provided for or planned?		x			
C	3.00	Parking standards	Yes	No	DNA	Comments	Suggested Standards

C 3.10	Is on street parking allowed?	x		In Village Center. (38-1704-f)	Among other benefits, on-street parking encourages pedestrian traffic, and can act as a buffer between pedestrians and moving vehicles. Design is important.
C 3.20	What relationship is dictated between parking spaces and the street?			"All parking areas shall be designed and landscaped to be visually and functionally integrated with other land uses" (38-1704-l)	Avoid diagonal parking on streets with bike lanes or routes and on heavily traveled streets.
C 3.30	Are there provisions for shared parking?	x		Yes, in Village Center. 38-1704-I. Uses regular parking standards in 38-1476 as the basis.	Shared parking should be encouraged.
C 3.40	Are there provisions for joint parking?				Joint parking should be considered where conditions warrant.
C 3.50	What basis is used to establish parking requirements?				Zone and use specific parking requirements should be established and should take transit facilities into consideration.
C 3.51	District type?		x		
C 3.53	Use?	x		Underlying parking requirements are determined entirely by use; in village center of UV zone they are discretionary.	
C 3.60	Are minimum requirements set?		x	Minimum standards are discretionary	
C 3.70	Are maximum requirements set?	x		38-1704-g specifies that standard parking requirements in 38-1476 shall be the maximum	
C 3.80	Are there provisions that allow reductions in requirements along transit routes?				Reductions for transit availability should be allowed.

C 3.90	Are reductions allowed in exchange for bike parking?			
C 4.00	Street hierarchy			Comments
C 4.1	What street hierarchy is in place?			Standard three-category hierarchy (Principal arterial, minor arterial, and collector), with rural and urban for each
4.11	Are design speed standards used?			Divisions within categories will permit a finer grained street system (e.g. differentiate between various widths of arterials, major and minor collectors, commercial and residential local streets). 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.
C 4.12	What standards are set for width, intersection and corner radii for neighborhood access 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.
C 4.13	What standards are set for width, intersection and corner radii for neighborhood connector streets?			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

C	4.14	What standards are set for width, intersection, and corner radii for regional access streets?			38-1603 has setback distances from centerline ranging from 55-70 for urban streets and 100-150 for rural streets	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	
C	5.00	Street pattern	Yes	No	DNA	Comments	Suggested Standards
C	5.10	What block lengths are dictated?					Excessively long blocks discourage pedestrian traffic. Limit block perimeters (e.g. 1600 ft.). Limit block face lengths (e.g. 500 ft.)
C	5.11	Do these differ by zone?					
C	5.12	Are cul de sacs allowed?					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.
C	5.20	Are there provisions to ensure street connectivity between neighborhoods?	x		38-1704-a		Require mid-block pedestrian passages in commercial and mixed-use zones (e.g. at 250' maximum intervals).
C	6.00	Street width	Yes	No		Comments	Suggested Standards
C	6.10	Do street width requirements vary by type of zone?					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'.

C	7.00	Streetscape features	Yes	No	DNA	Comments	Suggested Standards
C	7.01	Are crosswalks allowed?					Crosswalks should be allowed, and required on long blocks to provide access to commercial areas, schools, places of worship, transportation and recreation facilities.
C	7.02	Are pedestrian controlled crosswalk signals required?					Crosswalk signals increase pedestrian safety and encourage walking.
C	7.03	Is landscaping of medians or curbsides required?					Landscaping softens the street environment and makes it more attractive to pedestrians.
C	7.11	Are sidewalks allowed?	x				Sidewalks promote walking and contribute to pedestrian safety.
C	7.12	Are sidewalks required?	x				Sidewalks should be required in urban and suburban areas to provide for pedestrian safety.

C 7.13	Are sidewalks required on both sides of street?	x			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.
C 7.14	Is a minimum sidewalk width established?	x		12' sidewalk widths in village center (38-1704-q)	Sidewalk minimums should take into account the nature of the street and the anticipated volume of pedestrian traffic.
C 7.15	Is a maximum sidewalk width established?		x	See above	
C 7.16	Do sidewalks provide access to amenities such as parks and open space?	x		38-1704-p: A system of walkways and bicycle paths between buildings, common open space, recreation areas, community facilities, and parking areas shall be distinctly designed and adequately lighted where appropriate for nighttime use.	Pedestrian facilities should provide uninterrupted routes to public amenities such as parks, libraries, schools, etc.
C 7.20	Are standards set for curb cut frequency?			:	Limiting curb cuts limits the potential conflict between pedestrians and vehicles, and increases pedestrian safety.
C 7.30	Are impervious surfaces minimized?				
C 7.40	Are provisions made for street lighting?				
C 7.50	Are provisions made for traffic calming?	x		Not in so many words, but the UV zone permits alterations to street design in order to reduce speeds and accommodate pedestrians.	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.

