

# Smart Codes: Model Land-Development Regulations



**Marya Morris, General Editor**



**American Planning Association**

**Planning Advisory Service  
Report Number 556**

## **Model Residential Cluster Development Ordinance**



**PRIMARY SMART GROWTH  
PRINCIPLES ADDRESSED:**

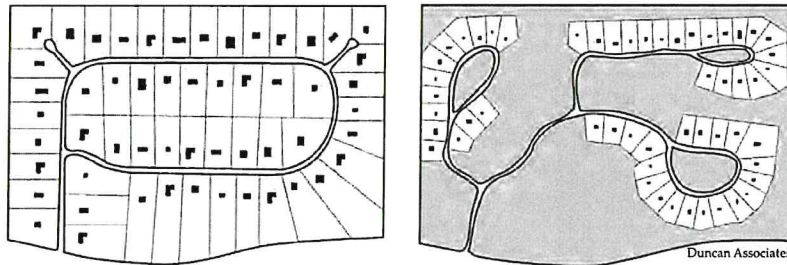
- Preserve open space and farmland
- Create distinctive and attractive places

Residential cluster development is a form of land development in which principal buildings and structures are grouped together on a site, thus saving the remaining land area for common open space, conservation, agriculture, recreation, and public and semipublic uses (Whyte 1964; Unterman and Small 1977; Arendt 1996; Sanders 1980). In many respects, cluster development dates back to one of the earliest town forms. In primitive early settlements, dwelling units were often organized to form a common area or enclosure that residents could use together and readily defend if necessary.

In the United States, the development of Radburn, New Jersey, in 1928 represented the first formal introduction of the cluster development concept. It drew on English town planning principles, notably those of the Garden Cities movement. In Radburn, single-family homes and garden apartments are sited in "superblocks" of 35 to 50 acres (Stein 1957, 34–37). The superblocks have no through traffic and are interspersed with parks and related green spaces on which the residences face. Clustering is also the basic site design concept in such contemporary new towns as Reston, Virginia, and Columbia, Maryland.

Cluster development has a number of distinct advantages over conventional subdivision development. A well-planned cluster development concentrates dwelling units on the most buildable portion of the site and preserves natural drainage systems, vegetation, open space, and other significant natural features that help control stormwater runoff and soil erosion. The common areas function as a trap for nutrients dissolved or suspended in stormwater runoff (Arendt 1994, 278, 281). Cost savings during construction are achieved by the reduction in street lengths and utility installations. Later savings can be realized in street and utility maintenance (less surface area that needs repaving and fewer feet of water and sewer line to maintain). Because dwelling units are placed closer together, refuse and other service vehicles do not have to negotiate as much street mileage, thus reducing travel time. Where clustering is accompanied by higher-density residential land uses and the provision of pedestrian pathways and bikeways, especially those that link to off-site activity centers, residents of the cluster development may walk and exercise more. Clustering also enhances a sense of community, allowing parents better supervision of children playing in common areas and promoting social interaction among neighbors.

*Figure 4.7.1. Cluster development groups buildings and structures together on a site, saving the remaining land for common open space, conservation, agriculture, and recreational uses.*



This model ordinance is intended to encourage developers to use cluster development as an alternative to conventional lot-by-lot development and authorizes cluster development as of right either in all residential districts or in selected residential districts. Section 105 of the ordinance also offers density bonuses of up to 25 percent when a developer: (a) provides affordable housing as part of the cluster development or (b) conveys land for open space, recreation, or other purposes that is accessible to the public.

Under section 107, the local planning commission has the primary responsibility for reviewing and approving a cluster development, although such a function could also be assigned to a hearing examiner. The model ordinance sets forth criteria for the commission to apply in deciding whether to approve the cluster development. (Remember that the responsibilities of the local planning commission vary from state to state.)

The model does not include a severability clause because it is assumed this ordinance will be incorporated into a zoning code that will have one already.

This model is based on a sample ordinance appearing in *Nonpoint Source Pollution: A Handbook for Local Governments* (Jeer et al. 1997).

**101. Purpose**

(1) It is the purpose of this ordinance to permit residential cluster development in order to:

- (a) encourage creative and flexible site design that is sensitive to the land's natural features and adapts to the natural topography;
- (b) protect environmentally sensitive areas of a development site and preserve on a permanent basis open space, natural features, and prime agricultural lands;
- (c) decrease or minimize nonpoint-source pollution impacts by reducing the amount of impervious surfaces in site development;
- (d) promote cost savings in infrastructure installation and maintenance by such techniques as reducing the distance over which utilities, such as water and sewer lines, need to be extended or by reducing the width or length of streets; and
- (e) provide opportunities for social interaction and walking and hiking in open space areas.

**102. Definitions**

As used in this ordinance, the following words and terms shall have the meanings specified herein:

*Comment: Please remember to consult your state statutes to employ definitions that are consistent with them. These definitions were drawn from different sources and, while useful, may differ from those already established by state legislation.*

**Affordable.** A sales price that is within the means of a moderate-income household or a rental amount for housing that is within the means of a low-income household, as those terms are defined in this section. In the case of dwelling units for sale, housing that is affordable is housing for which the mortgage, taxes, insurance, and fees are no more than [30] percent of the adjusted income for a household whose gross annual income is at or below [80] percent of the median for the area based on household size. In the case of rental housing, housing that is affordable is housing for which the monthly rental amount plus utility costs do not exceed [30] percent of the adjusted income for a household whose gross income is [50] percent of the area median household income adjusted for household size.

