Planner's Panacea or Pandora's Box: A Realistic Assessment of the Role of Urban Growth Areas in Achieving Growth Management Goals

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I. INTRODUCTION

Over the past twenty years, Urban Growth Areas (UGAs) have become a tool of choice to manage growth.1 Numerous states and local jurisdictions have mandated UGAs in hope of confining urbanization, reducing sprawl, protecting open space and resource lands, and minimizing infrastructure investment.2

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Since 1963, all California cities have had a state agency, the Local Agency Formation Commissions, determine for planning purposes each jurisdiction's expected ultimate growth boundary, which typically includes unincorporated territory outside the actual municipality. See Madelyn Glickfeld and Ned Levine, Lincoln Institute of Land Policy, Regional Growth . . . Location Reaction, the Enactment and Effects of Local Growth Control and Management Measures in California (1992). Glickfeld and Levin found 56 California cities and 23 counties aggressively using these urban growth lines as their jurisdictions urban growth boundary. See id. The County of Sacramento and the Cities of San Jose and San
Washington State joined the trend in 1990 when it adopted the Growth Management Act (GMA), which requires certain counties to establish UGAs as a central component of its “bottom up” growth management strategy. Nonetheless, thoughtful criticisms have been offered regarding the utility of UGAs to accomplish intended growth management goals, and concerns have emerged regarding unintended consequences associated with their implementation. This Article addresses whether UGAs can really achieve the meritorious goals assigned them, or whether they merely provide a temporary sense of accomplishment while livability continues to decline within their confines, and long-term regional patterns of growth remain unchanged.

The concept of UGAs as a tool to manage growth was developed in the 1970s in response to problems and perceived threats at that time. Conceptually, UGAs are intended to promote compact, higher density urban development and cost-effective provision of urban services and infrastructure, while conserving open space, rural, agricultural, and natural resource lands by prohibiting urban development outside of the UGA. The intent has been expressed as a need to “identify and separate urbanizable land from rural land,” or, similarly, as a

Diego have been widely discussed in planning literature as California jurisdictions actively pursuing UGB policies.

In Colorado, the City of Fort Collins and surrounding Larimer County implemented a UGB as part of their growth management program. Bobbie Zeman, Growth Management—Colorado Style, FLORIDA PLANNING, Feb. 1990, at 6.

3. WASH. REV. CODE §§ 36.70A.010-.902 (1992). The term “bottom up” connotes a locally controlled process for decision-making on growth management issues. While the Growth Management Act does not use the term “bottom up” in its text, the Department of Community Development (DCD) has developed procedural criteria, mandated by the GMA, which state that a major feature of the GMA is “[t]he concept the process should be a ‘bottom up’ effort, involving early and continuous public participation, with the central focus of decision making at the local level." WASH. ADMIN. CODE 365-195-010(3) (1992), Wash. St. Reg. §§ 92-18-097, 92-23-065 (effective Dec. 19, 1992).

4. In the 1970s, King County took a series of actions to address perceived negative impacts of growth. A purchase of development rights program was instituted for farmland (the second program of its type in the United States), and in 1978, a stringent urban service boundary was established through the adoption of a County Sewer Plan. The Plan established local service areas where sewer service was permitted and thus functioned much as a UGA will under the GMA until the sewer plan is amended by community plans. One can ask, with these actions, why King County residents still perceive that urban sprawl is a problem.

5. Lassar & Porter, supra note 1, at 1.

requirement to designate an area or "areas within which urban growth shall be permitted and outside of which growth can occur only if it is not urban in nature." UGAs are enacted as physical or geographical demarcations of where urban development will be allowed, whether that takes the form of designating an urban growth area, urban growth boundary, urban service boundary, urban limit lines, or otherwise. Areas in which urban growth shall be encouraged are urban areas where adequate public facilities and services exist or can be provided in an efficient manner. The necessary corollary to containing urban growth within the UGA is zoning that restricts densities and development on the rural side of the boundary.

Some critics of UGAs suggest that they may exacerbate rather than solve growth problems. Unintended negative impacts of UGAs include escalating real estate prices for both residential and commercial/industrial land, which reduce the availability of affordable housing; shifting development from lands within the urban growth boundary and which are identified and (a) Determined to be necessary and suitable for future urban uses (b) Can be served by urban services and facilities (c) Are needed for the expansion of an urban area." "Rural lands" are defined as "those which are outside the urban growth boundary and are: (a) Non-urban agriculture, forest or open space lands or, (b) Other lands suitable for sparse settlement, small farms or acreage homesites with no or hardly any public services, and which are not suitable, necessary or intended for urban use." Id. at 24.

7. WASH. REV. CODE § 36.70A.110(1) (1992). As defined elsewhere in the Act, "urban growth" refers to growth that makes intensive use of land for the location of buildings, structures, and impermeable surfaces to such a degree as to be incompatible with the primary use of such land for the production of food, other agricultural products, or fiber, or the extraction of mineral resources. When allowed to spread over wide areas, urban growth typically requires urban governmental services. "Characterized by urban growth" refers to land having urban growth located on it, or to land located in relationship to an area with urban growth on it as to be appropriate for urban growth. Id. § 36.70A.030(14).

8. The term "urban growth boundary" (UGB) gained popularity with the Oregon growth management program, which mandated UGBs for all cities by 1986. The term UGB emphasizes the demarcation and separation of urbanizable land from rural land. The term "urban growth area" (UGA), while substantially denoting the same concept, focuses attention on the land within the UGA that is either currently urban or available for urbanization, rather than on the boundary. UGA is the term used in the Washington State Growth Management Act. WASH. REV. CODE § 36.70A.030(15) (1992). The term "urban service boundary," which connotes essentially the same concept as urban growth boundary, calls attention to the fact that the jurisdiction imposing such a boundary is attempting to limit the provision of urban utility services, such as sewers and water, as a way to control urban growth. The "urban limit line" is another term for an urban growth boundary.

9. Lassar & Porter, supra note 1, at 32.
10. Id. at 35.
11. The Urban Land Institute recently assessed the nexus between development
constrained land within the UGA to outlying jurisdictions more receptive to growth; and reinforcing existing trends that convert resource lands to "hobby" or "martini" farms outside the boundary. This inefficient use of land, in turn, contravenes growth management goals by creating low density sprawl, hastening the decline in commercially important resource land, and presenting problems for future expansion of the UGA. Additionally, pressure to infill urban growth in existing neighborhoods at high densities threatens the livability and viability of those neighborhoods. Further, unless carefully determined jointly by all jurisdictions within a metropolitan region, a UGA imposed in one subregion may simply shift growth to another adjacent subregion. Finally, the blanket inclusion by Washington State of all existing towns and cities within the UGA signals change in all cities and may threaten the character of certain unique small towns unless special provisions are made for them.

This Article will address many of these issues associated with UGAs by describing how UGAs have functioned in other jurisdictions and at what cost. It will set forth the considerations that must go into drawing the urban growth boundary (UGB) and suggest a variety of actions that should be considered if the UGA technique is to effectively accomplish the goals that it is intended to address.

To understand how UGBs can work, one must first understand how they have in fact been used. The next section provides an overview of two examples of UGAs that have been in

regulation and housing affordability in Sacramento County. Estimated raw land prices there jumped from $17,500 to $42,500 an acre from 1988 to 1990. The U.S. Census Bureau figures show that the median sales price for new single family homes in the Sacramento area rose from $97,400 to $131,000 from 1987-1989, or 34%. Annualized population growth in the market area from 1980-1990 was approximately three percent. The escalation is blamed in part on development restrictions constraining vacant developable land to 40,000 acres within 20 miles of the central city, and in part on regulations with more direct dollar impacts, such as impact fees and environmental impact statements. See IRA LOWRY & BRUCE FERGUSON, DEVELOPMENT REGULATIONS AND HOUSING AFFORDABILITY 4-5, 127, 154 (Urban Land Institute 1992).

12. Lassar & Porter, supra note 1, at 33-34. According to Lassar and Porter, the development of "hobby" or "martini" farms on the edge of the UGB pose a problem for Portland and San Diego growth management efforts. Use of the terms "hobby" and "martini" farmers refers to those homeseekers "affluent enough to acquire the minimum acreage required in rural areas [and who] can construct a home and plant trees or pasture horses to establish their 'rural' use of the land," and thus satisfy rural land use requirements. Id.
place for ten years or more and compares these programs with Washington’s UGA requirements.

II. OVERVIEW OF UGA/UGB PROGRAMS IN TWO METROPOLITAN STUDY AREAS AND COMPARISON WITH WASHINGTON’S UGA PROVISIONS

A. The Portland Metropolitan Service District

When Oregon adopted its growth management act in 1973, it provided for the adoption of “goals,” which were defined as mandatory statewide planning standards. The Act established the Land Conservation & Development Commission (LCDC), which had the duty to develop the mandatory goals. LCDC was also charged with drafting “guidelines” to instruct jurisdictions how to develop plans in compliance with the goals. Cities and counties were mandated to develop comprehensive plans in compliance with the goals within one year of their adoption. In December 1974, LCDC adopted Goal 14, Urbanization, which is the genesis of Oregon’s UGBs. The purpose of Goal 14 is to provide for an orderly and efficient transition from rural to urban land use. Goal 14 mandated that “[u]rban growth areas shall be established to identify and separate urbanizable land from rural land,” and it set out a list of factors for consideration in establishing and changing the boundaries.

Pursuant to Goal 14, a UGB for the Portland metropolitan

14. Id. § 197.030(1).
15. Id. § 197.040(2)(c).
16. Id. §§ 197.175, .250.
17. Oregon’s statewide goals have been adopted as administrative rules. See OR. ADMIN. R. 660-15-000 (1992).
18. OREGON PLANNING GOALS, supra note 6, at 12. Mandatory factors for consideration include:
(1) demonstrated need to accommodate long-range urban population growth requirements consistent with LCDC goals; (2) need for housing, employment opportunities, and livability; (3) orderly and economic provision for public facilities and services; (4) maximum efficiency of land uses within and on the fringe of the existing urban area; (5) environmental, energy, economic and social consequences; (6) retention of agricultural land as defined, with Class I being the highest priority for retention and Class VI the lowest priority; and, (7) compatibility of the proposed urban uses with nearby agricultural activities.

Id.
area was acknowledged in 1979.\(^\text{19}\) Perhaps because of the state-
level orientation of growth management in Oregon, LCDC rec-
ognized early on that one UGB was needed for the Portland
Metropolitan Service District (MSD), even though it encom-
passed parts of three counties, more than twenty cities, and
three special service districts. The regional UGB was deemed
necessary because of the interconnectedness of transportation
networks, services, and housing in the three-county area.\(^\text{20}\)

The Portland MSD initially established a UGB that
encompassed 220,920 acres. Of that, approximately sixty-two
percent (136,696 acres) was already developed.\(^\text{21}\) Of the unde-
veloped land, 17,590 acres were identified as constrained by
flood plains or steep slopes.\(^\text{22}\) Optimistically, only fifty percent
(8,795 acres) of that constrained land was expected to be build-
able.\(^\text{23}\) By adding the potentially buildable fifty percent of the
constrained vacant land to the remaining 66,633 acres of
"unconstrained" vacant land, this established a bank of 75,428
net buildable acres within the UGB.\(^\text{24}\) By 1990, approximately
2,500 acres (largely vacant) was added to the UGB, mainly
through the minor amendment process, bringing the total UGB
acreage to 223,435.

When the UGB was established, the Portland MSD popu-
lation was approximately 882,000. At an average of 2.59 people
per household,\(^\text{25}\) this constituted 340,540 households and estab-
lished a gross density of about 2.5 household per acre.\(^\text{26}\) The

\(^{19}\) See H. Jeffrey Leonard, Managing Oregon's Growth, The Politics of

\(^{20}\) Id. at 97. Contrast Oregon's mandated regional approach with Washington's
approach, which places the responsibility on individual counties to establish their own
UGAs without requiring front-end coordination with neighboring jurisdictions.

\(^{21}\) METROPOLITAN SERVICE DISTRICT, URBAN GROWTH BOUNDARY FINDINGS Part
I, at 5 (Nov. 1979) [hereinafter UGB FINDINGS].