C 7.60	Are different streetscape features applied to different districts (e.g. transit districts)?					
C 8.00	Transit Zones	Yes	No	DNA	Comments	Suggested Standards
C 8.10	Are transit zones specifically established?					
C 8.11	How is their location determined?					
C 8.12	Are park-and-ride facilities provided for?					
C 8.13	Is a nodal-approach or a systems-approach used (I.e. transit oriented development or transit corridors)?					
C 8.14	Are HOV lanes in use or planned?					
Infrastructure						
I 9.00	Infrastructure	Yes	No	DNA	Comments	Suggested Standards
I 9.10	Are impact fees established for new development?	x				Where impact fees are established, lower fees should be established where excess infrastructure capacity exists to encourage compact development.
I 9.11	Schools?	x				
I 9.12	Water?		x			
I 9.13	Sewers?		x			
I 9.14	Park facilities?		x			

I	9.20	Are differential impact fees established to encourage infill or brownfield development?		x		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
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Neighborhood Commercial Zone

Note: Where NC, NAC, and NR are identical, audit items are included here.

Connectivity/Circulation							
C	1.00	Alleyways	Yes	No	DNA	Comments	Suggested Standards
C	1.10	Are alleyways allowed?					Require alleys to limit number of curb cuts on streets.
C	1.20	Are there restrictions on their use?					
C	1.30	Are width standards established?					Use should dictate width. In commercial zones, alleys can function as drive aisles for off-street parking lots and as fire lanes.
C	2.00	Bicycle/Multi-use trail facilities	Yes	No	DNA	Comments	Suggested Standards
C	2.10	Are bicycle lanes required?		x		But design is required to take vicycles into account.	Provide for a network of bicycle routes, lanes, or shared-use trails to promote bicycle use in all zones.
C	2.20	Are bicycle lanes accomodated?					Bicycle lanes can be retrofitted by changing the way on-street parking is accomodated.

C	2.30	Is bicycle parking required?	x		38-1734-d-5. Two psaces minimum for each project that requires 10 vehicle parking spaces, and pro rata from there.	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
C	2.40	Are standards established for bicycle lane width?				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.
C	2.50	Are standards established for bicycle lane surface?				Grade differences between gutter pans and street surface should be eliminated. Uniform, smooth surfaces should be specified.
C	2.60	Are standards established for separation of bike lanes from motorized vehicle lanes?				
C	2.70	Is a multi-use trail provided for or planned?				

C	3.00	Parking standards	Yes	No	DNA	Comments	Suggested Standards
C	3.10	Is on street parking allowed?					Among other benefits, on-street parking encourages pedestrian traffic, and can act as a buffer between pedestrians and moving vehicles. Design is important.
C	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.
C	3.30	Are there provisions for shared parking?	x			38-1734-3-c. Permits 15% reduction for shared parking or more with approval of county.	Shared parking should be encouraged.
C	3.40	Are there provisions for joint parking?	x			38-1734-3-d. 20% reduction in parking for mixed use	Joint parking should be considered where conditions warrant.
C	3.50	What basis is used to establish parking requirements?				See UV zone analysis	Zone and use specific parking requirements should be established and should take transit facilities into consideration.
C	3.51	District type?					
C	3.52	Building type?					
C	3.53	Use?					
C	3.60	Are minimum requirements set?					
C	3.70	Are maximum requirements set?	x			Standard requirements in 38-1476.	
C	3.80	Are there provisions that allow reductions in requirements along transit routes?		x			Reductions for transit availability should be allowed.