*Comment: Definitions of "affordable," "low-income household," and "moderate-income household" may need to be changed here and below. The definitions should comply with current requirements of the applicable federal or state construction or rehabilitation program. In particular, the bracketed percentages may be modified to affect the scope of the definition.*

**Buffer.** Land maintained in either a natural or a landscaped state and used to screen or mitigate the impacts of development on surrounding areas, properties, or rights-of-way.

**Building.** Any structure used or intended for supporting or sheltering any use or occupancy.

**Cluster or Clustering.** A site-planning technique that concentrates buildings and structures in specific areas on a lot, site, or parcel to allow the remaining land to be used for recreation, open space, or preservation of features or structures with environmental, historical, cultural, or other significance. The techniques used to concentrate buildings may include, but shall not be limited to, reduction in lot areas, setback requirements, or bulk requirements, with the resultant open space being devoted by deed restrictions to one or more uses.

**Cluster development, residential.** A land development project in which the site planning technique of clustering dwelling units is employed.

**Common open space.** The portion of the site set aside in perpetuity as open space. This area may include coastal and freshwater wetlands, floodplains or flood-hazard areas, stream corridors, prime agricultural lands, habitats of endangered wildlife (as identified on applicable federal or state lists), scenic views, historical or cultural features, archaeological sites, or other elements to be protected from development, as well as easements for public utilities.

**Development.** The construction, reconstruction, conversion, structural alternation, relocation, or enlargement of any structure; any mine, excavation, landfill, or land disturbance; or any change in use, or alteration or extension of use, of land.

**Gross area.** The total area of the site, including the net buildable area and public rights-of-way.

**Infrastructure.** The facilities and services needed to sustain residential, commercial, industrial, institutional, and other activities.

**Land development project.** A project in which one or more lots, tracts, or parcels of land are to be developed or redeveloped as a coordinated site for a complex of uses, units, or structures, including, but not limited to, planned development or cluster development for residential, commercial, institutional, recreational, open space, or mixed uses as are provided for in the zoning ordinance.

**Lot.** The basic development unit for determination of area, depth, and other dimensional variations; or, a parcel of land whose boundaries have been established by some legal instrument, such as a recorded deed or recorded map and recognized as a separate legal entity for purposes of transfer of title.

**Low-income household.** A household whose gross annual income does not exceed [50] percent of the area median as adjusted for household size.

**Moderate-income household.** A household whose gross annual income is less than [80] percent of the area median as adjusted for household size.

**Net buildable area.** The portion of the cluster development that may be developed or used for common open space, whether publicly dedicated or private but excluding private streets, public streets, and other publicly dedicated improvements.

**Site plan.** The development plan for one or more lots on which is shown the existing and the proposed conditions of the lot.

**Street, private.** A local roadway serving only abutting lots, not publicly dedicated or maintained by the [local government] but meeting specific municipal improvement standards and providing access for service and emergency vehicles.

**Street, public.** All public property reserved or dedicated for street traffic.

**Structure.** Anything constructed or erected that requires location on the ground or is attached to something having location on the ground.

### 103. Applicability: General Provisions

(1) A residential cluster development shall be permitted [as of right in any residential zoning district pursuant to this ordinance [or] as of right in the following zoning districts: [list district names]]:

(a) All principal and accessory uses authorized in the applicable residential zoning district(s) shall be allowed in the cluster development. In addition, multifamily dwellings, duplexes, and town houses may be permitted for a cluster development located in a residential zoning district that does not otherwise allow attached dwelling units.

(b) Maximum lot coverage, floor area ratios, building height, and parking requirements for the applicable zoning district shall apply to the cluster development. Maximum lot coverage, floor area ratios, and parking requirements, however, shall be applied to the entire site rather than to any individual lot.

(2) The following provisions shall apply to any residential cluster development, regardless of the general requirements of the applicable residential zoning district:

(a) The minimum area of the cluster development shall be [two to five] acres.

*Comment: There is a fair degree of debate about whether the area of a cluster development should be limited. Because cluster development is fundamentally a design review process, in theory, the approach should be applicable to a site of any size. However, it may be that, for smaller sites, a cluster development may not yield any appreciable benefits over conventional subdivisions. Consequently, the decision to authorize cluster development will depend on the policy preferences of the individual local government.*

(b) No minimum width or depth of a lot shall apply.

(c) A minimum separation of [10] feet shall be provided between all principal buildings and structures.

(d) A minimum yard or common open space of at least [25] feet in depth shall be provided, as measured from all public streets and from the side and rear lot lines of the entire cluster development.

- (e) Each lot shall have a minimum access of [12] feet to a public or private street. Such access may be shared with other lots.
- (f) More than one principal building or structure may be placed on a lot.
- (g) Not less than [25] percent of the site shall be conveyed as common open space in the manner provided for in section 110, below.
- [(h) Where the site contains floodplains or coastal or freshwater wetlands, not less than [50] percent of such floodplains or wetlands shall be included in calculating the common open space.]