\(^{22}\) Telephone interview with Stuart Todd, Assistant Regional Planner, Oregon
Metropolitan Service District (May 21, 1993).

\(^{23}\) Id.

\(^{24}\) Although identified as "unconstrained," this acreage was not adjusted for
wetlands or environmental constraints other than steep slopes and flood plains. Id.
See also UGB FINDINGS, supra note 21, Part I, at 13.

\(^{25}\) METROPOLITAN SERVICE DISTRICT, A POPULATION & EMPLOYMENT FORECAST
to 2005, PORTLAND METROPOLITAN AREA 37 (Oct. 1984) [hereinafter EMPLOYMENT
FORECAST]. For the Portland/Vancouver Standard Metropolitan Statistical Area
(SMSA), average persons per household in 1980 was 2.59, projected to decline to
approximately 2.4 during the forecast period. While Portland/Vancouver SMSA does
not match exactly the Portland MSD UGB, it was used by the Portland MSD for
forecasting purposes.

\(^{26}\) Gross density is determined by dividing the number of households in the UGB
by the total developed land (136,696 acres).
forecast for the year 2000 assumed a continuing decline to 2.45 people per household\textsuperscript{27} and population growth of 346,000 people (141,245 households). In the forecast accompanying the initial UGB determination, it was predicted that the population growth could be accommodated on 47,277 acres,\textsuperscript{28} bringing the total developed UGB acreage to 183,973 by the year 2000. This indicated a moderate increase in gross density to about three units per acre, or twenty percent over existing gross density. Initial forecasts assumed existing developed land ratios would continue, at forty-six percent residential, sixteen percent non-residential, and thirty-seven percent public and semi-public land. Based on these assumptions, the initial UGB contained a surplus, or cushion, of 28,152 net buildable acres over what would be needed to accommodate the year 2000 forecast.\textsuperscript{29} This Article will return to these UGB statistics in its discussion of market factors in Part III.A.3.

\textbf{B. The Twin Cities Metropolitan Urban Service Area}

The Metropolitan Council of the Twin Cities Area instituted the Metropolitan Urban Service Area (MUSA) in 1975, which encompassed a seven county area surrounding Minneapolis and St. Paul.\textsuperscript{30} The Metropolitan Council designated the MUSA in response to concerns over rising infrastructure costs, the increase in urban sprawl, and the growing loss of agricultural lands that accompanied sprawl.\textsuperscript{31} A chief goal of the Twin Cities MUSA is to "manage the provision of urban services more efficiently by maximizing the use of existing facilities before building new ones."\textsuperscript{32} Within the MUSA, the Metropolitan Council acts to ensure that regional facilities and resources—regional highway, sewer, park, airport, and solid waste management systems—are built and maintained in order

\textsuperscript{27} Employment Forecast, supra note 25, at 37.

\textsuperscript{28} UGB Findings, supra note 21, at 6. 47,277 is the difference between pre-existing urban land (136,696) and forecast saturation (183,973).

\textsuperscript{29} Id. See also Leonard, supra note 19, at 101 (referencing the MSD determination that the UGB encompassed 56 square miles more than would be needed to accommodate new growth forecast through the year 2000).


\textsuperscript{31} Lassar & Porter, supra note 1, at 32.

to support growth. Because urban services are confined within the MUSA, urban development outside of the boundary is effectively curtailed. The Metropolitan Council's power to manage growth was strengthened by the Metropolitan Land Planning Act of 1976, which requires all local governments to adopt comprehensive plans. These plans must be consistent with the Council's metropolitan systems plans for airports, parks, transportation, and sewers. The Land Planning Act requires local zoning and capital improvements programs to be consistent with the regional systems plans and the approved comprehensive plans.

The initial MUSA line, established in 1975, circumscribed an urban growth area 576,000 acres in size with a population of one million. Of that acreage, forty-seven percent (270,000 acres) was already developed and twenty percent (116,800 acres) was vacant and developable. An additional 189,200 acres were vacant yet undevelopable due to environmental constraints.

In the seventeen years since its establishment, the MUSA has been amended sixty times, each time extending the boundary line outward. Overall, the sixty amendments added 3,000 acres to the urban service area. The MUSA currently includes over 579,000 acres, 318,000 of which have been developed. Of the remaining 261,000 vacant acres, 48,000 acres are currently vacant and developable.

C. Comparison with Washington’s UGA Approach

In contrast with Oregon and Minnesota, UGAs in Washington are established on a county by county basis. Rather than using the multi-county approach illustrated by Portland’s MSD and by the Twin Cities’ MUSA, UGAs under the Wash-
ington GMA are established by a county comprehensive plan.\textsuperscript{44} Policies governing designation of the UGA must be included in the respective county’s countywide planning policies, also required by statute.\textsuperscript{45}

Only two GMA provisions address UGA related regional planning. First is the rather generic mandate that the comprehensive plans of each city or county must be coordinated and consistent with the comprehensive plans of neighboring jurisdictions.\textsuperscript{46} Second, multicounty planning policies must be adopted when two or more counties, each with a population of four hundred fifty thousand or more, share contiguous urban areas.\textsuperscript{47} The reality, at least in the Puget Sound region, is that counties are working in conjunction with cities within their bounds, but coordination of UGA development with neighboring counties is not systematic. It remains to be seen whether county-level urban growth planning can effectively address a multitude of regional concerns identified by Oregon and Minnesota, including issues of transportation, mobility, containment of urban growth, and provision of urban services.

Another difference between Washington’s GMA and Oregon’s GMA is that Washington opted for a system in which challenges to the designation of an Urban Growth Boundary must be by appeal to a regional Growth Planning Hearings Board (GPHB).\textsuperscript{48} Upon appeal, the GPHB will review the challenged plan or regulation to judge its compliance with the GMA.\textsuperscript{49} In contrast, under the Oregon system, the local government must present its proposed comprehensive plan and land use regulations to LCDC for acknowledgment of compli-

\textsuperscript{44} \textsc{Wash. Rev. Code} § 36.70A.110 (1992). In the 1993 session, the Washington State Legislature extended the time by which jurisdictions must adopt comprehensive plans under the GMA to July 1994. In conjunction with that extension, the legislature imposed a requirement that counties designate interim UGAs by development regulation by October 1, 1993, for counties initially required to plan under the GMA or within three years and three months of opting in or of certification for newly qualified counties. ESHB 1761, 1st Sp. Sess., 1993 Wash. Laws 2564, ch. 6.

\textsuperscript{45} \textsc{Wash. Rev. Code} § 36.70A.210(3)(a) (1992).

\textsuperscript{46} \textit{Id.} § 36.70A.100.

\textsuperscript{47} \textit{Id.} § 36.70A.210(7).

\textsuperscript{48} Three GPHBs are set up under the GMA, each with authority to hear only matters pertaining to the cities and counties within its jurisdictional boundaries. \textit{Id.} § 36.70A.250.

\textsuperscript{49} GPHBs may hear and determine only those petitions alleging: (1) that a state agency, county, or city is not in compliance with the requirements of the GMA or SEPA as it relates to GMA plans, regulations, and amendments thereto; or (2) that the twenty-year growth management planning population projections adopted by the office of financial management should be adjusted. \textit{Id.} § 36.70A.280.
ance with the statewide goals.\textsuperscript{50} A proposed UGB is reviewed for compliance with Goal 14. Until a plan has been acknowledged, land use decisions must be made in compliance with the statewide goals, not with the unacknowledged plan.\textsuperscript{51}

The clear distinction between the Oregon and Washington systems is that in Washington the locally adopted comprehensive plan and UGA are effective immediately, until and unless successfully challenged, whereas in Oregon a local government may not rely on its comprehensive plan and UGB until they have been acknowledged by the state commission. The UGB in Oregon is simply not effective until acknowledged.\textsuperscript{52} The Washington system places the burden on the challenging party to compel compliance with the GMA, rather than making the local jurisdiction directly and automatically accountable to a state body to pre-judge compliance.\textsuperscript{53}

Washington's deference to local governments is further evidenced by the presumption of validity granted to comprehensive plans and development regulations.\textsuperscript{54} The GPHB shall find compliance unless it determines by a preponderance of the evidence that the state agency, county, or city erroneously interpreted or applied the GMA.\textsuperscript{55} While the Washington sys-

\textsuperscript{50} Or. Rev. Stat. § 197.251(2) (1989).
\textsuperscript{51} Perkins v. City of Rajneeshepuram, 706 P.2d 949 (Or. 1985). In Perkins, the City of Rajneeshepuram had adopted an UGB as part of its comprehensive plan, but had not submitted the plan for acknowledgment. Relying on the UGB, the City then attempted to convert rural agricultural land to urban uses, claiming the land was urbanizable because it was within the UGB. The court found that once a UGB is "established," land within the UGB is considered urbanizable and shall be considered available for urban development over time, with land use decisions made under the plan and implementing regulations. Id.; see also Or. Rev. Stat. § 197.752(1), (2) (1989). However, the court held that pursuant to Or. Rev. Stat. § 197.251 (1989), the UGB, as part of the comprehensive plan, is not "established" until it has been acknowledged by LCDC. Perkins, 706 P.2d at 953. Thus, until the time that the comprehensive plan, and hence the UGB, has been acknowledged, land use decisions must comply with the goals overall, and the local government cannot rely upon unacknowledged comprehensive plans.
\textsuperscript{52} Perkins, 706 P.2d at 954.
\textsuperscript{53} In Washington, under the GMA, comprehensive plans and development regulations, and amendments thereto, are presumed valid upon adoption. Wash. Rev. Code § 36.70A.320 (1992).
\textsuperscript{54} Id.
\textsuperscript{55} Id. This apparently hybrid burden of proof has been the cause of consternation on the part of at least one GPHB. In the matter of Clark County Natural Resources Council v. Clark County, Western Washington Growth Planning Hearings Board No. 92-02-0001 (Nov. 10, 1992), the Audubon Society challenged the compliance of Clark County's wetlands ordinance with the GMA, and particularly Wash. Rev. Code § 36.70A.060 (1992). The Board asked for briefing on the burden of proof. In its decision addressing the record and standard of review, the Board rejected
tem creates greater certainty, it also places greater responsibility on local governments.

For standing purposes, both Washington and Oregon require that a challenging party have participated in the development of the local plan or regulation. In Oregon, once a request for acknowledgment has been received, interested persons may submit their objections or comments to the acknowledgment request and, following completion of the Commission's report, may file written exceptions to the report. However, a person may not submit written comments or objections to the acknowledgment request of a local government unless that person participated in the local government proceedings leading to the adoption of the plan or regulations. Similarly, in Washington, a petition to the GPHB to review a comprehensive plan or regulations for compliance with the GMA may be filed only by the state, county or city that plans under the GMA, a person who has either appeared before the county or city regarding the matter on which a review is requested or who is certified by the governor, or a person qualified under Revised Code of Washington (RCW) 34.05.530.

Finally, the Oregon and Washington acts differ greatly in the level of detail with which they mandate subsequent local review of adopted plans. The Oregon statute was amended in 1991 to establish a detailed process for periodic review to ensure that comprehensive plans and land use regulations are achieving the statewide planning goals. The statute specifies a systematic process to review and revise plans and regulations. Periodic review is accomplished in two phases. In phase one, the existing plan and its implementation are evaluated and a

the "arbitrary and capricious" test as inapplicable to Board review under WASH. REV. CODE § 36.70A.320 (1992). The Board instead determined that a "mid-tier" level of analysis would harmonize the seemingly conflicting standards of the GMA, and thereunder asked whether the ordinance in question is "supported by reasoned choices based on appropriate factors actually considered in the record." Clark County, Final Order, at 3-4. The Board emphasized that the burden of showing non-compliance rests on the petitioner. Id.

56. It took nearly twelve years for Oregon's LCDC to acknowledge all city and county comprehensive plans.
59. Id. § 197.253.
60. WASH. REV. CODE § 36.70A.280(2) (1992). Certification by the governor must occur within 60 days of filing the petition with the board.
work program to make needed changes is developed. Phase two is the completion of tasks outlined in the work program. LCDC establishes the schedule for periodic review, and the process allows for self-critique by local governments and for public review. The scope of periodic review includes whether there has been a substantial change in circumstances so that the comprehensive plan or regulations do not comply with the statewide planning goals; whether implementation decisions, or the effects of implementation decisions, are inconsistent with the goals; and whether there are issues of regional or statewide significance, intergovernmental coordination, or state agency plans or programs affecting land use that must be addressed to bring comprehensive plans and regulations into compliance with the goals.