C	3.90	Are reductions allowed in exchange for bike parking?		x		
C	4.00	Street hierarchy			Comments	Suggested Standards
C	4.1	What street hierarchy is in place?			See UV zone analysis	Divisions within categories will permit a finer grained street system (e.g. differentiate between various widths of arterials, major and minor collectors, commercial and residential local streets).
	4.11	Are design speed standards used?	Yes			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.
C	4.12	What standards are set for width, intersection and corner radii for neighborhood access 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.
C	4.13	What standards are set for width, intersection and corner radii for neighborhood connector streets?				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

C	4.14	What standards are set for width, intersection, and corner radii for regional access streets?				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	
C	5.00	Street pattern	Yes	No	DNA	Comments	Suggested Standards
C	5.10	What block lengths are dictated?					Excessively long blocks discourage pedestrian traffic. Limit block perimeters (e.g. 1600 ft.). Limit block face lengths (e.g. 500 ft.)
C	5.11	Do these differ by zone?					
C	5.12	Are cul de sacs allowed?					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.
C	5.20	Are there provisions to ensure street connectivity between neighborhoods?					Require mid-block pedestrian passages in commercial and mixed-use zones (e.g. at 250' maximum intervals).
C	6.00	Street width	Yes	No		Comments	Suggested Standards
C	6.10	Do street width requirements vary by type of zone?					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'.
C	7.00	Streetscape features	Yes	No	DNA	Comments	Suggested Standards
C	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.
C	7.02	Are pedestrian controlled crosswalk signals required?					Crosswalk signals increase pedestrian safety and encourage walking.
C	7.03	Is landscaping of medians or curbsides required?					Landscaping softens the street environment and makes it more attractive to pedestrians.
C	7.11	Are sidewalks allowed?	x				Sidewalks promote walking and contribute to pedestrian safety.
C	7.12	Are sidewalks required?	x				Sidewalks should be required in urban and suburban areas to provide for pedestrian safety.
C	7.13	Are sidewalks required on both sides of street?	x				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.

C	7.14	Is a minimum sidewalk width established?	x		4' on minor streets, 5' on collectors and arterials	Sidewalk minimums should take into account the nature of the street and the anticipated volume of pedestrian traffic.
C	7.15	Is a maximum sidewalk width established?				
C	7.16	Do sidewalks provide access to amenities such as parks and open space?				Pedestrian facilities should provide uninterrupted routes to public amenities such as parks, libraries, schools, etc.
C	7.20	Are standards set for curb cut frequency?				Limiting curb cuts limits the potential conflict between pedestrians and vehicles, and increases pedestrian safety.
C	7.30	Are impervious surfaces minimized?				
C	7.40	Are provisions made for street lighting?				
C	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.

C	7.60	Are different streetscape features applied to different districts (e.g. transit districts)?					
C	8.00	Transit Zones	Yes	No	DNA	Comments	Suggested Standards
C	8.10	Are transit zones specifically established?					
C	8.11	How is their location determined?					
C	8.12	Are park-and-ride facilities provided for?					
C	8.13	Is a nodal-approach or a systems-approach used (I.e. transit oriented development or transit corridors)?					
C	8.14	Are HOV lanes in use or planned?					
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?					Large minimum lot sizes discourage a mix of uses, and contribute to sprawling land use patterns.

Z	10.22	Are maximum lot sizes established?			
Z	10.23	Are small single-family lots permitted?			
Z	10.24	Are Rural Residential, Residential Estate, or Suburban Residential lots of an acre or more allowed?			
Z	10.30	Are residential uses encouraged in the CBD or other business/commercial districts?			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?		x	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?	x		38-1734-b. FAR not to exceed 2.0; Residential densities between 4 and 40 units per acre.
Z	10.60	Are second units allowed?			Second units can provide affordable life-cycle housing options for extended families.
Z	10.61	By right?			
Z	10.62	By use permit?			

Z	10.70	Are manufactured homes allowed in all zones?	x			Manufactured housing can expand affordable housing options.
Z	10.71	By right?				
Z	10.72	By use permit?				
Z	10.80	Are minimum residential square-footages established?				Minimum residential square-footage requirements may preclude building affordable housing.
Z	10.90	Is fast-track permitting provided for accessory units?				
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?	x			But only in parking requirements.
MUD	11.11	Do set-back requirements severely limit lot usage?				
MUD	11.12	Do Floor Area Ratios severely limit lot useage?				
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?		x		
MUD	11.16	What parking standards apply?				Reduction for MXD, see above.

MUD	11.16	Are parking standards customized for zone?	x		
MUD	11.16	How?			Reduction for MXD, see above.
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?			
MUD	11.52	For commercial ventures?			

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?			