*Comment: In some states, the identification of floodplains and coastal or freshwater wetlands occurs routinely as part of the land development and subdivision review process. Optional language in Section 103(2)(h), above, requires that at least 50 percent of the floodplains or wetlands must be included as part of the common open space. By including the land designated as common open space, the calculation of net buildable area gives credit for the land area in which floodplains and wetlands that meet state criteria are located. This is intended to serve as an incentive to employ clustering by allowing the area represented by lands in floodplains and wetlands to be used in determining the maximum number of dwelling units.*

#### 104. Contents of Site Plan

(1) The preliminary and final site plan for a residential cluster development shall include, but shall not be limited to, the following information:

- (a) The maximum number and type of dwelling units proposed;
- (b) The areas of the site on which the dwelling units are to be constructed or are currently located and their size (this may take the form of the footprint of the dwelling unit or a building envelope showing the general area in which the dwelling unit is to be located);
- (c) The calculations for the permitted number of dwelling units, derived pursuant to section 105, below;
- (d) The areas of the site on which other proposed principal and accessory uses may be located and their size;

*Comment: Uses other than residences may be located on the site. For example, the cluster development may include storage facilities, garages, and recreational buildings. Conceivably, a very large cluster development could also include sites for schools.*

- (e) The areas of the site designated for common open space and their size;
- (f) The areas of the site designated for parking and loading and the size of individual spaces;
- (g) The number and percentage of dwelling units, if any, that are proposed to be affordable;
- (h) The location of sidewalks, trails, and bike paths;

*Comment: This model assumes the local government will require sidewalks as part of the public improvements required for subdivision.*

- (i) The number of acres that are proposed to be conveyed as common open space; and
- [(j) Cite any other plans or information otherwise required by the local government for a major land development or subdivision in its land development or subdivision regulations, such as a plan for landscaping and screening.]

#### 105. Calculation of Permitted Number of Dwelling Units; Density Bonuses

(1) Except as provided in paragraph (3) below, the maximum number of dwelling units proposed for a residential cluster development shall not exceed the number of dwelling units otherwise permitted for the residential zoning district in which the parcel is located.

(2) Except as provided in paragraph (3) below, the number of permitted dwelling units on a site shall be calculated in the following manner.

*Comment: The calculations in paragraph (2) are intended to mirror those that a local government would normally employ for determining the maximum number of dwelling units permitted for nonclustered development. Some communities may subtract land area in wetlands and floodplains from the gross area of the cluster development which will reduce the maximum number of dwelling units in the development.*



*Figure 4.7.2. Residential cluster developments require a certain percentage of the site to be conveyed as common open space—in this case the steep slopes.*

- (a) Measure the gross area of the proposed cluster development site in acres and tenths of an acre.
- (b) Subtract from the gross area determined in subparagraph (a) the area of public and private streets and other publicly dedicated improvements, measured in acres and tenths of an acre, excluding common open space (whether or not it is conveyed pursuant to section 110, below). The remainder shall be the net buildable area.
- (c) Convert the net buildable area from acres to square feet (SF), using the equivalency of 43,560 SF = 1 acre.
- (d) Divide the net buildable area by the smallest minimum lot size (in square feet) per unit for a dwelling unit permitted in the zoning district. This figure shall be rounded to the nearest lower number to establish the maximum number of dwelling units permitted in the cluster development.
- (3) The [local planning commission] may approve an increase of up to [25] percent of the maximum number of dwelling units in the cluster development, as calculated in paragraph (2) above, if:

*Comment: The bonus provisions in paragraph (3) are a means by which a local government can ensure that new housing will benefit low- and moderate-income households and implement state goals for affordable housing. Indeed, should a local government decide it wants to more aggressively provide for affordable housing through cluster development (as well as open space conveyance), it might increase the density bonus from the suggested figure of 25 percent.*

- (a) the percent of density bonus is no greater than the percent of dwelling units in the cluster development that are affordable units; or
- (b) the percent of density bonus is no greater than the percent of the gross area of the cluster development that is both:
  - 1. set aside as and conveyed as common open space pursuant to section 110, below; and
  - 2. accessible to the public.

*Comment: Note that only when the common open space is both conveyed and accessible to the public is a density bonus justified. If the common open space was simply conveyed to a private entity (rather than the local government) but there was no public access, a density bonus could not be approved.*

#### 106. Procedures for Review

- (1) The [local planning commission] shall review and approve a residential cluster development and any amendments thereto as a land development project in the manner provided for in [cite applicable state statute], together with any ordinances and regulations adopted pursuant thereto and appearing in [cite applicable local land development regulations].

#### 107. Review Criteria

- (1) In reviewing a residential cluster development, the [local planning commission] shall determine whether:
  - (a) the site plan satisfies the requirements of sections 103, 104, and 105, above;
  - (b) buildings and structures are adequately grouped so at least [25] percent of the total area of the site is set aside as common open space. To the greatest degree practicable, common open space shall be designated as a single block and not divided into unconnected small parcels located in various parts of the development;
  - (c) pedestrians can easily access common open space;
  - (d) the site plan establishes, where applicable, an upland buffer of vegetation of at least [50] feet in depth adjacent to wetlands and surface waters, including creeks, streams, springs, lakes, and ponds;
  - (e) individual lots, buildings, structures, streets, and parking areas are situated to minimize the alteration of natural features, natural vegetation, and topography;
  - (f) existing scenic views or vistas are permitted to remain unobstructed, especially from public streets;
  - (g) the site plan accommodates and preserves any features of historic, cultural, or archaeological value;

- (h) floodplains, wetlands, and areas with slopes in excess of [25] percent are protected from development;
- (i) the cluster development advances the purposes of this ordinance as stated in section 101, above; and
- [(j) other, such as contiguity requirement for common open space.]

(2) The [local planning commission] may, in its opinion, apply such special conditions or stipulations to its approval of a residential cluster development as may be required to maintain harmony with neighboring uses and to promote the objectives and purposes of the comprehensive plan and the zoning and subdivision ordinances.

(3) If the [local planning commission] finds that the requirements of paragraph (1), above, are satisfied, it shall approve the residential cluster development, subject to any special conditions or stipulations pursuant to paragraph (2) above, any density bonus pursuant to section 105, above, and any reductions [or waivers] pursuant to section 108, below.