The Washington statute, in contrast, provides only that each county designating UGAs in its comprehensive plan must review, at least every ten years, its designated UGA and the densities permitted within it. The UGA and associated densities must be revised to accommodate the urban growth projected to occur in the county for the succeeding twenty-year period.

Overall, Washington's GMA is structured to give significantly more leeway and control to local governments in the implementation of growth management. Washington's "bottom up" approach is evidenced in the lack of emphasis on regional planning, the presumption of validity provided to local governments' plans and regulations, and the lack of state scheduling and oversight of mandated periodic review. The absence of state coercion over the specifics of growth management implementation in Washington places a premium on public involvement at the local level and greater emphasis on local governments' responsibility to monitor and self-police their plans and regulations to ensure compliance with state GMA goals.

III. DRAWING THE LINE

A. Determining Adequate Capacity

One of the first and most significant ways in which local

62. Id. § 197.633.
63. Id. § 197.628.
64. WASH. REV. CODE § 36.70A.130(3)(1992).
65. Id.
governments can exercise a level of care commensurate with their responsibility is the extent to which they employ rigorous factual analysis in establishing a UGA. If there is a potential fatal flaw in the implementation of UGAs, it is in the difficulty of ensuring an adequate supply of land available for development. If raw land cost is inflated by UGA constraints, affordable land for housing will be difficult, if not impossible, to achieve, new businesses will be deterred from locating within the UGA, and existing businesses may be forced to expand elsewhere or relocate outside the UGA altogether. Under the GMA, affordable housing and economic development are goals of no less weight and priority than containing urban growth and reducing sprawl. In fact, the twenty year land supply requirement arguably gives greater weight to housing and economic goals. Thus, a UGA that contains growth, but drives housing prices out of reach and inhibits opportunities for economic development, miscarry the intent of GMA.

Theoretically, one could challenge a county's UGA for non-compliance with the GMA on the grounds that it provides inadequate capacity to accommodate forecast growth. In addition, if inadequate capacity within the UGA drives up prices, it undercuts one of the implicit assumptions supporting use of UGBs; that is, by making investments in urban facilities and services more predictable, thereby streamlining the overall development process, UGBs theoretically reduce development.

66. Id. § 36.70A.020 (planning goals). The following goals are adopted to guide the development and adoption of comprehensive plans and development regulations of those counties and cities that are required or choose to plan under WASH. REV. CODE § 36.70A.040 (1992). The following goals are not listed in order of priority and shall be used exclusively for the purpose of guiding the development of comprehensive plans and development regulations:

(1) Urban growth. Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.
(2) Reduce sprawl. Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.

(4) Housing. Encourage the availability of affordable housing to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock.
(5) Economic development. Encourage economic development throughout the state that is consistent with adopted comprehensive plans, promote economic opportunity for all citizens of this state, especially for unemployed and for disadvantaged persons, and encourage growth in areas experiencing insufficient economic growth, all within the capacities of the state's natural resources, public services, and public facilities.

Id. § 36.70A.020.
costs. Because adequate capacity within the UGA is essential to affordable housing and economic opportunities, as well as to controlling the cost of development, adequate capacity is the first and foremost issue for planning the UGA.

The term "adequate capacity" involves two complex processes. First, the calculation of land available for development within a proposed UGA. Second, the determination of whether the capacity of that land is "adequate" to accommodate the growth forecast for the planning area—classic demand/supply analysis. While the determination of whether capacity is "adequate" is clearly value laden, it is less clear, but no less true, that the calculation of available land also reflects the public values of a community. How these values play into the capacity calculations is outlined in the four-step process described below. Unfortunately, the process is fraught with complications.

The determination of capacity is impeded by intricacies of calculating vacant and redevelopable land within existing urban areas. The problem is compounded by uncertainties in assessing future need and in converting that need into the gross acreage of undeveloped land necessary to accommodate it. Jurisdictions should take a methodical approach, using rational assumptions. They should strictly record the assumptions employed, test them before establishing lines that rely on these assumptions, and be prepared to recalculate when assumptions prove to be faulty or indicate deleterious results. The UGA should not be adopted until it has undergone sufficient public process and reality checks to fully inform decision-makers of the policy choices and potential lifestyle changes its implementation demands. Finally, jurisdictions must establish a monitoring system that will measure UGA performance and cost.67

The capacity question may be untangled by breaking the analysis into several steps, each defined by terms that embody the assumptions that determine that step. This Article suggests a four step process for determining capacity: (1) inventory the "theoretical land capacity" within the proposed UGA; (2) establish the amount of "developable land" within the UGA by subtracting out physically constrained land and applying land use ratios to account for actual rather than theoretical

67. See infra parts V.A. and D. discussing benchmarks and monitoring respectively.
land utilization or yield; (3) determine the "available land capacity" by calculating the capacity of infrastructure to accommodate growth and by applying a market factor to account for intangible market impacts on availability; and (4) determine whether the available land capacity is "adequate" to accommodate growth forecasts.

1. Step One: Theoretical Land Capacity

In the first step, the planning jurisdiction compiles an inventory of vacant and redevelopable land within existing and proposed urban areas. A listing of these lots may be generated from the tax assessor's database. In King County's first effort at a capacity analysis, a "planning" or "zoning" capacity approach was used. Using this method of capacity analysis, King County planners identified vacant parcels with an improvement value of less than 0.1% of the total value. Redevelopable parcels were identified as those with an improvement value of less than fifty percent of the total value. These tracts (i.e., vacant parcels and redevelopable parcels) were identified, and the capacity attributed to them was the number of units required to achieve one hundred percent of the zoned potential. In all cases, maximum yield of the zoned capacity was assumed.

Contrary to King County's approach, "zoning" or "planning" capacity should not be a part of this initial inventory establishing theoretical land capacity. Theoretical land capacity should be measured in terms of acres and lots or legal parcels. Not only is total acreage important, but equally valuable is an inventory of the legal lots or parcels that comprise this acreage. This step should be a simple measure of the amount of land available for growth, without superimposing upon it

68. In Washington, the planning jurisdiction is the county. The greater the extent to which each element of growth management planning can be mapped on a Geographical Information System, the greater the applicability of the data to other planning areas (e.g., transportation, open space, critical areas, etc.). This will provide for greater accuracy and efficiency in establishing capacity, grant the planner greater flexibility to experiment with alternative patterns, and establish a basis for monitoring.

69. Seattle-King County Association of Realtors, Private Sector Concerns, King County Land Capacity (1992), presented to the Fiscal and Economic Development Committee of the King County Growth Management Planning Council 1 on Dec. 24, 1992.

70. Id.

71. Id.
the amount of growth or number of households that can be accommodated on that land. The collection of raw data establishes an objective foundation for the ensuing subjective debate of what level of density is desirable and realistically achievable. Layering the theoretical land capacity with planning capacity at this early step obscures the facts necessary to develop sound growth management strategies.

The objectivity of this first step is so important that even the formulas used to determine "redevelopable" land should be tested. Planning departments should perform sampling to ascertain to what extent the formula includes aberrations, such as view lots, which have higher land values that would skew the redevelopment count, or small substandard lots that require assembly to develop. After testing the formula in a few representative areas an error factor should be applied.  

2. Step Two: Developable Land

Step two of determining adequate capacity is the calculation of developable land, which is the theoretical land supply with deductions made for all land that will not be developed as residential or commercial/industrial due to natural site constraints. Undevelopable lands should include GMA mandated critical areas such as wetlands, frequently flooded areas, geologically hazardous areas, critical aquifer recharge areas, and fish and wildlife habitat conservation areas, as well as lands the community considers undevelopable for other reasons, such as for their historical or cultural value. Land subtracted for critical areas should be ample enough to account for the buffer frequently imposed to protect them from the effects of development. While critical area deductions should be made as specifically as possible, the calculation obviously depends on data availability. Where specific data is unavailable, the county should provide guidance to cities regarding reasonable percentage deductions.

72. Some communities may choose not to consider redevelopment potential at all. Nothing in the GMA requires a county to rely on redevelopment potential to accommodate 20 year growth projections. Obviously, redevelopment land typically costs more than undeveloped land, so communities that wish to rely on redevelopment to meet the required 20 year land supply still need to ensure that such land is "cost competitive".


75. Percentages should be calculated by averaging specific data compiled by
Also in the developable land step, deductions should be made for the ratio of land needed for roads and public use. These uses can be categorized as (1) parks and recreation (including private amusement parks and municipal golf courses), (2) transportation and utilities facilities (including rights of way, streets, alleys, airports, transit terminals, water facilities, etc.), and (3) institutional uses (including schools, hospitals, police and fire stations) as well as quasi-public facilities such as churches, synagogues, and fraternal organizations.\(^76\) For large and small cities alike, a 1992 survey shows that the ratio of developed land for such public uses averaged just over thirty percent.\(^77\) This public use ratio has declined from 1955 averages of forty-eight percent for small cities and fifty-one percent for large cities.\(^78\)

While the ratio of land dedicated to public use can be manipulated by policy and planning, jurisdictions must determine whether diminution of the ratio is desirable or justified considering the implications of other simultaneous policy decisions. For instance, consider the relationship between single family homes and parks. The rule of thumb is that one acre of park supports one hundred residents.\(^79\) While many communities have fallen well short of that goal for the past twenty years, that deficit has been less noticeable in light of the increase in single family homes, which generally have private front, side, and back yards. During the same 1955-1992 time frame in which public use ratios declined by sixteen to nineteen percent, single family homes as a percentage of all residential use increased from thirty-six to forty-one percent in jurisdictions with similar geography and soil types. Also, the percentage figure should reflect the tendency to use unconstrained lands first. Thus, in jurisdictions where the ratio of developed to undeveloped land is higher, the percentage of vacant land constrained by sensitive areas is also likely to be higher than in a geographically similar jurisdiction where land is largely undeveloped.


\(^77\) *Id.* at 4, 5. Compare this finding with an estimate by Washington's Department of Community Development (DCD), which recommends jurisdictions assume that 17 to 30 percent of vacant lands designated for urban development will be needed for rights-of-way when major roads are not in place. WASH. DEPT COMM. DEV., *ISSUES IN DESIGNATING URBAN GROWTH AREAS: PROVIDING ADEQUATE URBAN AREA LAND SUPPLY Part II*, at 10 (Mar. 1992) [hereinafter DCD REPORT].

\(^78\) Harris, *supra* note 76, at 1. Among other interpretations, this dramatic decrease indicates the strain that our public facilities are under from the lack of infrastructure investment over the past several decades.

\(^79\) *Id.* at 4.
small cities, and from thirty-two to thirty-eight percent in large cities.\textsuperscript{80}

In King County, the ratio of single family homes to multifamily in 1990 was far higher than the survey average—with sixty-five percent of residential use being single family.\textsuperscript{81} Even Washington's largest city, Seattle, is far above the survey average for single family homes, coming in at fifty-five percent single family.\textsuperscript{82} However, the twin mainstays of current growth management planning efforts in King County are to increase density\textsuperscript{83} and rely on redevelopable lands to accommodate a large percentage of future growth. This will necessarily require decreases in both lot size and the single family ratio and will create pressure for reducing existing green space in urban areas attributable to vacant undevelopable land. Indeed, much of the opposition to "infill" is the perception that valuable community open space (albeit privately owned) will be lost. This type of development will reduce the amount of private yard space and vacant lots available for recreation. In addition, Washington's GMA may precipitate a loss of farmland because agricultural and forest land within the UGA may not be designated as such unless the jurisdiction has in place a program authorizing transfer or purchase of development rights.\textsuperscript{84} Owing to the interplay of these factors, preservation of livability within the UGA will require that increased densities be accompanied by an increase, not a decrease, in public park and open space.