Neighborhood Activity Centers

Connectivity/Circulation						Comments	Suggested Standards
C	1.00	Alleyways	Yes	No	DNA		
C	1.10	Are alleyways allowed?					Require alleys to limit number of curb cuts on streets.
C	1.20	Are there restrictions on their use?					
C	1.30	Are width standards established?					Use should dictate width. In commercial zones, alleys can function as drive aisles for off-street parking lots and as fire lanes.
C	2.00	Bicycle/Multi-use trail facilities	Yes	No	DNA	Comments	Suggested Standards
C	2.10	Are bicycle lanes required?		x		But design is required to take bicycles into account 38-1741-c-1.	Provide for a network of bicycle routes, lanes, or shared-use trails to promote bicycle use in all zones.
C	2.20	Are bicycle lanes accommodated?				See above	Bicycle lanes can be retrofitted by changing the way on-street parking is accommodated.

C	2.30	Is bicycle parking required?	x		Same as in NC zone	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
C	2.40	Are standards established for bicycle lane width?				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.
C	2.50	Are standards established for bicycle lane surface?				Grade differences between gutter pans and street surface should be eliminated. Uniform, smooth surfaces should be specified.
C	2.60	Are standards established for separation of bike lanes from motorized vehicle lanes?				

C	2.70	Is a multi-use trail provided for or planned?				
C	3.00	Parking standards	Yes	No	DNA	Comments
C	3.10	Is on street parking allowed?				Among other benefits, on-street parking encourages pedestrian traffic, and can act as a buffer between pedestrians and moving vehicles. Design is important.
C	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.
C	3.30	Are there provisions for shared parking?				Shared parking should be encouraged.
C	3.40	Are there provisions for joint parking?				Joint parking should be considered where conditions warrant.
C	3.50	What basis is used to establish parking requirements?				Zone and use specific parking requirements should be established and should take transit facilities into consideration.
C	3.51	District type?				
C	3.52	Building type?				
C	3.53	Use?				

C	3.60	Are minimum requirements set?			
C	3.70	Are maximum requirements set?			
C	3.80	Are there provisions that allow reductions in requirements along transit routes?			Reductions for transit availability should be allowed.
C	3.90	Are reductions allowed in exchange for bike parking?			
C	4.00	Street hierarchy			Comments Suggested Standards
C	4.1	What street hierarchy is in place?			Divisions within categories will permit a finer grained street system (e.g. differentiate between various widths of arterials, major and minor collectors, commercial and residential local streets).
	4.11	Are design speed standards used?	Yes		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.
C	4.12	What standards are set for width, intersection and corner radii for neighborhood access 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.

C	4.13	What standards are set for width, intersection and corner radii for neighborhood connector streets?				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
C	4.14	What standards are set for width, intersection, and corner radii for regional access streets?				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
Zoning						
Z	10.00	Use (Zoning) Districts	Yes	No	DNA	Suggested Standards
Z	10.10	Is development allowed in floodplains?				
Z	10.11	Under what conditions?				
Z	10.21	Are minimum lot sizes established?				Large minimum lot sizes discourage a mix of uses, and contribute to sprawling land use patterns.
Z	10.22	Are maximum lot sizes established?				
Z	10.23	Are small single-family lots permitted?				

Z	10.24	Are Rural Residential, Residential Estate, or Suburban Residential lots of an acre or more allowed?			
Z	10.30	Are residential uses encouraged in the CBD or other business/commercial districts?			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?			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?	x		38-1741-b-1,2,3. FAR 1.0; residential 4-25 units per acre.
Z	10.60	Are second units allowed?			Second units can provide affordable life-cycle housing options for extended families.
Z	10.61	By right?			
Z	10.62	By use permit?			
Z	10.70	Are manufactured homes allowed in all zones?			Manufactured housing can expand affordable housing options.
Z	10.71	By right?			
Z	10.72	By use permit?			

Z	10.80	Are minimum residential square-footages established?				Minimum residential square-footage requirements may preclude building affordable housing.
Z	10.90	Is fast-track permitting provided for accessory units?				
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?				
MUD	11.11	Do set-back requirements severely limit lot usage?				
MUD	11.12	Do Floor Area Ratios severely limit lot useage?				
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?				
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?			
MUD	11.52	For commercial ventures?			
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?			