*Comment: While these review criteria are intended to guide the planning commission in the evaluation of the proposed cluster development, they cannot replace a sensitive and creative site planner who has the responsibility of designing cluster development or an experienced professional planner whose responsibility it is to review the proposal and advise the planning commission on necessary design changes.*

#### **108. Reduction [or Waiver] of Certain Physical Design Requirements**

(1) In approving a residential cluster development, the [local planning commission] may reduce the pavement width of any public or private streets that would otherwise be required by the [subdivision regulations or other design specifications for roads] to [22] feet.

(2) An applicant who wants the reduction of pavement width of public or private streets as provided for in paragraph (1), above, shall submit a statement of justification for the reduction [or waiver] along with the final site plan.

*Comment: Most local governments have adopted standard design specifications for streets. This section allows the planning commission to reduce street pavement widths in order to minimize impervious surfaces on the site as well as limit the portions of the site that must be regraded to accommodate wider streets. If a street proposed in a cluster development is to be used as a connector from an adjoining development or as a through street, it is probably not a candidate for a reduction in width. There is no firm rule, however, on when a reduction or waiver should be allowed and determinations should be made on a case-by-case basis.*

*The 22-foot pavement width shown in brackets assumes a 15-foot travel lane and a seven-foot parking area. If parking were desired on both sides of the street, a 28-foot pavement would accommodate two seven-foot parking lanes and a 14-foot wide travel lane (Southworth and Ben-Joseph 1997; Livable Oregon n.d.; Ewing 1996, 69–72).*

#### **109. Controls on Resale and Rerental of Affordable Housing Units Used as Basis for Density Bonus**

(1) Affordable dwelling units used as the basis for approving a density bonus in section 105, above, shall be subject to a deed restriction and a mortgage lien to ensure that newly constructed low- and moderate-income sales and rental units remain affordable to low- and moderate-income households for a period of not less than [30] years, which period may be renewed.

(2) The deed restriction and mortgage lien shall be approved by the [local government] law director and shall be enforceable by the [local government] through legal and equitable remedies.

*Comment: If the density bonus is to be given on the basis of a guarantee of the provision of affordable housing, there must be a mechanism that ensures the housing, whether it is for sale or for rent, will remain affordable for a reasonable period of time.*

#### **110. Conveyance of Open Space**

(1) Common open space provided by a residential cluster development shall be conveyed as follows:

- (a) To the [local government] and accepted by it for park, open space, agricultural, or other specified use or uses, provided that the conveyance is approved by the [local planning commission] and is in a form approved by the [local government] law director; or
- (b) To a nonprofit organization whose principal purpose is the conservation of open space, to a corporation or trust owned or to be owned by the owners

of lots or dwelling units within the residential cluster development, or to owners of shares within a cooperative development. If such a corporation or trust is used, ownership shall pass with the conveyances of the lots or dwelling units. The conveyance shall be approved by the [local planning commission] and shall be in a form approved by the [local government's] law director (see Diehl et al. 1988 for model language for easements).

(2) In any case, where the common open space in a residential cluster development is conveyed pursuant to subparagraph (1)(b), above, a deed restriction enforceable by the [local government] shall be recorded that provides that the common open space shall:

(a) be kept in the authorized condition(s); and

(b) not be developed for principal uses, accessory uses (e.g., parking), or roadways.

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## Model Urban Growth Boundary Ordinance



PRIMARY SMART GROWTH  
PRINCIPLES ADDRESSED:

- Direct development toward existing communities
- Preserve open space and farmland

This urban growth boundary ordinance establishes a planning and regulatory tool that directs growth and development into compact and efficient development patterns by capitalizing on vacant or underused infill sites and carefully considered expansion of the regional urbanized envelope. It is also intended to preserve open space and agricultural uses outside the boundary. The California Planning Roundtable defines an urban growth boundary as “a boundary, sometimes parcel-specific, located to mark the outer limit beyond which urban development will not be allowed. It has the aim of discouraging urban sprawl by containing urban development during a specified period, and its location may be modified over time.” An urban growth area is defined as the land within the urban growth boundary, except for areas that may be deemed off-limits because of various specified development constraints.

Pendall, Martin, and Fulton (2002) identify urban growth boundaries as one of three primary methods for managing the growth of urban areas. The other two are urban service areas, which seek to control and channel growth by limiting the extension of infrastructure, such as sewer and water lines, and greenbelts, which are common in the United Kingdom and South Korea. They rate greenbelts as the “tightest” type of boundary and urban service areas as the loosest.

An urban growth boundary typically has multiple objectives for areas both inside and outside the line. On its website, Portland Metro, the regional agency that administers that region’s boundary, lists three benefits:

- Motivation to develop and redevelop land and buildings in the urban core. This helps keep core “downtowns” in business.
- Assurance for businesses and local governments about where to place infrastructure (such as roads and sewers) needed for future development.
- Efficiency for businesses and local governments in terms of how that infrastructure is built. Instead of building roads farther and farther out, as happens in urban “sprawl,” money can be spent to make existing roads, transit service, and other services more efficient.

The foregoing points make clear that a major objective of urban growth boundaries is to steer both public and private investment back toward the urban core while making such investment more efficient in spurring local economic growth and reinvigorating existing urban neighborhoods. However, this is effective only if the boundaries are well drawn, based on solid land-market data, and revised with regularity as conditions and forecasts change. Some entity must be given power and responsibility for monitoring development and growth projections and recommending needed changes over time. If the boundary affects a single municipality, this can be the local planning department. If the boundary affects multiple jurisdictions, a new or existing regional board or agency may need to be empowered with this task. This regional planning group is likely to need some authority to coordinate between regional and local comprehensive plans in adopting the boundary.