Another element to consider when deliberating whether jurisdictions can reasonably decrease the ratio of land dedicated to public use is the current infrastructure deficit.\textsuperscript{85} Our transportation facilities in many areas are at, if not exceeding,

80. Id.
81. See KEITH DEARBORN, BOGLE & GATES, THE REAL GROWTH FACTS (Nov. 1992)
82. Id.
83. KING COUNTY GROWTH MANAGEMENT PLANNING COUNCIL, COUNTYWIDE PLANNING POLICIES: RECOMMENDATION TO THE KING COUNTY COUNCIL 15 (June 3, 1992).
85. Public infrastructure spending nationally, as a percentage of gross national product, has steadily declined since the mid-1980s. Capital outlays for public works in the Northwest states (Washington, Idaho, and Oregon) peaked in 1973 at more than three percent of the region's total gross state product (GSP). By the mid-1980s, capital spending in the Northwest region had fallen to less than two percent of GSP. Robert A. Chase, Fragile Foundations: Public Infrastructure and Economic Development, PACIFIC NORTHWEST EXECUTIVE, Apr. 1991, at 11. According to Chase, a likely conclusion is that infrastructure spending in Oregon would have to double to three
capacity. Improvements to reduce congestion will require additional acquisitions of public rights-of-way, whether they be for streets, rail facilities, or high occupancy vehicle lanes. This will increase the ratio of land dedicated to public use, as will public acquisition of open space, wildlife habitat corridors, and other lands that the public must acquire to accomplish livable managed growth. The extent to which these public uses will offset land "savings" accomplished by other policy changes must be carefully considered before any jurisdiction determines that it can significantly reduce the ratio of land necessary for public use.

Next, the developable land remaining after the critical areas and public use deductions have been made should be allocated between residential use and employment use (i.e., industrial, commercial, and retail). Planners should consider historical ratios between these uses. In the 1992 PAS survey, the ratio between residential and employment use ran about 2.4 acres to 1 in large cities. For small cities the ratio was closer to 3 residential acres to 1 commercial/industrial.

Again, planners must use caution in assuming that a policy-driven decrease in the amount of land dedicated to housing the population will automatically, or even desirably, reduce the land necessary to employ it. In this instance, residential use is a measure, not a driver. Where residential acreage has been used to measure land necessary to employ the population, increasing density will require more jobs per residential acre, and thus, unless employment density also increases, relatively more commercial/industrial acreage.

Another quantifiable measure for determining the acreage necessary for commercial/industrial purpose is jobs per acre, but care must be taken in predicting increases in employment density. For example, employment density is greatest in highrise offices, but if the employment forecast for a community is best served by business parks and single story manufacturing facilities, it is not likely that employment density will increase. In reality, increasing the density of residential use

percent of gross state product—or $1.5 billion per year—to achieve Oregon's economic goals and maintain its quality of life by 1995. Id.

86. Local governments in the Seattle area spend about 62 cents out of every public infrastructure dollar simply to maintain existing public capital facilities. This leaves only 38 cents out of every dollar for system improvements and expansion. Id.

87. Harris, supra note 76, at 6.

88. High wage jobs are more frequently found in manufacturing/industrial sectors
may not shrink the land use pie proportionately, but more likely will increase the comparative proportion of land used for commercial and industrial purposes. Ultimately, these ratios will play a role in determining whether the capacity within the proposed UGA is “adequate.”

3. Step Three: Available Capacity

Available capacity takes into account that developable land becomes available for development at different times. The determination of the amount of developable land that constitutes available capacity should involve two calculations. First, cities and counties should calculate reductions to capacity necessary because capital facilities plans and concurrency limit the utilization of developable land. Infrastructure limitations are time sensitive constraints on capacity that should be measurable based on excess capacity of existing infrastructure plus new capacity created by capital facilities plans. Once capacity reductions of developable land due to lack of adequate public facilities have been determined, the next step is to account for unavailability due to market factors.

The second calculation in completing the available capacity step establishes a market factor to account for market generated uncertainties. Property may be held out from development or redevelopment because of property owner preference, cost, stability, or quality of the existing neighborhood, etc. Other properties are marginal for residential development because of their location adjacent to a rail line, power substation, industrial area, or the like. In some instances, properties will be inappropriate for development or redevelopment because of their cultural resource significance (e.g., archeological or historical sites). Finally, some properties will be developed at less than maximum zoned density than in the service sector. However, service sector jobs are more amenable to densification than manufacturing and distribution. Thus, if policies for densification of employment depend on service sector jobs, the consequences for the local economy and personal income must be carefully considered.

89. See infra part III.A.4.

90. DCD REPORT, supra note 77, Part I, at 11.

91. An alternative to accounting for infrastructure constraints on capacity at this stage is to incorporate them as a cap on planned densities when determining “planning capacity.” See infra part III.A.4. discussing adequate capacity.

92. WORKING PAPER, supra note 74, at 5, 8.

93. Id. at 5.

94. Id.
because of neighborhood opposition, permit requirements, market demand, or financing difficulties.

To counter these intangible restraints on availability, a "market factor" should be applied to buffer the UGA and reduce the pressure on land prices. The market factor should be measured as a percentage of developable land or, alternatively, as a percentage of total saturated land use. An amount of developable land equivalent to the market factor percentage should be added to the proposed UGA to augment land supply. By increasing the amount of available land beyond the minimum necessary to meet the forecast demand for the planning period, a market factor reduces inflationary pressure on land prices.

Francis Chapin suggests that a market factor permits flexibility, allowing for "unanticipated choices of individuals and firms who may acquire land in excess of the estimated need, and [the market factor] allows for land which may be held out of use because of legal complications which make the land unavailable for immediate development."95 In addition to simply increasing the land supply and permitting flexibility, a market factor helps to discourage a monopolistic market structure on behalf of builders, developers, and real estate investors. If a supply of developable land becomes greatly curtailed, the market will likely become increasingly less competitive as it becomes dominated by fewer landowners.96 A market factor at least partially mitigates the potential problem of decreasing competitiveness of land markets. Two UGA pioneers, Portland and the Twin Cities, have developed distinct approaches to cushion land prices within the UGA against inflation.

a. Portland Market Factor

When the Columbia Region Association of Governments (CRAG) first proposed its UGB in 1976, it included a market factor of vacant buildable land twenty-five percent in excess of the saturated land use (total developed land) for the twenty year planning period.97 It maintained that the market factor buffer was necessary to maintain acceptable choices of size and

97. UGB FINDINGS, supra note 21, Part I, at vii, 12-14. Responsibilities of CRAG for establishing the Portland Metro UGB were assumed by the Portland Metropolitan
price of land parcels, contending that a market factor of less than twenty-five percent would increase the danger of constraining vacant land supply, causing the price of land to appreciate.  

Portland used a developable land calculation similar to the one proposed in this Article, which deducted steep slope and flood plain constrained lands, and then subtracted forty percent as the ratio of developable land dedicated to public use and therefore not available for private development. A market factor of twenty-five percent of the total saturated land use at the end of the planning period was then added to the developable land figure for the purposes of establishing the UGB. The initially proposed UGB with a twenty-five percent market factor was criticized as providing too much vacant land for development and was sent back. Following legal challenges, a political compromise to reduce the amount of vacant land in Clackamas County to be included in the UGB was reached.

The proposal subsequently reintroduced was substantially similar, but in effect reduced the market factor to approximately fifteen percent of saturated land use for the twenty year period, essentially a "cushion" of 28,152 acres. Translated to future demand, this figure constitutes thirty-seven percent of the net buildable land available within the UGB. Despite Oregon's early initiative and the Portland MSD's planning of its UGB in 1979, a study conducted ten years later to assess its efficiency revealed a number of inefficiencies and unintended consequences. After ten years with a UGB, gross density in the Portland MSD had increased only moder-

Service District on January 4, 1979, which adopted the 1978 CRAG proposal. Leonard, supra note 19, at 99-104.

98. UGB FINDINGS, supra note 21, Part I, at 12. See also METROPOLITAN SERVICE DISTRICT, CRAG URBAN GROWTH BOUNDARY FINDINGS AND SUPPLEMENTAL DOCUMENTS 16-17 (Sept. 1, 1978).

99. PORTLAND METROPOLITAN SERVICE DISTRICT, URBAN GROWTH BOUNDARY PERIODIC REVIEW 59-60 (1992). Portland's calculation included all recorded lots on file with the county assessor equal to or larger than either the minimum lot size of applicable zoning and either devoid of any structures or having no improvement value. Id. at 58.

100. The market factor was challenged in 1000 Friends of Oregon v. CRAG, LCDC No. 78-039 (filed 1978).

101. Telephone interview with Stuart Todd, Assistant Regional Planner, Planning Department Portland Metropolitan Service District (Oct. 30, 1992).

102. 28,152 acres of market factor equals a cushion of thirty-seven percent of the 75,428 acres of net developable land.

103. OREGON DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT, URBAN GROWTH MANAGEMENT STUDY SUMMARY REPORT v (July 1991). This study sought to
ately and the Portland MSD Periodic Review concluded that if current development patterns continued, only 5,374 net buildable acres would remain by the year 2010. In order to avoid imminent expansion of the UGB, the Portland MSD is presently increasing density assumptions and adjusting downward the ratio of public land necessary to support per capita residential and employment development. Whether the “statistical” indication of capacity created by these changed assumptions will prevail over inflationary pressures on land prices remains to be seen.

Portland’s experience in relying heavily on lands designated as “market factor surplus” is instructive for Washington State jurisdictions currently in the process of designating urban growth boundaries. However, Portland’s market factor should not be used blindly. Portland has only recently begun to test its UGB within a period of economic growth, and the surplus designated may prove to be insufficient.

b. Twin Cities Five Year Overage

The Twin Cities Metropolitan Council followed a somewhat different approach when it approved a “metropolitan urban service area” (MUSA) concept in 1975. The Council mandated that urban growth occur within the bounds of the MUSA. According to Steve Keefe, former Metropolitan Council Director, the MUSA was drawn generously in order to avoid driving up the costs of land and housing prices. The original MUSA was drawn to encompass an area supplying an amount of developable land sufficient to meet the twenty year forecast, plus a five year oversupply of urban land. As recounted in a 1988 review of the MUSA, the purpose of the five year oversupply of urban land is “to encourage a realistic scale of public and private planning, yet not make the urban service area so large that it undermines the economic benefits of a regional staging plan. The overage in needed land supply is also intended to temper increases in land prices attributable to a

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identify shortcomings and accomplishments of Oregon’s grown management program. It both identifies a range of issues and arrays proposals for addressing them.

104. Metropolitan Service District, Periodic Review Land Supply Findings 53 (1990); Telephone interview with Stuart Todd, Assistant Regional Planner, Planning Department, Portland Metropolitan Service District (May 23, 1993).

105. Lassar, supra note 32, at 21.

106. Telephone interview with Robert Davis, Twin Cities Metropolitan Council, Senior Planner, Research and Long Range Planning Section (June 8, 1993).
restricted supply."\textsuperscript{107} Essentially, the MUSA contained a twenty-five year supply of land even though the planning period was only twenty years.\textsuperscript{108}

The five year oversupply was based on the initial forecast of demand made when the MUSA was established. This five year oversupply technique for providing a "market factor" is simply another way to build in a safety and flexibility factor to account for uncertainty in calculating developable land. Like a market factor, it provides a hedge against the vagaries of the market. In effect, the choice of a five year oversupply ensured a minimum market factor of twenty-five percent.\textsuperscript{109} The five year oversupply would be equivalent to a twenty-five percent market factor at the beginning of the twenty year period.\textsuperscript{110}

Later, at the mid-point of the twenty year planning period in 1980, the five year overage would be equivalent to a fifty percent market factor.\textsuperscript{111} An important aspect is that MUSA's five year overage requirement applies to each community within the MUSA.\textsuperscript{112} Land availability is continuously monitored by local jurisdictions, and if they find that the local land supply is "below or approaching the five year overage and regional facilities are adequate," the Council will agree to a Service area expansion.\textsuperscript{113}

The focus of supplementing the UGA with an additional five years of growth has the advantage of explicitly acknowledging that the UGA designation is based on a forecast of

\textsuperscript{107} TWIN CITIES METROPOLITAN COUNCIL, METROPOLITAN DEVELOPMENT AND INVESTMENT FRAMEWORK 52 (1988) [hereinafter MDIF REPORT].