Neighborhood Residential

Connectivity/Circulation							
C	1.00	Alleyways	Yes	No	DNA	Comments	Suggested Standards
C	1.10	Are alleyways allowed?					Require alleys to limit number of curb cuts on streets.
C	1.20	Are there restrictions on their use?					
C	1.30	Are width standards established?					Use should dictate width. In commercial zones, alleys can function as drive aisles for off-street parking lots and as fire lanes.
C	2.00	Bicycle/Multi-use trail facilities	Yes	No	DNA	Comments	Suggested Standards
C	2.10	Are bicycle lanes required?		x		But design is required to take vicycles into account.	Provide for a network of bicycle routes, lanes, or shared-use trails to promote bicycle use in all zones.
C	2.20	Are bicycle lanes accomodated?					Bicycle lanes can be retrofitted by changing the way on-street parking is accomodated.

C	2.30	Is bicycle parking required?	x		38-1748-3-d. Two bike spaces for every 10 vehicle spaces.	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
C	2.40	Are standards established for bicycle lane width?				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.
C	2.50	Are standards established for bicycle lane surface?				Grade differences between gutter pans and street surface should be eliminated. Uniform, smooth surfaces should be specified.
C	2.60	Are standards established for separation of bike lanes from motorized vehicle lanes?				

C	2.70	Is a multi-use trail provided for or planned?					
C	3.00	Parking standards	Yes	No	DNA	Comments	Suggested Standards
C	3.10	Is on street parking allowed?					Among other benefits, on-street parking encourages pedestrian traffic, and can act as a buffer between pedestrians and moving vehicles. Design is important.
C	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.
C	3.30	Are there provisions for shared parking?	x			38-1748-d-2-a, 15% reduction for shared driveways; 38-1748-3-c. 15% reduction for all land uses if parking is shared	Shared parking should be encouraged.
C	3.40	Are there provisions for joint parking?					Joint parking should be considered where conditions warrant.
C	3.50	What basis is used to establish parking requirements?					Zone and use specific parking requirements should be established and should take transit facilities into consideration.

C	3.51	District type?			
C	3.52	Building type?			
C	3.53	Use?			
C	3.60	Are minimum requirements set?			
C	3.70	Are maximum requirements set?			
C	3.80	Are there provisions that allow reductions in requirements along transit routes?			Reductions for transit availability should be allowed.
C	3.90	Are reductions allowed in exchange for bike parking?			
C	4.00	Street hierarchy	Comments		Suggested Standards
C	4.1	What street hierarchy is in place?			Divisions within categories will permit a finer grained street system (e.g. differentiate between various widths of arterials, major and minor collectors, commercial and residential local streets).
	4.11	Are design speed standards used?	Yes		Use design speed standards to establish pedestrian and bicycle friendly environments. Designing streets for higher speeds encourages speeding even though lower speed limits are set and often necessitates retrofitting traffic calming features.

C	4.12	What standards are set for width, intersection and corner radii for neighborhood access 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.
C	4.13	What standards are set for width, intersection and corner radii for neighborhood connector streets?			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

C	4.14	What standards are set for width, intersection, and corner radii for regional access streets?				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	
C	5.00	Street pattern	Yes	No	DNA	Comments	Suggested Standards
C	5.10	What block lengths are dictated?					Excessively long blocks discourage pedestrian traffic. Limit block perimeters (e.g. 1600 ft.). Limit block face lengths (e.g. 500 ft.)
C	5.11	Do these differ by zone?					
C	5.12	Are cul de sacs allowed?					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.
C	5.20	Are there provisions to ensure street connectivity between neighborhoods?					Require mid-block pedestrian passages in commercial and mixed-use zones (e.g. at 250' maximum intervals).

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?					Establishing large minimum lot sizes effectively precludes a mix of housing types and affordability levels within neighborhoods.
S	9.12	Are a wide range of lot sizes allowed within each subdivision?	x			381748-c. Range of building densities permitted in townhome zones.	Allowing a wide range of lot sizes permits a variety of housing type and range of affordability which facilitates residents' remaining in their neighborhoods as their needs and circumstances change (life cycle planning).
S	8.20	Are various parcel configurations allowed?					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?			Large minimum lot sizes discourage a mix of uses, and contribute to sprawling land use patterns.
Z	10.22	Are maximum lot sizes established?			
Z	10.23	Are small single-family lots permitted?			
Z	10.24	Are Rural Residential, Residential Estate, or Suburban Residential lots of an acre or more allowed?			
Z	10.30	Are residential uses encouraged in the CBD or other business/commercial districts?			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?			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?	x		FAR 0.40. Residential densities 4-20 units per acre.
Z	10.60	Are second units allowed?			Second units can provide affordable life-cycle housing options for extended families.
Z	10.61	By right?			
Z	10.62	By use permit?			
Z	10.70	Are manufactured homes allowed in all zones?			Manufactured housing can expand affordable housing options.
Z	10.71	By right?			
Z	10.72	By use permit?			
Z	10.80	Are minimum residential square-footages established?			Minimum residential square-footage requirements may preclude building affordable housing.