This ordinance assumes adoption by either a county legislative body or some state-designated regional authority, with participation from, and subsequent adoption by, individual communities within the larger urban growth area, unless the urban area is such that only one incorporated municipality occupies the relevant landscape. Various studies have repeatedly emphasized the likely futility of individual municipalities enacting separate growth boundaries within a larger metropolitan area, in large part because the probable result will simply be a shift in development from one community to others rather than a truly effective separation of urban and rural land uses. Growth management statutes in Oregon and Washington have incorporated this regional approach.

It is necessary to qualify this model by noting that in some states the designation of urban growth boundaries is mandated or controlled by state planning legislation or related guidelines. Where that is the case—including, particularly, Maryland, Maine, Tennessee, Oregon, and Washington—the provisions of such legislation take precedence over any model ordinance language. Those guidelines can be quite specific in detailing the methodology for delineating urban growth boundaries.

Typically, as in Oregon, the urban growth boundary must contain a 20-year supply of land for future residential and industrial development. (Maine prescribes 10 years.) In addition to including the amount of additional land needed in line with growth calculations, it is common practice to add some

additional amount as a “land market supply factor,” which in effect provides the market with enough elasticity to handle the projected growth without undue constraints. How large an additional increment is needed depends in part on the regularity with which planners monitor the regional land supply and the frequency with which the boundaries are updated.

It is also essential to establish priorities for the use of land. Oregon uses a categorization system of first through fourth priority lands to define the order in which specific lands outside the boundary will be brought within it. The first priority land, or urban reserve land, is designated as land that can be brought in to accommodate growth. A simplified diagram of the overall scheme, below, drawn from Easley (1992), illustrates the nested sectors of the overall urban growth area within the boundary.

#### 101. Purpose

The purpose of the Urban Growth Boundary Ordinance is to achieve or ensure urban containment by promoting compact and contiguous development patterns. Specifically, the Urban Growth Boundary Ordinance is intended to:

- (a) Foster patterns of development that can be efficiently served by public services;
- (b) Provide a mechanism whereby a [regional or county] planning agency and local governments within its jurisdiction may coordinate the location and extent of urban growth;
- (c) Encourage preservation and adaptive reuse of historic buildings;
- (d) Protect agricultural and forest lands, scenic areas, and other natural resources, living and nonliving, from urban development;
- (e) Identify where urban services are being or will be provided;
- (f) Direct growth to locations where infrastructure capacity is available or committed to be available in the future;
- (g) Ensure the provision of an adequate supply of buildable land for at least 20 years;
- (h) Ensure a variety of affordable housing types at various densities.

#### 102. Definitions

As used in this ordinance, the following words and terms will have the meanings specified herein:

**Affordable housing.** Housing that has a sales price or rental amount that is within the means of a household that may occupy middle-, moderate-, or low-income housing. In the case of dwelling units for sale, housing that is affordable means housing in which mortgage, amortization, taxes, insurance, and condominium or association fees, if any, constitute no more than [30] percent of such gross annual household income for a household of the size which may occupy the unit in question. In the case of dwelling units for rent, housing that is affordable means housing for which the rent and utilities constitute no more than [30] percent of such gross annual household income for a household of the size which may occupy the unit in question.

**Agricultural land.** Land used for farming, livestock, and the growing and harvesting of food.

**Buildable land.** Land within or near urban areas that is suitable and available for residential, commercial, and industrial uses and includes both vacant land and developed land that, in the opinion of the local planning agency, is likely to be redeveloped.

**Comprehensive plan.** An adopted official statement of a legislative body of a local government that sets forth (in words, maps, illustrations, or tables) goals, policies, and guidelines intended to direct the present and future physical, social, and economic development that occurs within its planning jurisdiction and that includes a unified physical design for the public and private development of land and water.

**Development.** Any building, construction, renovation, mining, extraction, dredging, filling, excavation, or drilling activity or operation; any material change in the use or appearance of any structure or in the land itself; the division of land into parcels; any change in the intensity or use of land, such as an increase in the number of dwelling units in a structure or a change to a commercial or industrial use from a less intensive use; any activity that alters

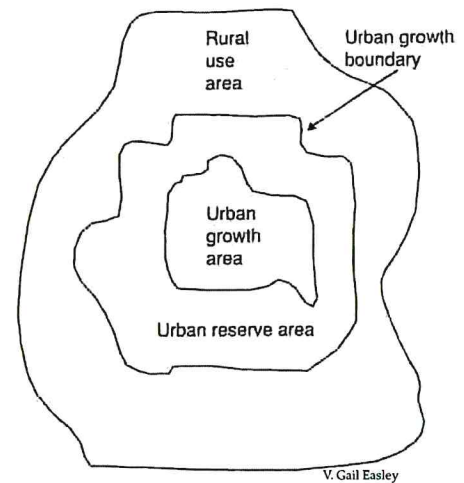


Figure 4.12.1. Sectors of the overall urban growth area.

a shore, beach, seacoast, river, stream, lake, pond, canal, marsh, dune area, woodland, wetland, endangered species habitat, aquifer, or other resource area, including coastal construction or other activity.

**Forest land.** Land that is suitable for commercial forest uses including adjacent or nearby lands that are necessary to permit forest operations or practices and other forested lands that maintain air, soil, water and fish, and wildlife resources.