\textsuperscript{108} Id. The Metropolitan Council discounted the developable land both for environmental constraints and for areas lacking adequate public facilities. Id. at 54. Lands identified as having wetlands, floodplains, or bedrock areas were removed from capacity estimates of the land supply. Id. at 52.

\textsuperscript{109} The actual percentage of 20-year demand may fluctuate, depending on which five year period is used as a basis of the overage. For instance, when the Portland Metro went through the exercise of applying its interpretation of the Twin Cities five-year overage concept to its own UGB, it concluded that it amounted to a 21.7 percent market factor over total saturated land use. See UGB FINDINGS, supra note 21, Part I, at 13.

\textsuperscript{110} The MUSA was approved in 1975 for a planning period to run through 1990. However, the MUSA was developed over a period of years based on 1970 figures, and constituted, in that sense, a twenty year planning period. Telephone Interview with Robert Davis, supra note 106.

\textsuperscript{111} MDIF REPORT, supra note 107, at 52. According to the Metropolitan Council, the 1975 framework was a guide for planning by the Council and local communities to the year 1990. The 1988 framework extended the planning "horizon" to the year 2000. See id. at 5.

\textsuperscript{112} Id. at 52.

\textsuperscript{113} Id. at 57.
demand for land. By directly linking the overage factor to the demand forecast, the technique compensates for uncertainties and inherent inaccuracies in forecasting demand over time. Growth pressure in the Twin Cities area has been low to moderate since the imposition of the MUSA. Nevertheless, the five year overage seems to have helped avoid inflationary land costs and housing price inflation resulting from the imposition of the MUSA. However, like Portland, the Twin Cities Metropolitan Council has found that the imposition of the MUSA has not discouraged low-density growth at the urbanizing fringe. It is now considering whether to take more direct action in the next decade to create greater density and remedy disincentives to redevelopment and infill in the inner cities and first ring suburbs.

The experiences of Portland and the Twin Cities indicate that even where a thorough land capacity study is developed, which accounts for undevelopable lands and lands necessary for public use, a market factor of at least twenty-five percent in excess over the net developable land should be applied to avoid significant increases in land and housing prices associated with regulations restricting development. In addition, a primary lesson from experiences with growth boundaries is that the greater the market factor, the less need for routine expansion of the UGA. Even so, monitoring is a necessary counterpart to enable jurisdictions to adjust course. The further into the future jurisdictions try to project, the less precise they can be, and the greater the likelihood that circumstances will change or faulty assumptions will come to light that invalidate the capacity formulation. Monitoring is also critical to ensure that growth patterns within the UGA are accomplishing goals and are not haphazardly sprawling to the border.

If a UGA is designated without adequate capacity, unintended consequences, such as inflationary land and housing costs and shifting of urban development patterns to jurisdictions with capacity, will likely undermine the growth management program’s effectiveness. The goal is to balance the

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114. "The MUSA provides a sufficient amount of land to accommodate development to the year 2000, plus a five-year ‘verage.’ This policy is to avoid unduly restricting the supply of developable land and driving up its cost." METROPOLITAN COUNCIL, METROPOLITAN DEVELOPMENT AND INVESTMENT FRAMEWORK STAFF REPORT: BACKGROUND AND ISSUES 10 (Pub. No. 640-92-097, Sept. 25, 1992).

115. See id.

116. Lassar & Porter, supra note 1, at 33.
accomplishments of the UGA with the costs that it imposes on livability. A market factor—either the Portland MSDs excess over saturated use technique or the Twin Cities five year over-age technique—aids in designating a UGB that takes into account the fact that developable land becomes available at different times and cushions against undesirable consequences of insufficient capacity.

4. Step Four: Adequate Capacity

Having determined the available land supply, the fourth step is to make the determination of whether the available land is "adequate" to accommodate the twenty year growth projection. In this step, planning or zoning capacity becomes critical, and the full weight of growth management policies comes to bear. The key issue here is land utilization. For example, what residential density is necessary given the available land supply to accommodate the twenty year population forecast? How does that compare to current average densities countywide, and what changes in zoning regulations will be necessary to achieve it? Also essential to this inquiry is whether the market will bear the changes demanded by the assumptions and policies used. If the forecast population cannot be accommodated on available land within the proposed UGA without unacceptable increases in housing cost and improbable constriction of housing choices, then the UGA has been drawn too small.

The determination of whether land capacity is adequate should reflect a realistic assessment of the ultimate density that will be achieved. "Zoning" or "planning" capacity is generally based on the unwarranted assumption that vacant parcels in the inventoried land will be developed at the maximum density permitted by zoning regulation or at the density envisioned in the jurisdiction's comprehensive plan. Realistically, vacant land typically develops at densities below those planned or zoned. If the total number of acres are categorized by lot or legal parcels in the land capacity analysis, then realistic estimates of the ultimate density necessary to accommodate

117. "Based upon the population growth management planning projection made for each county by the office of financial management, the urban growth areas in the county shall include areas and densities sufficient to permit the urban growth that is project to occur in the county for the succeeding twenty-year period." WASH. REV. CODE § 36.70A.110(2) (1992).
growth can be more readily established. In addition, jurisdictions need to exercise caution when relying on significant amounts of redevelopment to sustain capacity. If redevelopment contributes a significant share of planned capacity, jurisdictions will need to take actions to make redevelopment lands competitive with vacant land.

Historical densities and land utilization trends, as well as estimates of the effects of current trends and proposed growth management policies, should be used to establish the probable ultimate density for the inventoried lands. With this type of realistic analysis, the available land capacity can be used to more accurately predict future development patterns than a hypothetical "zoning" and "planning" capacity.

B. Drawing the UGA Boundary

Having used the above described four-step process to determine the acreage needed within the UGA to house, employ, and provide adequate recreational opportunities for the twenty year growth forecast, the next question is where that acreage will be located. UGAs need not be concentric circles of dense centers surrounded by low-density suburbia, the bounds of which are demarcated by a hard rural edge. Rather, planners should be flexible, logical, and innovative in laying out UGAs. They should capitalize on existing transportation corridors and infrastructure, but should also be planning long-range for the best location of new transportation systems and capital facilities in presently undeveloped areas. Natural geographic boundaries should be used to help define the outer perimeter as well as allowing greenbelts, resource land, and low density rural areas to function as urban separators within the UGA.

UGAs in Washington include certain givens. By definition, each city located within a county planning area under the GMA is an urban growth area. Furthermore, counties must balance policies promoting contiguous and orderly development with the mandate that each UGA include greenbelt and open spaces. This mandate may require locating the UGA boundary further into the rural area than might otherwise have been anticipated. In Washington, it requires

118. Id. § 36.70A.110.
119. See id. § 36.70A.210(3)(b).
120. See id. § 36.70A.110(2).
acknowledging that so-called "rural cities" are urban growth areas and must accommodate urban growth outside the main body of the UGA. In addition, counties may reserve a portion of the twenty year growth forecast to be accommodated by new fully contained communities located outside the established UGA.\(^{121}\)

The Minneapolis program includes the concept of free-standing growth nodes. Development is encouraged in eleven free-standing rural centers—medium-sized cities with their own employment base, housing, and public services that are located in the rural portion of the region.\(^{122}\) Urban areas outside the main UGA should not be seen as a failure of the UGA, but as an element that can be essential to its proper implementation.

Likewise, perhaps "fingers" of rural land and open space should extend into the UGA, particularly along transportation corridors. Consideration should be given to allow existing rural areas within the UGA to remain as they are rather than to zone them for high density infill. Nor must a county designate just one, contiguous UGA. A county may choose to designate several distinct UGAs separated by open space corridors\(^ {123}\) or resource lands. For instance, the King County Countywide Planning Policies call for "urban separators," defined as low density areas or areas of little development within the UGA, that protect resource lands and environmentally sensitive areas and create open space corridors within and between urban areas.\(^ {124}\) Urban separators provide environmental, visual, recreational, and wildlife benefits. They are not to be redesignated in the future to urban uses or higher densities.\(^ {125}\) Rural areas within a UGA can also help meet acquifer recharge, water quality, and storm water management goals.

A look at the configuration of several established UGAs in other jurisdictions illustrate some available options. For instance, the Twin Cities follows the concentric growth forma-

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121. Id. § 36.70A.350(2). New fully contained communities must meet the criteria established in this provision.

122. Lassar, supra note 32, at 21.

123. WASH. REV. CODE § 36.70A.160 (1992) requires comprehensive plans to identify open space corridors within and between urban growth areas.

124. KING COUNTY GROWTH MANAGEMENT PLANNING COUNCIL, COUNTYWIDE PLANNING POLICIES: RECOMMENDATION TO THE KING COUNTY COUNCIL 16 (June 3, 1992).

125. Id. at 16-17.
tion, with five separate planning areas and specific objectives for each area. The metro centers of Minneapolis and St. Paul are the two hubs of Planning Area I, surrounded by city outskirts and existing suburbia of Planning Area II. Planning Area III is where the most active urbanization is occurring. Planning Area IV is designated rural, with significant growth restrictions to preserve the agricultural economic base, in which metropolitan scale development is precluded except for new free-standing rural towns and cities where development of a local economic base will be emphasized.

An alternative is the "radial corridor" plan of the Washington, D.C. area. The configuration is of a dense metropolitan center with six corridors of urban growth radiating out from the axis along established high volume transportation routes. The plan was selected to sustain the greatest opportunity for mass transit and to provide much needed open space close in to the urban core.

Yet a third alternative also revolves around freeway routes with free standing urban centers located along the freeways and at intersections between major north-south and east-west freeways. The pattern accommodates a lower density region that relies heavily on cars as the principle form of mobility.

Naturally, the configuration that a jurisdiction selects will be heavily influenced by existing development patterns. However, jurisdictions should remain flexible and consider taking actions that encourage changes in existing patterns if they make sense and increase options for yet undeveloped areas.

Finally, the UGA boundary must be coordinated between counties to ensure that a tight boundary in one county does not simply intensify growth pressures in adjacent counties. The growth forecasts for the Central Puget Sound counties provide

127. Id.
128. Id.
129. Id.
130. Id. at 1046.
131. Id.
132. Id.
133. Id. at 1047.
134. Intercounty growth pressures are readily illustrated by King and Snohomish County growth patterns. For example, King County adopted an extremely stringent sewer service boundary in 1978. Subsequently, Snohomish County, with no sewer
a case in point. For the 1990-2010 time period, the Puget Sound
Regional Council projects that new job formation in King
County will more than triple that in Pierce County—330,000
new jobs in King County versus 92,000 in Pierce County.\textsuperscript{135}
Will this projection become reality? This question cannot be
answered without first understanding whether the proposed
UGA in both counties contains an adequate supply of available
land. This inquiry is complicated by the fact that, at present,
King County expects more than fifty percent of its growth to
occur on lands requiring redevelopment. In sum, the complica-
ted interrelationships between adjacent UGAs underscores
the difficulty of accurately predicting necessary capacity and
the importance of flexibility in designing and implementing
UGAs.

\textbf{C. An Evolving Process}

Once adopted, work on the UGA must not become dor-
mant. Adoption of a UGA simply initiates an ongoing process.
Appropriate and effective functioning of the UGA requires the
ability to make mid-course corrections in response to changed
circumstances or discovery of faulty assumptions in establish-
ing the UGA. Both the “when” and “how” of UGA amend-
ments should be prescribed at the time of adoption to reduce
uncertainty and controversy later. Jurisdictions must also rec-
ognize that the UGA is not a permanent demarcation of avail-
able land, but a temporal snapshot anticipating where growth
should occur during the planning period following UGA adop-
tion. Oregon’s ten year review reveals some undesirable UGB-
related development patterns that are detrimental to growth
management as a whole.