Z	10.90	Is fast-track permitting provided for accessory units?			
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R-1 Zone

Connectivity/Circulation						Suggested Standards
C	1.00	Alleyways	Yes	No	DNA Comments	
C	1.10	Are alleyways allowed?				Require alleys to limit number of curb cuts on streets.
C	1.20	Are there restrictions on their use?				
C	1.30	Are width standards established?				Use should dictate width. In commercial zones, alleys can function as drive aisles for off-street parking lots and as fire lanes.
C	2.00	Bicycle/Multi-use trail facilities	Yes	No	DNA Comments	Suggested Standards
C	2.10	Are bicycle lanes required?		x	Generally: Bike lane requirements follow land use plan, not zoning	Provide for a network of bicycle routes, lanes, or shared-use trails to promote bicycle use in all zones.
C	2.20	Are bicycle lanes accommodated?				Bicycle lanes can be retrofitted by changing the width of on-street parking is accommodated.

C	2.30	Is bicycle parking required?				Require bike parking facilities in commercial and industrial projects to encourage the use of bikes as alternative transportation. Provide for both short-term and secured long-term parking within convenient distances of building entrances, varying standards for different types of projects.	
C	2.40	Are standards established for bicycle lane width?				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' (6' for parking and 5' for bikes) is suggested.	
C	2.50	Are standards established for bicycle lane surface?				Grade differences between gutter pans and street surfaces should be eliminated. Uniform, smooth surfaces should be specified.	
C	2.60	Are standards established for separation of bike lanes from motorized vehicle lanes?					
C	2.70	Is a multi-use trail provided for or planned?					
C	3.00	Parking standards	Yes	No	DNA	Comments	Suggested Standards

C	3.10	Is on street parking allowed?			Among other benefits, on-street parking encourages pedestrian traffic, and can act as a buffer between pedestrians and moving vehicles. Design is important.
C	3.20	What relationship is dictated between parking spaces and the street?			Avoid diagonal parking on streets with bike lanes routes and on heavily traveled streets.
C	3.30	Are there provisions for shared parking?			Shared parking should be encouraged.
C	3.40	Are there provisions for joint parking?			Joint parking should be considered where conditions warrant.
C	3.50	What basis is used to establish parking requirements?			Zone and use specific parking requirements should be established and should take transit facilities into consideration.
C	3.51	District type?			
C	3.52	Building type?			
C	3.53	Use?			
C	3.60	Are minimum requirements set?			
C	3.70	Are maximum requirements set?			
C	3.80	Are there provisions that allow reductions in requirements along transit routes?			Reductions for transit availability should be allowed.
C	3.90	Are reductions allowed in exchange for bike parking?			
C	4.00	Street hierarchy	Comments		Suggested Standards

C	4.1	What street hierarchy is in place?			Divisions within categories will permit a finer grain street system (e.g. differentiate between various widths of arterials, major and minor collectors, commercial and residential local streets).
	4.11	Are design speed standards used?	Yes		Use design speed standards to establish pedestrian and bicycle friendly environments. Designing streets for higher speeds encourages speeding even though lower speed limits are set and often necessitates retrofitting traffic calming features.
C	4.12	What standards are set for width, intersection and corner radii for neighborhood access 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.
C	4.13	What standards are set for width, intersection and corner radii for neighborhood connector streets?			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 speeds

C	4.14	What standards are set for width, intersection, and corner radii for regional access streets?				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 greater than 50 mp	
C	5.00	Street pattern	Yes	No	DNA	Comments	Suggested Standards
C	5.10	What block lengths are dictated?					Excessively long blocks discourage pedestrian traffic. Limit block perimeters (e.g. 1600 ft.). Limit block face lengths (e.g. 500 ft.)
C	5.11	Do these differ by zone?					
C	5.12	Are cul de sacs allowed?					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.
C	5.20	Are there provisions to ensure street connectivity between neighborhoods?					Require mid-block pedestrian passages in commercial and mixed-use zones (e.g. at 250' maximum intervals).
C	6.00	Street width	Yes	No		Comments	Suggested Standards
C	6.10	Do street width requirements vary by type of zone?					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 angle parking are included in design.