**Public services.** Activities, facilities, and utilities that are provided to urban-level densities and intensities to meet public demand or need and that, together, are not normally associated with nonurban areas. These may include but are not limited to: the provision of sanitary sewers and the collection and treatment of sewage; the provision of water lines and the pumping and treatment of water; fire protection; parks, recreation, and open space; streets and roads; mass transit; and other activities, facilities, and utilities of an urban nature, such as stormwater management or flood control.

**Urban growth area.** An area delineated in the adopted [county or regional] comprehensive plan [in accordance with an applicable state enabling statute or plan guidelines] within which urban development is encouraged by delineation of the area, compatible future land-use designations, and implementing actions in local comprehensive plans, and outside of which urban development is discouraged. The area will allow existing or proposed land uses at minimum densities and intensities sufficient to permit urban growth that is projected for the [county or region] for the succeeding 20-year period and existing or proposed urban services to support that urban growth adequately.

**Urban growth boundary.** A perimeter drawn around an urban growth area.

### 103. Applicability of Regulations

This ordinance applies to all development activities, including land-use regulation activities, of the [county or regional authority and counties therein] and local governments within the [county or regional authority]. These activities should include the development of a local comprehensive plan by any local government and the extension of public services to facilitate development. Local governments whose jurisdiction lies outside the urban growth boundary established for the [county or region] itself and any boundary covering multiple local jurisdictions must establish in their own comprehensive plans an urban growth boundary for that community that meets the criteria established by the [county or regional authority] and [any applicable state laws and guidelines]. Applicable procedures appear in section 104, below.

Hereafter, no building or structure may be erected, demolished, remodeled, reconstructed, altered, enlarged, or relocated, and no building, structure or premises may be used in the urban growth area except in compliance with the provisions of this title and then only after securing all required permits. Any building, structure, or use lawfully existing at the time of passage of this title, although not in compliance therewith, may be maintained as provided for in [the applicable section of the local zoning code dealing with nonconforming uses].

### 104. Designation of Urban Growth Area

The [county or regional authority] must designate an urban growth area or areas within which urban growth will be encouraged and outside which growth can occur only if it is not urban in nature. Each city within the [county or region] must be included within an urban growth area, but an urban growth area may include more than one city. An urban growth area may include territory that is located outside a city only if such territory already is characterized by urban growth whether or not the urban growth area includes a city or is adjacent to territory already characterized by urban growth or is a designated new fully contained community.

#### 104.1 Procedure for Adoption

The [county or regional] planning department will be responsible for applying the criteria in this section to develop a proposed urban growth boundary and urban growth area(s), subject to approval by the planning commission and the [county or regional council or board]'s adoption of the recommendation submitted by the planning commission. The planning commission will complete its recommendation to the [county or regional council or board] within one year of the effective date of this ordinance. The [county or regional] planning department will be responsible for coordinating the gathering of data with, and for consulting with, all individual local governments within the [county

or region] concerning the boundaries and areas proposed. In addition, each city within the [county or region] will consider the relevant aspects of the adopted urban growth boundary and urban growth area(s) for adoption and incorporation into its own comprehensive plan.

During the process of development of the urban growth boundary, each municipality within the [county or region] will propose the designation of an urban growth area that will include the area within its municipal boundary and may include additional unincorporated areas contiguous to its municipal boundary. Once a proposed boundary is recommended to the [county or regional council or board], any local government may object formally with the [county or regional authority] over the designation of the urban growth area within which it is located. The planning department will attempt to resolve conflicts, including the use of mediation services, and the [county or regional council or board] will consider the solutions offered as a result.

*Comment: The timeline here is primarily intended to provide some model for implementation of the ordinance. Actual timelines in a local ordinance may depend on state enabling legislation or growth management mandates, where they apply, or on other relevant local considerations. The underlying idea is simply that providing a reasonable certain date is necessary to ensure that the process moves forward. This section envisions the subsequent step of adoption of a defined urban growth boundary and urban growth area(s) once this work is completed. In addition, section 106 provides for subsequent amendments to the originally adopted boundary and area(s). The precise applicability and wording of the final sentence of the first paragraph will depend in large part on how state law defines the relationships, especially for planning purposes, between counties and the cities they contain.*

*The provisions for consultation with local governments in the first paragraph, and for objections and dispute resolution in the second paragraph, are derived from both APA's Growing Smart and a related mechanism in Washington State law and are aimed at ensuring meaningful collaboration and cooperation among county and city planners and elected and appointed officials in the development of the urban growth boundary. However, it should be noted that some states provide a state-level mechanism for arbitrating or resolving such disputes. Where that is the case, reference to the state mechanism must be included.*

#### 104.2 Criteria for Designation

(1) The planning department will obtain, consider, and develop the best projections available regarding growth of population over the 20-year [or other] period during which the urban growth area must provide adequate land for anticipated development, including changes in household size and age-related, socioeconomic, and other factors necessary for acquiring an accurate estimate of likely future needs for housing, public services, education, and other facilities relevant to determining future development needs.

*Comment: Although 20 years is a commonly used period for projecting anticipated growth within the urban growth area, state and local governments may develop a rationale for establishing some other period within the ordinance. If that decision is made, it should also be reflected in the language of sections 106 and 107, below, to make them consistent.*

- (2) Urban growth should be located according to the following priorities:
- (a) In areas already characterized by urban growth that have adequate existing public facility and service capacities to serve such development;
  - (b) In areas already characterized by urban growth that will be served adequately by a combination of both existing public facilities and services and any additional needed public facilities and services that are provided by either public or private sources;
  - (c) In the remaining portions of the urban growth areas.
  - (d) Urban growth may also be located in designated new fully contained communities.