\textbf{IV. Oregon’s Experience After Twenty Years}

Almost twenty years after enacting growth management,
and ten years after acknowledgment of its UGB, Portland’s
review has disclosed unsettling facts about development within
and outside of the UGB. Planning efforts under the growth
management system have not eliminated sprawl within the

\footnotesize{\textsuperscript{135} Puget Sound Regional Council, Puget Sound Subarea Forecasts:
Model Calibration and Forecasts 11 (Apr. 1992).}
UGB.\textsuperscript{136} Along with persistant sprawl, urban areas continued to be plagued by under-provision of roads, parks and other urban service facilities, a combination that threatened long-term urban livability.\textsuperscript{137} In its periodic review, LCDC found that livability in Oregon's fastest growing communities was slipping, as measured by a number of indicators. Regarding transportation related indicators, livability was affected by rising traffic congestion, declining air quality, and growing automobile dependency.\textsuperscript{138} Livability also suffered due to lagging development of new parks.\textsuperscript{139} In addition, housing prices and rental rates increased faster than personal and median family income for the same period.\textsuperscript{140} LCDC also expressed concern that decline in the above stated "physical" measures of livability could also result in deterioration of other aspects, like public safety, educational opportunities, and cultural amenities.\textsuperscript{141}

The periodic review reported that sprawl within the UGB was the single most significant reason for slipping livability.\textsuperscript{142} While the Portland UGB fared better than other Oregon UGBs at reaching the desired mix of multifamily to single family housing, single family subdivisions within the Portland UGB still developed at only sixty-seven percent of density allowed under comprehensive plans.\textsuperscript{143} Single family housing in the Portland MSD for the 1985-89 study period developed at approximately five units per net acre.\textsuperscript{144} Net density, including

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\textsuperscript{136} Oregon Dep't of Land Conservation and Dev., Urban Growth Management Study: Summary Report v (July 1991) [hereinafter DLCD Report].
\textsuperscript{137} Id.
\textsuperscript{138} Id. at 6. Traffic volume and level of service estimates documented increasing congestion in Bend, Medford, and Portland, especially at suburban locations. In 1990, Portland experienced the highest number of federal air quality violations for ozone in ten years, and total vehicle miles traveled in the Portland metro area grew by more than 40% from 1982 to 1988. Id.
\textsuperscript{139} Id. While certain areas of the Portland MSD increased their park land holdings by six percent, Clackamas County added almost no park land.
\textsuperscript{140} Id. at 6-7.
\textsuperscript{141} Id. at 7.
\textsuperscript{142} Id.
\textsuperscript{143} 1000 Friends of Oregon and The Home Builders Ass'n of Metropolitan Portland, Managing Growth to Promote Affordable Housing: Revisiting Oregon's Goal 10, Technical Report 24, 33 (Sept. 1991) [hereinafter 1000 Friends Housing Report]. Multifamily housing in the Portland area accounted for 54% of residential building occurring between 1985-89. The higher rate of multifamily housing development was probably not precipitated by the UGB itself, but by the Portland Metropolitan Housing Rule, under which local comprehensive plans (excepting small, developed cities) must allow at least 50% of new housing to be multifamily or attached single family. Id. at 27-28.
\textsuperscript{144} DLCD Report, supra note 136, at 8.
\end{flushleft}
multifamily, reached nine units per net acre. Applying the historical ratio, overall gross density increased moderately, approximately three units per gross acre.

Two techniques proposed by DLCD to counter sprawl within the UGB are “focused growth plans” and “cooperative microplanning.” Under focused growth plans, adequate public facilities requirements would be established and public infrastructure would be concentrated in areas designated to meet five- to ten-year growth needs. The intent of focused growth plans is to sequentially concentrate public and private investment within the UGB in areas fully-serviced with urban service facilities.

Cooperative microplanning envisioned a process in which local governments, citizens, and developers would collaborate on an urban design for an area. The design would provide for all urban facilities and would specify land uses, street designs, landscaping and development standards at a level of detail that would allow permit approvals without discretionary reviews. The combination of strategies strives to (1) attract new development to preferred growth areas by providing public infrastructure and services there first and (2) rein in increased housing costs by decreasing neighborhood opposition and resultant procedural delays to development by investing all affected constituencies in the development of and adherence to objective design standards. The problems recognized through the periodic review, and actions proposed to address them, underscore the inability of UGBs alone to change development patterns or improve livability within the UGB. In addition to problems identified within the UGB, related complications were also identified to be occurring outside the boundary.

Recent residential development at the perimeter of the UGB has resulted in a “ring of low density residential development around much or all of the UGB in each of the four case study areas.” This “fringe” development continues the sprawl pattern, diverts infrastructure resources from the urban

145. Id.
146. The Authors have found an inherent difficulty in finding like figures to compare, probably because jurisdictions are regularly amending (and hopefully improving) their data collection process.
147. DLCD REPORT, supra note 136, at v.
148. Id. at vi.
149. Id. at 33. The four case study areas are the Bend, Brookings, Medford, and Portland areas. Id. at 5.
area, and requires provision of urban services to low-density rural areas at increased cost per capita or household. It also impedes the efficient expansion of the UGB when it becomes necessary, which ultimately speeds the consumption of resource lands for urban use.

Oregon's Department of Land Conservation and Development's (DLCD) urban growth management study found that significant amounts of residential development had occurred outside UGBs but within commuting distance of the urban areas.\textsuperscript{150} The so-called "exurban" development was occurring on lands zoned for commercial farm and forest production, as well as "exception lands," which are lands outside the UGB but identified as "committed" to uses other than farming or forestry and available for uses such as low-density residential development.\textsuperscript{151} In the metropolitan Portland area, approximately nine percent of the 20,721 single family dwelling units built or placed in the area from 1985 through 1989 were located outside of the UGB.\textsuperscript{152} While the overall exurban residential growth\textsuperscript{153} was nine percent, each of the three counties comprising the metropolitan Portland area experienced different degrees of growth outside of the UGB.\textsuperscript{154} In Clackamas County, about twenty percent of single family growth between 1985 and 1989 occurred outside the UGB.\textsuperscript{155} In contrast, both Multnomah and Washington County experienced only about four percent of their single family growth outside the UGB.\textsuperscript{156} The difference between Clackamas County and the other two counties may be attributed to the fact that Clackamas County has an unusually large amount of exception lands.\textsuperscript{157} Conse-

\textsuperscript{150} Id. at vi.
\textsuperscript{151} Id. at vi-vii. The designation of exception lands is governed by Oregon's Goal 2. OREGON PLANNING GOALS, supra note 6, at 4-5.
\textsuperscript{152} OREGON DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT, URBAN GROWTH MANAGEMENT STUDY: PORTLAND CASE STUDY 7 (Nov. 1990) [hereinafter PORTLAND CASE STUDY].
\textsuperscript{153} The "exurban" area comprises the "urban fringe" (areas outside but within 1-2 miles of the UGB) and the rest of the area outside the UGB. OREGON DEPT. OF LAND CONSERVATION AND DEVELOPMENT, URBAN GROWTH MANAGEMENT STUDY: CASE STUDIES REPORT 11 (Jan. 1991) [hereinafter CASE STUDIES REPORT].
\textsuperscript{154} PORTLAND CASE STUDY, supra note 152, at 7.
\textsuperscript{155} Id.
\textsuperscript{156} Id.
\textsuperscript{157} One might surmise that development of the Clackamas County "exception lands" is quite possibly related to the exclusion of vacant acreage in that county from the UGB as part of the compromise regarding the side of the market factor allowed for the Portland MSD. See supra text accompanying note 100. Such a relationship would
quently, outside the metropolitan Portland area UGB, a land use pattern has emerged that can be described as "a ring of low density, rural development." 158

The Oregon study concluded that the large amount of low-density residential just outside and encircling the UGB undermined the "ability to provide urban service needed to accommodate growth and maintain livability" inside UGBs. 159 This low-density "ring" stretches limited governmental resources and exacerbates the already impaired ability of service providers inside a UGB to finance the urban infrastructure needed to accommodate growth. 160 Because new households may locate anywhere within a UGB, or even outside of it, uncertainty is created regarding where new residential development will locate, and jurisdictions experience difficulty in forecasting revenue streams necessary to finance new urban services—such as a new sewer or water line. 161 Unpredictable development patterns within the UGB also indicate the need to create incentives to attract growth to targeted areas, and thereby improve the ability to plan for and finance infrastructure. Residential growth outside the UGB also undermines the ability of jurisdictions to provide urban services because the lower densities and "haphazard" distribution of rural residential development increase the cost of delivering school, police and fire protection, and other urban services. 162

In addition, low-density, dispersed rural residential development just outside the UGB makes future expansion into, and efficient urbanization of, these areas difficult. The Portland Case Study authors conducted a visual survey of several areas of growing residential development located just outside the metropolitan Portland area UGB. 163 The residential development located immediately outside of the UGB "often occurs on long, narrow lots of two to five acres in strips along county roads." 164 Because of access limitations, newer developments and large lots are often located behind developed strips. 165

confirm the importance of realistically drawing the line to encompass sufficient vacant land.

158. DLCD REPORT, supra note 136, at vi.
159. Id.
160. Id. at 38.
161. Id.
162. Id.
163. PORTLAND CASE STUDY, supra note 152, at 7.
164. Id. at 12.
165. Id. at 13.
these areas of residential growth located on the outside fringe of UGBs, houses generally appeared to be sited "in a random fashion, making future road extensions difficult." These same characteristics of residential development outside of the UGB also undermine the ability of jurisdictions to provide economical urban services because they increase the costs of community water systems and reduce the area's serviceability by public transportation. The resulting increases in both auto dependency and traffic congestion on suburban and urban street systems further undermine livability.

Not only does exurban or hobby farm development have adverse consequences within the UGB, it reduces the efficacy of the UGB to foster resource uses in the rural area. The residential development outside the UGB occurs on land zoned for farming and forest production as well as in lands committed to other uses. Residential development patterns outside of the Portland UGB increase the number of settings in which farming and forest production activities will conflict with urban activities. Likewise, it decreases the amount of open space and negatively impacts the natural beauty around urban areas.

Perhaps the most intractable consequence, however, of the growing ring of low-density residential development around the UGB perimeter is that it constrains the ability of local jurisdictions and the regional authorities to expand the UGB. UGB expansion will be difficult in areas marked by sparse residential development because of citizen and neighborhood resistance to expansion efforts. Residents making homes in the new low-density, dispersed residential growth area, who now enjoy rural residential living, can be expected to oppose UGB expansion and subsequent development in their neighborhoods. Just such neighborhood resistance occurred

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166. Id.
167. DLCD REPORT, supra note 136, at 38.
168. Id. at vi. "Other uses" indicates exception areas allowed by Goal 2. OREGON PLANNING GOALS, supra note 6, at 5. In the view of some commentators, "recent proliferation of hobby farms threatens [the] viability [of commercial farms] by increasing land prices and fragmenting land holdings, thus hindering the expansion of commercial farms and the consolidation of parcels into commercial farming units." T. Daniels & A. Nelson, Is Oregon's Farmland Preservation Program Working?, AMER. PLAN. J., Winter 1986, at 23. However, legislatures and courts have tightened standards regarding future residential development in agricultural zones. See, e.g., Still v. Board of City Commissioners of Marion Cty., 600 P.2d 433 (Or. App. 1979).
169. DLCD REPORT, supra note 136, at 33.
170. PORTLAND CASE STUDY, supra note 152, at 12-13.
when the City of Medford expanded its UGB in 1990.\textsuperscript{171} The owners of acreage homesites located outside the Medford UGB successfully blocked the 1990 attempt to expand the urban growth area into their neighborhood.\textsuperscript{172}

Oregon's UGB has yet to be evaluated fully. Certainly the most recent and perhaps the most thorough analysis is by Gerrit Knapp and Arthur C. Nelson.\textsuperscript{173} Knapp and Nelson conclude that use of the UGB to create denser, more compact cities has yet to be demonstrated.\textsuperscript{174}

V. RECOMMENDED ACTIONS TO MAKE UGAS WORK

Adoption of a UGA must be viewed as the beginning, not as the end of the GMA process. It must also be recognized as a 1970s technique that must be adapted to fit the real growth issues of the 1990s. Congestion and affordability are vastly more important urban issues today than they were twenty years ago. Long distance commuting and two income families are now a necessity for many who wish to realize the American Dream of home ownership. Technology that was a novelty or unheard of in the 1970s, such as home computers, facsimile machines, and cellular phones, are now customary features in many households, offering greater flexibility in where one lives and dramatically changing mobility. Many are now able to pursue their livelihood outside of the urban area, making rural living a lifestyle of choice. Using UGAs to address these issues is made even more complex because, over the last twenty years, we have disinvested in urban area infrastructure. This disinvestment leaves existing urban areas in many communities with little capacity to accommodate more urban growth.