						Neighborhood streets - 50' to 60'.	
C	7.00	Streetscape features	Yes	No	DNA	Comments	Suggested Standards
C	7.01	Are crosswalks allowed?					Crosswalks should be allowed, and required on local streets to provide access to commercial areas, schools, places of worship, transportation and recreation facilities.
C	7.02	Are pedestrian controlled crosswalk signals required?					Crosswalk signals increase pedestrian safety and encourage walking.
C	7.03	Is landscaping of medians or curbsides required?					Landscaping softens the street environment and makes it more attractive to pedestrians.
C	7.11	Are sidewalks allowed?					Sidewalks promote walking and contribute to pedestrian safety.
C	7.12	Are sidewalks required?					Sidewalks should be required in urban and suburban areas to provide for pedestrian safety.
C	7.13	Are sidewalks required on both sides of street?					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.
C	7.14	Is a minimum sidewalk width established?					Sidewalk minimums should take into account the nature of the street and the anticipated volume of pedestrian traffic.

C	7.15	Is a maximum sidewalk width established?					
C	7.16	Do sidewalks provide access to amenities such as parks and open space?			Pedestrian facilities should provide uninterrupted routes to public amenities such as parks, libraries, schools, etc.		
C	7.20	Are standards set for curb cut frequency?			Limiting curb cuts limits the potential conflict between pedestrians and vehicles, and increases pedestrian safety.		
C	7.30	Are impervious surfaces minimized?					
C	7.40	Are provisions made for street lighting?					
C	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 discourage the routine use of local residential streets by through traffic.		
C	7.60	Are different streetscape features applied to different districts (e.g. transit districts)?					
C	8.00	Transit Zones	Yes	No	DNA	Comments	Suggested Standards
C	8.10	Are transit zones specifically established?					
C	8.11	How is their location determined?					
C	8.12	Are park-and-ride facilities provided for?					

C	8.13	Is a nodal-approach or a systems-approach used (I.e. transit oriented development or transit corridors)?				
C	8.14	Are HOV lanes in use or planned?				
Infrastructure						
I	9.00	Infrastructure	Yes	No	DNA	Comments
I	9.10	Are impact fees established for new development?				Where impact fees are established, lower fees should be established where excess infrastructure capacity exists to encourage compact development.
I	9.11	Schools?				
I	9.12	Water?				
I	9.13	Sewers?				
I	9.14	Park facilities?				
I	9.20	Are differential impact fees established to encourage infill or brownfield development?				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 providing
S	9.00	Land Subdivision	Yes	No	DNA	Comments
S	9.11	Are a wide range of lot sizes allowed within each zone?				Establishing large minimum lot sizes effectively precludes a mix of housing types and affordability levels within neighborhoods.

S	9.12	Are a wide range of lot sizes allowed within each subdivision?				Allowing a wide range of lot sizes permits a variety of housing type and range of affordability which facilitates residents' remaining in their neighborhoods as their needs and circumstances change (life cycle planning).
S	8.20	Are various parcel configurations allowed?				Dictating large minimum frontage requirements contributes to sprawl. Allowing various parcel configurations and clustering of structures promote the efficient use of space and limits infrastructure requirements.
Zoning						
Z	10.00	Use (Zoning) Districts	Yes	No	DNA	Comments
Z	10.10	Is development allowed in floodplains?				
Z	10.11	Under what conditions?				
Z	10.21	Are minimum lot sizes established?				Large minimum lot sizes discourage a mix of uses and contribute to sprawling land use patterns.
Z	10.22	Are maximum lot sizes established?				
Z	10.23	Are small single-family lots permitted?				

Z	10.24	Are Rural Residential, Residential Estate, or Suburban Residential lots of an acre or more allowed?			
Z	10.30	Are residential uses encouraged in the CBD or other business/commercial districts?			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?			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?			
Z	10.60	Are second units allowed?			Second units can provide affordable life-cycle housing options for extended families.
Z	10.61	By right?			
Z	10.62	By use permit?			
Z	10.70	Are manufactured homes allowed in all zones?			Manufactured housing can expand affordable housing options.
Z	10.71	By right?			
Z	10.72	By use permit?			