In order to properly determine an urban growth boundary that makes most efficient use of the existing network of public services, the planning process will include consideration of the following:

- (a) Locations and current service areas of existing facilities;
- (b) Levels and capacities of services provided;
- (c) Plans for expansion or extension of facilities or services;
- (d) Present and projected adequacy of each service;

- (e) Condition of each facility;
- (f) Costs of providing each service; and
- (g) Historically underserved communities.

*Comment: When inclusion of an area inside an urban growth boundary is conditioned on the adequacy of existing public facilities to support greater development density, consideration should be given to whether the area is one that for reasons of racial or economic exclusion has suffered disproportionate lack of economic development and infrastructure investment. In such cases, the goal of equitable investment should take precedence over other boundary designation criteria.*

(3) Recommendations from the planning commission for adoption of an urban growth boundary will include consideration of at least the following factors related to past, current, and future land use and local policies regulating or otherwise affecting land use:

- (a) Existing land use, specifically including residential densities and intensities of nonresidential uses;
- (b) Developments already approved but not yet completed, with their proposed densities and intensities;
- (c) Local policies, whether in comprehensive plans or other documents, concerning planned or proposed annexation, housing types and densities, and redevelopment and infill of existing developed areas;
- (d) Existing and proposed zoning patterns and anticipated rezonings within the proposed boundary;
- (e) Holding capacity of vacant lands within the proposed boundary;
- (f) Effects of subdivision, planned unit development, and other ordinances on the density, intensity, and siting of development within the proposed boundary;
- (g) Agricultural land-preservation programs, including all existing and planned purchases or transfers of development rights;
- (h) Effects on land use of current or proposed floodplain management regulations or other resource protection programs;
- (i) Effects of anticipated and probable market conditions on the sale of residential, commercial, and industrial property;
- (j) Density goals planned within the proposed boundary, those established by local zoning, and actual density ranges achieved within communities within the proposed boundary; and
- (k) Comparisons of existing residential density with the capacity of public infrastructure.

*Comment: The art of designing an effective urban growth area and boundary ultimately depends on a considerable amount of professional judgment of the above planning criteria, and the ordinance is merely an attempt to spell out the necessary considerations. Included in (i) is the need to establish some appropriate market multiplier that takes into account the amount of additional land needed above that actually necessary for development at the intended densities and intensities to allow some choice and flexibility in the market. Those numbers vary, often in the range of 15 to 20 percent beyond the stated need, but must be determined based on local market conditions and should not be specified in the ordinance. However, one might make a case for explicitly specifying in (i) the use of some multiplier to be determined by the planning department or planning commission.*

(4) In order to account adequately for the constraints on development within the urban growth area posed by natural features of the landscape, anticipated growth needs should account for those factors that may or will limit or prohibit development within areas containing those features. Recommendations must include considerations of how the following factors may reduce the overall supply of buildable land within the proposed urban growth area:

- (a) Floodplains
- (b) Steep slopes
- (c) Habitats for endangered species
- (d) Watersheds, especially where an urgent need exists to reduce impervious surface areas
- (e) Water bodies
- (f) Agricultural lands targeted for preservation

- (g) Areas containing seismic or geological hazards such as fault zones or areas subject to liquefaction
- (h) Aquifer recharge zones and well fields
- (i) Wetlands
- (j) Forest lands
- (k) Historic, cultural, or archaeological sites

*Comment:* Although the lists of considerations above are largely universal in nature, local legislatures obviously should consider including any additional factors that have special local relevance and deleting those that do not apply. This is most likely to be the case with the final subsection on natural resources because these tend to vary depending on regional climate, geography, and topography. Greater or lesser specificity may be deemed appropriate according to the circumstances. The intent here is to provide a solid inventory of the basic planning considerations that need to be addressed in almost every case in order to establish a workable boundary. In drafting or revising this section of the ordinance, it would be wise to refer to the Critical Areas Model Ordinance, below.

### 105. Interpretations

- (1) The director of planning for the [county or region] will review and resolve any questions involving the proper interpretation or application of the provisions of this ordinance or of the subsequently adopted urban growth area(s) and urban growth boundary that any affected property owner, tenant, government officer, department, or other person may request. The director will make that decision in keeping with the spirit and intent of the ordinance and the [county or regional] and local comprehensive plan.
- (2) The director of planning and the [county or regional] board will keep a record of all interpretations made by each, and these will be used for future administration and ordinance amendments.
- (3) In any conflict between a local or county zoning map and the text of this ordinance or of the resolution adopting the urban growth area, the urban growth boundary provisions will prevail.

*Comment:* This is basically a stripped-down version of the language used in the Thurston County code in Washington, and its intent is to ensure that there is a clear source of authority for interpretation of any ambiguities in either the authorizing ordinance for the urban growth boundary or the actual boundaries in force at the time that an interpretation is requested. Not all ordinances examined have included such a section, but its utility seems self-evident.

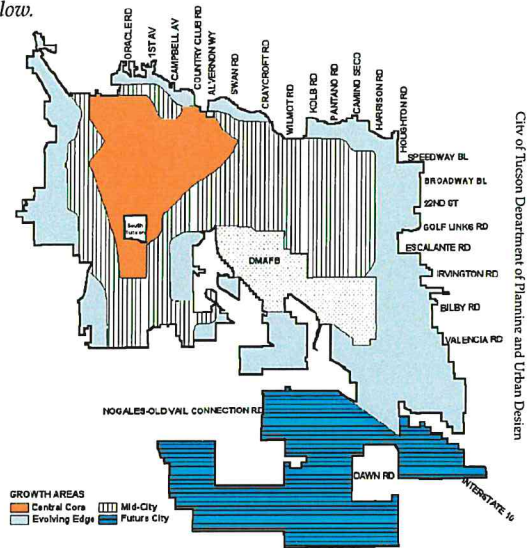
### 106. Periodic Reassessment

The [county or region] will evaluate the need to amend the urban growth boundary and related provisions of any local and [county or regional] comprehensive plan, and associated land development regulations, at least every [five] years, or when the urban growth area does not contain sufficient buildable lands to accommodate residential, commercial, and industrial needs for the next 20 years. This reassessment will be based on the land supply monitoring system established in section 107, below. In addition, municipalities within the [county or region] may petition for amendments and provide the rationale for the proposed amendments to the existing boundary.