In short, containing urban growth in urban areas has become much harder in the twenty years since UGAs were first utilized. Yet community interest in avoiding urban sprawl has never been higher and the Washington State Legislature has spoken: Growth will be managed using the urban growth area technique. The danger, if the UGA technique is not mod-

\begin{itemize}
\item \textsuperscript{171} DLCD REPORT, supra note 136, at 33.
\item \textsuperscript{172} CASE STUDIES REPORT, supra note 153, at 13, 19.
\item \textsuperscript{173} GERRIT KNAPP & ARTHUR C. NELSON, THE REGULATED LANDSCAPE (Lincoln Institute of Land Policy 1992).
\item \textsuperscript{174} Id. at 67. Although urban land values have increased as a result of UGBs, residential density within UGBs has developed at a lower rate than planned, while outside the UGBs, it has developed at a higher rate than planned. \textit{Id.} at 65.
\end{itemize}
ernized, is that a UGA becomes simply a line to sprawl to and then to be moved once there is no more room within the UGA. Fortunately, promising ideas are being tried to make UGAs work, with perhaps the most promising coming from Oregon.

A. Benchmarks—Making Goals Measurable

Oregon has developed a valuable tool to help implement growth management—benchmarks.¹⁷⁵ The term "benchmarks" expresses a process for converting goals to measurable standards, then measuring actual results against those standards. First developed as an economic development tool that stated concrete objectives, set program and budget priorities, and measured performance, benchmarks are now being recognized in Oregon and elsewhere to have broader application. One valuable new application for benchmarks is setting measurable standards for, and ensuring accountability in, growth management.

In King County, the benchmarks concept has been embraced by a public/private task force convened to develop effective economic development policies for the King County Countywide Planning Policies. At its April 6, 1993, meeting, the Fiscal Economic Development (FIS/ED) Task Force presented its draft economic development policies, which supplemented each policy subject area with sample benchmarks, drawn from Oregon, that would measure progress in achieving the particular policies. A separate section described the benchmarks concept and its intended purpose:

King County will have the best chance of achieving the future it seeks if there is agreement on the vision and all parties work together to accomplish it. By establishing standards for performance, progress can be measured and incremental adjustments made as conditions change. Benchmarks will create a focus for a sustained period of time, which is a key requirement for economic development.¹⁷⁶


¹⁷⁶ King County Fiscal and Economic Development Task Force, Draft Economic Development Policies 12 (Apr. 5, 1993) [hereinafter ED POLICIES]. While the policies were sent to the GMPC without corresponding benchmarks for analysis in the SEIS or King County’s Countywide Planning Policies, a subcommittee is
Similar ideas are surfacing in Pierce and Clark counties.

The benchmarks concept can work equally well to measure performance for other subject areas of Countywide Planning Policies, including UGAs. Jurisdictions should establish benchmarks against which to measure the effectiveness of the UGA. The quality of urban living can also be benchmarked. Measurement criteria might include stability of land and housing prices, increased household size within targeted zones, average commute times, satisfaction with schools, change in home ownership, achievement of target densities, acreage of park and open space per capita, infrastructure levels of service, etc. Some criteria might be measured UGA-wide, but others might be tailored to the goals of specific sub-areas. Selecting benchmarks can help to ensure that the UGA remains a growth management tool to achieve committed objectives, and not an end in itself.

Certain benchmarks should include a "trigger" that would implicate immediate review of the UGA. For instance, an affordable housing benchmark might require reevaluation of the adequacy of the land supply in one of the following situations: (1) a pre-designated increase occurs in median housing price over a set period of time, (2) a pre-set deviation from an established and acceptable absorption rate, or (3) a decline in home ownership. Likewise, a benchmark might call for a certain percentage of new housing construction to occur on infill or redevelopment lots as opposed to new, vacant lots. If new construction occurs solely or predominantly on new, vacant lots, this would consume the most affordable capacity quickly. Benchmarks should indicate a conservative ratio of infill/redevelopment to vacant lot construction to ensure a stable supply of affordable housing over the long term. Such a pattern indicates a need for future action such as expanding the UGA or developing improved incentives to reverse these trends. The consequences of a failure to act could be a sharp rise in housing land prices.

Perhaps the greatest advantage of benchmarks is that they are readily understood by the general public and that progress in achieving them can be measured and disclosed periodically. Establishment of benchmarks also requires harmonizing goals that can be otherwise conflicting, i.e., housing policies and poli-

continuing to work on the development of fiscal and economic benchmarks for King County.
cies to contain urban sprawl. Of greatest importance, however, is that using benchmarks forces jurisdictions to view growth management as process and not a product, thus requiring communities to commit on a continuing basis to achieve GMA goals rather than to treat the task as completed when the UGA is established.

**B. Metropolitan Housing Rule**

In its attempt to meet affordable housing goals within the UGA, LCDC adopted the Metropolitan Housing Rule in 1981.¹⁷⁷ The rule was intended to provide consumers a greater choice in the “type, location and density of housing.”¹⁷⁸ In theory, the rule provides a way around local political resistance to more affordable housing by requiring all jurisdictions to participate in providing a spectrum of housing construction opportunities.¹⁷⁹ By recognizing that single family homeowners are the ultimate voting base and that their interests in zoning are conservative (i.e., protection of property values against real or imagined threats and continuance of homogenous, single-use neighborhoods), the rule aimed at defusing this entrenched resistance in two ways. First, it took the decision away from local policymakers, or at least it provided them with the “LCDC made me do it” excuse to act.¹⁸⁰ Second, by applying the rule to all metropolitan jurisdictions, it enforced a sharing of the political pain of approving multifamily projects.¹⁸¹ Substantively, the rule mandates that each jurisdiction within the Portland MSD zone its buildable land for six, eight, or ten units of housing per acre, depending on the jurisdiction's location.¹⁸² And it requires that new construction be divided equally between detached single family and fifty percent multifamily or attached single family units.¹⁸³

Following an empirical evaluation in 1990, the rule appears to be achieving its goals.¹⁸⁴ Overall, the housing mix objective is being met, with fifty-four percent of units approved during

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¹⁷⁸. 1000 FRIENDS HOUSING REPORT, supra note 143, at 24.
¹⁸⁰. Id. at 13.
¹⁸¹. Id.
¹⁸². Id.
¹⁸³. Id.
¹⁸⁴. 1000 FRIENDS HOUSING REPORT, supra note 143, at 27-28.
the study period being multifamily. In addition, jurisdictions on the average were achieving sixty-six percent of planned density for single family developments and ninety percent of planned density for multifamily projects.\textsuperscript{185} Portland’s experience with the rule provides some evidence that depoliticizing the approval of projects can improve affordability by providing a more diverse mix and density of housing opportunities, while relieving some opposition and individual project challenges.

C. Oregon’s One Hundred Twenty Day Rule

Oregon has also recognized the value of time and certainty to developers and, therefore, to achieving the goal of affordable housing. In response, the Oregon State Legislature passed the “one hundred twenty day rule,”\textsuperscript{186} another example of UGB implementation worthy of Washington’s attention. Under the Oregon statute, cities must take final action on an application for a permit, limited land use decision or zone change, including resolution of all appeals to a hearing officer on action on a permit application, within one hundred twenty days of the application being deemed complete.\textsuperscript{187} If an application is deemed incomplete, the applicant must be notified of exactly what information is missing within thirty days of receipt of the application.\textsuperscript{188} If the city does not take final action within one hundred twenty days, the applicant may apply in the circuit court of the county where the application was filed for a writ of mandamus to compel the city to issue the approval.\textsuperscript{189} The writ shall be issued unless the city shows that the approval would violate a substantive provision of the city’s comprehensive plan or land use regulations.\textsuperscript{190} The same one hundred twenty day rule also applies to final actions by counties on permit applications, limited land use decisions, and zone changes.\textsuperscript{191}

Under this streamlined permit process, local actions on discretionary permits, including subdivisions, design review, and even planned communities or zone changes, must be com-

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\item \textsuperscript{185} Hales, \textit{supra} note 179, at 14.
\item \textsuperscript{186} OR. REV. STAT. § 227.178 (1991).
\item \textsuperscript{187} Id. § 227.178(1).
\item \textsuperscript{188} Id. § 227.178(2).
\item \textsuperscript{189} Id. § 227.187(7).
\item \textsuperscript{190} Id.
\item \textsuperscript{191} Id. § 215.428.
\end{itemize}
\end{footnotesize}
completed within one hundred twenty days. The limited time frame is appropriate because when proposed projects follow the already adopted comprehensive plan, there should be less need for an extensive local ad hoc review process. While the rule is not always followed as strictly as developers would like, the rule provides developers with a remedy when local governments are truly dilatory and with the ability to allow extra time when governments are acting in good faith. The certainty and reduced permitting time for developers translates into project dollars saved and therefore promotes affordable housing.

D. Monitoring

The use of computers and geographic information systems to monitor land supply is becoming a common practice in the 1990s. These tools are vital components of a UGA system that seeks to avoid adverse land cost and housing price effects of growth management policies. Land information systems have been valuable features of the growth management programs of both Portland and the Metropolitan Council of the Twin Cities. In addition to monitoring land availability, land costs, and housing prices, building permits and development occurring below maximum zoning yield should be tracked. A monitoring system must encompass all the jurisdictions within a UGA and pay particular attention to utilization of redevelopment lands when such lands provide a significant portion of the twenty year land supply.

Land supply monitoring systems are particularly helpful because they can pinpoint "hot subareas" where available supply may not be adequate for projected demand. They also serve as an empirical basis to justify expansion of the UGA in areas where demand for land is exceeding the supply, and support actions to encourage use of land in other areas within the UGA. Lack of capacity overall, or market demand in a particular sub-area of the UGA, may indicate a justifiable reason to amend the UGA. Finally, accurate monitoring systems are an essential underpinning to a successful benchmarks program.

193. Id.
194. Id.
E. Incentive-Guided Development

In order to foster development patterns that will work within the UGA, jurisdictions should consider implementing actions that make urban areas attractive magnets for future growth. Jurisdictions should consider creating focused growth plans for target areas within the UGA that provide for a six year supply of vacant land with full urban service facilities available to it.\textsuperscript{195} The permitting process for developments that meet GMA requirements should be streamlined to attract development. The public provision of infrastructure particularly sequenced with increased density can help counter the fear of decline in services that is associated with densifications. In turn, reduced permitting time can help to counteract land price inflation and foster provision of affordable housing. Densities should be higher than the existing average or trend, but they should be phased in over time so that they do not discourage marketability. By guiding growth and fostering higher densities with incentives rather than mandates, jurisdictions can build an essential base of public support for growth management.\textsuperscript{196}

F. Community Based Microplanning

Jurisdictions should recognize that effective growth management within urban growth areas requires a partnership of public and private interests. A shared commitment is needed to alter trends that are making urban living less attractive. In particular, because containing growth within UGAs will often require increasing densities in existing neighborhoods, particular attention must be given to fitting higher density/intensity projects into a community so that the vitality and stability of the community or neighborhood is enhanced. Recognizing this need, King County's FIS/ED Task Force is proposing a pre-application review process as an integral feature of a permit

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\textsuperscript{195} The six year time period is suggested to match the GMA six year transportation concurrency requirement, WASH. REV. CODE § 36.70A.070(6)(e) (1992), and the capital facilities plan requirements of the GMA, WASH. REV. CODE § 36.70A.070(3) (1992).