Z	10.80	Are minimum residential square-footages established?				Minimum residential square-footage requirement may preclude building affordable housing.
Z	10.90	Is fast-track permitting provided for accessory units?				
SUD Special Use Districts						
MUD	11.00	Mixed-Use Districts	Yes	No	DNA	Comments
MUD	11.10	Are provisions made for Mixed-Use districts?				
MUD	11.11	Do set-back requirements severely limit lot usage?				
MUD	11.12	Do Floor Area Ratios severely limit lot useage?				
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?				
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?			
MUD	11.52	For commercial ventures?			
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?				
LWD	12.00	Live-Work Districts	Yes	No	DNA	Comments
						Suggested Standards
LWD	12.10	Are provisions made for Live-Work districts?				
LWD	12.20	Do set-back requirements severely limit lot usage?				
LWD	12.30	Do Floor Area Ratios severely limit lot usage?				
LWD	12.40	Are building frontage standards established?				
LWD	12.50	Is vehicular and pedestrian connectivity to adjacent neighborhoods required?				
LWD	12.60	Are density bonuses granted in mixed-use zones?				
LWD	12.70	What parking standards apply?				

LWD	12.71	Are parking standards customized for zone?					
LWD	12.72	How?					
LWD	12.73	Are there provisions for shared parking?					
LWD	12.74	Is centralized parking allowed?					
LWD	12.80	What standards are set for development scale or design elements?					
PUD	13.00	Planned Unit Development (PUD)	Yes	No	DNA	Comments	Suggested Standards
PUD	13.10	Are provisions made for PUDs?	Yes				
PUD	13.20	Is block length regulated?					
PUD	13.21	Are vehicular or pedestrian connectivity to adjacent neighborhoods required?					
PUD	13.30	Are there set back requirements that effectively preclude certain uses?					
PUD	13.31	Are second units allowed?					
PUD	13.31	By right?					
PUD	13.31	By use permit?					
PUD	13.32	Are manufactured homes allowed?					
PUD	13.32	By right?					
PUD	13.32	By use permit?					

PUD	13.40	Are standards set for development scale or design elements?			
PUD	13.50	Is private open space required?			
PUD	13.51	Is consideration given to open space connectivity?			
PUD	13.60	Are provisions made for cluster development?			
PUD	13.70	Are home occupation or commercial ventures allowed in these zones?			
PUD	13.70	By right?			
PUD	13.70	By use permit?			
PUD	13.71	Are compatibility standards established for home occupation or commercial ventures?			
PUD	13.72	Do safety codes (primarily fire codes) restrict or effectively disallow commercial or home occupation uses?			
PUD	13.73	What parking standards apply to home occupation or commercial uses?			
PUD	13.73	Do parking standards effectively preclude home occupation or commercial use?			

PUD	13.80	Is consideration given to the zone's relationship to other zones?					
PUD	13.81	Are there provisions for transitioning neighborhoods from suburban standards to traditional neighborhood districts, mixed-use or live-work zones?					
PUD	13.82	Are there requirements to provide a mix a housing affordable to all income levels within PUDs?					
TND	14.00	Traditional Neighborhood Districts	Yes	No	DNA	Comments	Suggested Standards
TND	14.10	Are provisions made for Traditional Neighborhood districts (TND)?					
TND	14.11	Are density standards established?					
TND	14.20	Is block length regulated?					
TND	14.21	Are vehicular or pedestrian connectivity to adjacent neighborhoods required?					
TND	14.30	Are there set back requirements that effectively preclude certain uses?					
TND	14.31	Are second units allowed?					
TND	14.31	By right?					

TND	14.31	By use permit?			
TND	14.32	Are manufactured homes allowed?			
TND	14.32	By right?			
TND	14.32	By use permit?			
TND	14.40	Are standards set for development scale or design elements?			
TND	14.50	Is private open space required?			
TND	14.51	Is consideration given to open space connectivity?			
TND	14.60	Are provisions made for cluster development?			
TND	14.70	Are home occupation or commercial ventures allowed in these zones?			
TND	14.71	By right?			
TND	14.71	By use permit?			
TND	14.71	Are compatibility standards established for home occupation or commercial ventures?			
TND	14.72	Do safety codes (primarily fire codes) restrict or effectively disallow commercial or home occupation uses?			

TND	14.73	What parking standards apply to home occupation or commercial uses?			
TND	14.73	Do parking standards effectively preclude home occupation or commercial use?			
TND	14.80	Is consideration given to the zone's relationship to other zones?			
TND	14.81	Are there provisions for transitioning neighborhoods from suburban standards to traditional neighborhood districts, mixed-use or live-work zones?			
TND	14.82	Are there requirements to provide a mix a housing affordable to all income levels within TNDs?			