*Comment:* Every system created for maintaining an urban growth area and boundary has included provisions for periodic updating. While this ordinance prescribes five years, where state law specifies some other period for mandatory plan updates that provision must apply. Likewise, local governments with some other regular period (say, three years) for updating comprehensive plans may wish to stay with an existing regime and update both the urban growth boundary and the plan simultaneously. A five-year update is simply common and convenient. The 20-year land supply is tied to the provisions of section 104, above, but again, state law or local policy may dictate some other goal. The important point is to recognize the need to institutionalize some sort of periodic readjustment to reflect evolving development realities.

### 107. Land Supply Monitoring

- (1) The [county or regional] planning department will establish, as a means of implementing and supporting the urban growth area, a land supply monitoring system. The planning department may, by agreement, establish a land supply monitoring system for municipalities [and other local governments] within the [county or region] and may assume those responsibilities on behalf



**Figure 4.12.2.** The urban growth area must be regularly reassessed to ensure that it contains sufficient buildable land for the next 20 years.

of a local planning agency. Municipalities [and other local governments] may also establish their own system in cooperation with the [county or regional] planning department or contract for such services with a private vendor.

(2) In line with the stated goals of section 104, above, the purposes of the land supply monitoring system are to:

(a) Periodically inventory the supply of buildable lands for the [county or region] to determine its adequacy;

(b) Evaluate the impact of the goals and policies of the planning department and of municipalities [or other local governments] on the prices and supply of and demand for buildable land;

(c) Propose changes, if necessary, that will ensure the supply of buildable land within the planning jurisdiction of the [county or region] meets projected needs for residential, commercial, and industrial development, and supports public and community facilities in the land-use element of the local comprehensive plan; and

(d) Provide information to the public on the operation of the land market within the [county or region].

(3) Using a geographic information system as part of the periodic review required in section 106, above, the planning department will, on at least a five-year basis, inventory the supply of buildable lands within the urban growth area. The planning department may also inventory any other buildable lands within the local government's jurisdiction. In determining whether land is buildable, the planning department will use the definition in section 102 and the criteria established in section 104, above.

(4) Proposals for Adjustment of Urban Growth Area

Based upon the inventory of buildable lands determined in compliance with paragraph (3), above, if it determines that the urban growth area does not contain adequate buildable lands to accommodate residential, commercial, and industrial needs for the next 20 years, the planning department will:

(a) Propose amendments to the urban growth area to accommodate residential, commercial, and industrial needs for the next 20 years at the actual development density or intensity during the period since the last periodic review or within the last five years, whichever is greater. The proposed amendments will include additional lands that are adequate and reasonably necessary for public and community facilities or services, including transportation, to support residential, commercial, and industrial needs. After the [county or regional council or board] has amended the urban growth area in the [county or regional] comprehensive plan, municipalities will also incorporate and adopt the urban growth area into their own local comprehensive plans.

(b) Propose inclusion of measures in the comprehensive plan and land development regulations that will demonstrably increase the likelihood that (1) residential development will occur at densities and with types sufficient to accommodate housing needs, and (2) commercial and industrial development will occur at intensities and with a mix of types and categories sufficient to accommodate commercial and industrial needs, for the next 20 years without expansion of the urban growth area; or

(c) Adopt a combination of actions described in subparagraphs (a) and (b), above.

To achieve the goals of subparagraphs (a) through (c), above, measures proposed for enactment by the [county or regional council or board] or by individual municipalities may include but not be limited to:

(a) Increases in the permitted density of existing residential land use and in intensity of existing commercial and industrial lands in a zoning ordinance;

(b) Financial incentives for higher-density housing;

(c) Reduction of on-site parking requirements in a zoning ordinance;

(d) Reduction of yard requirements in a zoning ordinance;

(e) Provisions permitting additional density or intensity beyond that generally allowed in the particular zoning district(s) in exchange for amenities and features provided by the developer;

(f) Minimum density or intensity requirements in a zoning ordinance;

- (g) Redevelopment, infill, or brownfields strategies;
- (h) Authorization of housing types or site planning techniques in a zoning ordinance that were not previously allowed by a local comprehensive plan or zoning ordinance;
- (i) Authorization of changes in the zoning use classification, including the employment of mixed use zones; and
- (j) Changes in standards for public and community facilities or services, including transportation, that require the use of less land.

*Comment: Most of this section involves a substantial adaptation of provisions in the Growing Smart Legislative Guidebook (2004) concerning the establishment of a land market monitoring system. Growing Smart takes the position that such a system is a mandatory element of any system to create an urban growth boundary in order to ensure that the jurisdiction creating such a boundary can make well-informed decisions that avoid the undesired side effects of overly restrictive or poor growth management policies. The land supply monitoring system established here should be seen as a necessary and essential tool in implementing an effective urban growth area policy. In addition to Growing Smart, Knaap (2001) and Moudon and Hubner (2000) can be seen as essential resources in guiding the practice of managing a land supply monitoring system.*

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