\textsuperscript{196} In a survey conducted by Dr. Gary Pivo, respondents' most frequently volunteered advice to others for the use of growth management tools was to generate community and political support for their use. GARY PIVO, GROWTH MANAGEMENT PLANNING & RESEARCH CLEARINGHOUSE, LOCAL GOVERNMENT PLANNING TOOLS 43 (1992).
\end{flushright}
Guidance for Growth

The City of Seattle has also recognized the need for micro-level design review.\(^{198}\)

The approach being analyzed in King County is for local jurisdictions to adopt processes for neighborhood based preapplication review of mixed use and infill projects that increase land use intensity and density. Under this proposal, preapplication review would occur within defined time periods and rely on adopted neighborhood standards.\(^{199}\) In return, jurisdictions should also adopt development regulations that establish defined time periods for prompt permit approval of projects that conform with the countywide planning policies and the jurisdictions’ comprehensive plan. The FIS/ED Task Force proposal is for conforming project approval to occur in less than ninety days, or in the case of tenant improvement permits, in less than forty-five days.\(^{200}\) The proposal incorporates aspects of several Oregon rules, including its one hundred twenty day permit processing rule, benchmarking, and elements of the proposed community microplanning process. This policy recognizes that regulatory reform must start at the local level now and should be accomplished by cities and King County as an integral part of drafting GMA regulations.

**G. Prioritize Infrastructure Funding**

Most of the incentives suggested above require public investment. Local governments need to realize that growth management generally, and increased density in particular, is not cheap. The costs of particular growth management techniques must be analyzed, new and creative funding mechanisms should be explored, and ultimately trade-offs will need to be reached. In the density-cost balancing equation, public investment in infrastructure will be of paramount importance. Impact fees cannot make up for infrastructure deficits, and they hinder growth management by encouraging development at lower densities than planners find desirable.\(^{201}\)

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197. See ED POLICIES, supra note 176, at 8. Policy 14 of the King County Fiscal and Economic Development Task Force was approved by the Growth Management Planning Council (GMPC) for analysis in the Supplemental Environmental Impact Statement on the Countywide Planning Policies.


199. See ED POLICIES, supra note 176, at 8 (ED Policy 14).

200. Id.

201. WASH. REV. CODE § 82.02.050-.060 (1992).
currency, another GMA strategy, pushes growth to areas with infrastructure capacity—areas which may not be the most appropriate for urban growth.\textsuperscript{202}

Infrastructure funding can also be prioritized using the six year capital facility plans and target areas discussed above. One of the innovative features of the GMA is that it links public capital investment to land use planning. If a jurisdiction ensures that it has a six year supply of land that is or will be served with adequate urban services, much of the uncertainty about whether an adequate twenty year land supply exists can be managed through incremental decision-making.

VI. ENSURING LIVABILITY WITHIN THE UGA

One purpose of Washington's adoption of the GMA is to conserve the "high quality of life enjoyed by residents of this state."\textsuperscript{203} Indeed, one the objectives of containing growth within UGAs is the protection of the environment and natural resource industries outside the boundary. However, environmental protection outside of the line does not alone preserve the high quality of life of the Northwest. Integral to quality of life is also the level of livability within the UGA.

Components of livability include access to parks, open space and other recreational opportunities; adequate public facilities; accessibility of jobs, goods, and services close to where you live; affordable housing and a range of housing choices; the ability to move freely from place to place; and preservation of small town and neighborhood character.\textsuperscript{204} Not every neighborhood or community within the UGA needs to offer identical services and opportunities. Indeed, a diversity of offerings is preferable to accommodate the different lifestyles and choices of people living in the region.\textsuperscript{205} Furthermore, the UGA should be designed and implemented to

\textsuperscript{202} Id. § 36.70A.070(6).

\textsuperscript{203} Id. § 36.70A.010.

\textsuperscript{204} While this list may not be complete, indications of "livability" can be found elsewhere. See WASH. REV. CODE § 36.70A.020 (1992); DLCD REPORT, supra note 136, 6-7.

\textsuperscript{205} The Central Puget Sound Growth Planning Hearings Board has held that "a long term purpose of county-wide planning policies is to facilitate the transformation of local governance in the urban growth area so that urban governmental services are provided by cities and rural and regional services are provided by counties." City of Snoqualmie v. King County, Central Puget Sound Growth Planning Hearings Board Case No. 92-3-0004, at 9 (Mar. 1, 1993).
improve, not degrade, livability within the boundary as well as
preserve rural and resource lands outside the boundary.

Increased densities are one of the central mainstays of all
UGA strategies. However, if jurisdictions plan to pack people
into closer living arrangements (i.e., smaller lot sizes, increas-
ing multi-family ratios, and taller multi-family developments),
they must provide neighborhood parks and recreational oppor-
tunities. Nor should people have to drive to the perimeter of
the UGA to find open space. Possibly stemming from our
heavy reliance on private yards to substitute for this need,
most jurisdictions in Washington are woefully lacking in public
park space per capita. Increased density requires increased
provision of parks and open spaces within walking or transit
distance. This will undoubtedly require public acquisition.

Likewise, increased density demands increased public
services, such as more police and fire protection. Jurisdictions
must provide safe playgrounds, parks and schools if they want
to draw families, or anyone, into the city. In fact, much of the
household “growth” in the Puget Sound region is a result of a
reduction in household size. Many of Seattle’s “family” neigh-
borhoods have been increasingly overtaken by single individu-
als and childless couples, as those with children flee to the
suburbs in search of better schools and bigger yards. Seattle’s
population has actually decreased from a high of 557,000 in
1960 to 516,000 in 1990. While population declined, the
number of dwelling units required to house Seattle residents
increased by more than 30,000. A concerted effort by cities
like Seattle to improve in-city schools and parks may help
draw families back to better utilize existing family homes and
to increase household size. In turn, benchmarks should
include increased household size for certain cities and neigh-
borhoods. Obviously, the more families that can be accom-
modated in existing single family homes, the lower the
demand will be for new single family homes on vacant land.

Livability also includes the ability to move from place to
place within a reasonable time frame and the assurance of
affordable housing. In Oregon, traffic congestion and housing

206. CITY OF SEATTLE PLANNING DEPT, TOWARD A SUSTAINABLE SEATTLE,
SEATTLE’S PLAN FOR MANAGING GROWTH, PUBLIC REVIEW DRAFT 9 (Spring 1993).
207. Id. at 10.
208. Seattle’s proposed comprehensive plan accents a continuing decline in
household size (1.2 people per household), expecting 60,000 new households to
accommodate the projected 72,000 population growth. Id. at 12.
prices have increased in case study areas since the imposition of UGBs,\textsuperscript{209} even without rapid growth. The case studies raised concerns that fast growing communities did not appear to be able to fund street and road needs to accommodate growth. If jurisdictions are intending to draw people into target growth areas, those areas must be kept at reasonably low levels of congestion or offer user-friendly transit options.\textsuperscript{210}

Fundamentally, we must recognize that containing urban growth requires changes in lifestyle. Incentives and choices are a key to changing the way we live. A recent survey shows that eighty-five percent of all Americans identify the traditional single family detached home with a yard as the ideal place to live.\textsuperscript{211} Consequently, by a four to one margin Americans would rather own a home some distance from work than rent within easy commuting distance.\textsuperscript{212} People may be willing to accept smaller single family dwellings on smaller lots, especially if livability factors are improved as a trade-off, such as shorter commute, better park and shopping opportunities, or magnet schools. However, UGAs should be viewed as an experimental effort, not as a technique with a well-documented record of success.

Affordable housing for all income levels and assurance of choices in housing is also critical to maintaining livability. More people would probably be willing to accept high density multi-family dwellings if the livability trade-offs were right, for instance, availability of a nearby open-space and safe and maintained neighborhood play-areas. The key is for the trade-off to squarely address the day-to-day needs of urban living, and not necessitate driving far away on the weekend to recreate and escape the pressure of living in an urban area.

Finally, jurisdictions need to address how the UGA can preserve small town and neighborhood character, which add greatly to the concept of livability. This is especially important in Washington where all cities are by definition urban areas. A

\textsuperscript{209} CASE STUDIES REPORT, supra note 153, at v. The CASE STUDIES REPORT also voiced concern that the amount of developed parkland was not increasing as rapidly as population.

\textsuperscript{210} Cars per capita in King county increased from .54 in 1960 to .91 in 1990, and miles driven per capita increased by 80% in the 1980s. See DEARBORN, supra note 81.

\textsuperscript{211} Memorandum from Michael Spence, Governmental Affairs Dir., The Seattle King County Association of Realtors, to Interested Parties (Oct. 28, 1992) (abstracting the Fannie Mae National Housing Survey of June 1992).

\textsuperscript{212} Id.
recent decision by the Central Puget Sound Growth Plannings Hearings Board partially addresses this question. The legal question posed to the Board was whether countywide planning policies could lawfully require a city's local comprehensive plan to include specific community characteristics, including design standards and types of business or scale of development within the city. The Board answered that while the manner in which rural cities fit into the UGA, and the share of population and employment distribution that they are targeted to accept, can be influenced at the county level, the “character” of these rural towns will remain distinctly in local hands.

Land Use Policy 26 (LU-26) of King County's Countywide Planning Policies establishes a process for determining UGAs for rural cities:

In recognition that cities in the rural area are generally not contiguous to the countywide Urban Growth Area, and to protect and enhance the options cities in rural areas provide, these cities [Black Diamond, Carnation, Duvall, Enumclaw, North Bend, Snoqualmie and Skykomish] shall be located within an Urban Growth Area. These Urban Growth Areas generally will be islands separate from the larger Urban Growth Area located in the western portion of the county. Each city in the rural area, King County and the GMPC shall work cooperatively to establish an Urban Growth Area for that city.

The Urban Growth Area for cities in rural areas shall:

a. Include all lands within existing cities in the rural area;

b. Be sufficiently free of environmental constraints to be able to support rural city growth without major environmental impacts;

c. Be contiguous to city limits; and

d. Have boundaries based on natural boundaries, such as watersheds, topographical features, and the edge of areas already characterized by urban development.

LU-26 was found to be an appropriate policy statement that provides a framework for adoption of local comprehensive plans.

213. Snoqualmie v. King County, Central Puget Sound Growth Planning Hearings Board Case No. 92-3-0004, at 29 (Mar. 1, 1993).
214. Id. at 30.
215. Id. at 24-25.
In contrast, LU-27 was found to constitute an impermissible contraint on local land use powers. LU-27 states:

Cities in rural areas shall include the following characteristics:

a. Shopping, employment, and services for residents, supplies for resource industries, including commercial, industrial, and tourism development at a scale that reinforces the surrounding rural characteristic;

b. Residential development, including small-lot single-family, multifamily, and mixed-use developments; and

c. Design standards that work to preserve the rural, small-town character and promote pedestrian mobility.\(^{216}\)

The Board agreed with Snoqualmie's assessment that the policy infringed on the authority of cities because it attempted to dictate aspects of the comprehensive plan that are fundamentally local in nature, such as community character, design standards, types of businesses, and scale of development.\(^{217}\)

The Board elaborated that "[w]hether Snoqualmie chooses to look like a quaint 18th-century Bavarian village or the set of *Star Trek X* (or neither!) should be left to purely local prerogative."\(^{218}\)

Thus, the UGA implication for whether small towns like Snoqualmie, Coupeville, Langley, LaConner, Leavenworth and Winthrop will be able to keep their unique characters will arise from the population and employment growth forecasts. Allowing sufficient capacity within the rural town UGA to creatively accommodate growth is essential to their ability to maintain rural character. However, the form that character will take and the manner in which it will be expressed will be left to the citizenry of the rural towns.

VII. CONCLUSION

Beyond designating areas within which urban growth can occur, UGAs do little to affect the nature or pattern of growth within the UGA boundaries. This creates the danger that the UGA boundary becomes nothing more than a line to sprawl to. Additionally, the establishment of the boundary itself can be

\(^{216}\) Id. at 29-30.

\(^{217}\) Id.

\(^{218}\) Id. at 30.
fraught with political controversy. After fighting the battle to draw the line, local jurisdictions may feel that their task is accomplished and that they can sit back and watch while growth occurs in an orderly and contiguous manner within the confines of the UGA. The unwelcome reality is that drawing the UGA boundary is but one step in a growth management strategy.

The UGA is a rather crude tool for influencing growth patterns. It does not, for example, steer particular types of development to the most appropriate locations within the urban area. To be successful and not to create more problems than they solve, UGAs must be carefully planned, monitored, and supplemented with other growth management strategies that address growth patterns both within the boundary and at the fringe. Further, to ensure that the UGA does not simply shift growth to other urban areas, concerted, committed effort must be expended to make urban areas magnets to attract expected population and employment growth.