



TOURO UNIVERSITY
JACOB D. FUCHSBERG LAW CENTER
Where Knowledge and Values Meet

**Digital Commons @ Touro Law
Center**

Scholarly Works

Faculty Scholarship

2002

Sprawl, Growth Boundaries and the Rehnquist Court

Michael Lewyn

Touro Law Center, mlewyn@tourolaw.edu

Follow this and additional works at: <https://digitalcommons.tourolaw.edu/scholarlyworks>



Part of the [Constitutional Law Commons](#), and the [Land Use Law Commons](#)

Recommended Citation

2002 Utah L. Rev. 1 (2002)

This Article is brought to you for free and open access by the Faculty Scholarship at Digital Commons @ Touro Law Center. It has been accepted for inclusion in Scholarly Works by an authorized administrator of Digital Commons @ Touro Law Center. For more information, please contact lross@tourolaw.edu.

Sprawl, Growth Boundaries and the Rehnquist Court

Michael Lewyn*

I. INTRODUCTION

Over the past several decades, metropolitan America has been revolutionized by suburban sprawl—"low-density, single-use development, married with strip and auto-oriented commercial land uses, at the very edges or beyond the fringe of existing urbanization."¹ Sprawl typically involves: (1) low-density development requiring dependence on automobiles; (2) segregated land uses (that is, commercial uses are far from residential uses); (3) long distances and poor non-automotive access between housing, jobs, and schools; (4) consumption of land for suburban development occurring at a faster rate than population growth; and (5) "consumption of agricultural and/or environmentally sensitive land for suburban development."² At the end of World War II, roughly 70% of metropolitan Americans lived in central cities.³ By contrast, in 1990, only about 40% of metropolitan Americans, and only 31.3% of all Americans, lived in central cities.⁴

*Associate Professor, John Marshall Law School, B.A., Wesleyan University, J.D., University of Pennsylvania Law School, former law clerk for Judges Morris Arnold and Theodore McMillian, U.S. Court of Appeals for the Eighth Circuit. I would like to thank Michael Proctor, Timothy Dowling, Deron Lovaas, Michael Lynch, and Glenn Sugameli for their helpful comments.

¹Lee R. Epstein, *Where Yards Are Wide: Have Land Use Planning and Law Gone Astray?*, 21 WM. & MARY ENVTL. L. & POL'Y REV. 345, 347 (1997). *See also* Home Builders & Contractors Ass'n v. Dep't of Cmty. Affairs, 585 So. 2d 965, 968 (Fla. Dist. Ct. App. 1991) (restating hearing officer's finding that sprawl is "extension of [urban] development into rural, agricultural, or other undeveloped" land); Timothy J. Dowling, *Reflections on Urban Sprawl, Smart Growth, and the Fifth Amendment*, 148 U. PA. L. REV. 873, 874 (2000) (defining sprawl as "low-density, land-consuming, automobile-dependent . . . development on the fringe of settled areas, often near a deteriorating central city or town, that intrudes into rural or other undeveloped areas"); George E.H. Gay, *State Solutions to Growth Management: Vermont, Oregon and a Synthesis*, NAT. RESOURCES & ENV'T, Winter 1996, at 13, 14 (characterizing sprawl as "low-density and/or uneven physical development occurring at the fringe of the urbanized area as well as disinvestment [in] and abandonment of older urbanized areas"); Roberta F. Mann, *The (Not So) Little House on the Prairie: The Hidden Costs of the Home Mortgage Interest Deduction*, 32 ARIZ. ST. L.J. 1347, 1370 (2000) ("[S]prawl is defined as low-density development that extends beyond traditional city boundaries."); *cf.* JAMES HOWARD KUNSTLER, *HOME FROM NOWHERE* 110 (1996) (stating that modern suburbia typically requires "mandatory driving to get from one [land] use to another, and huge supplies of free parking").

²Paul Emrath, *How Communities Manage Growth*, HOUSING ECON., Dec. 1, 2000, at 6, 2000 WL 16440621 (describing each of these factors as one of "various definitions" of sprawl).

³*See* F. KAID BENFIELD ET AL., *ONCE THERE WERE GREENFIELDS* 120 (1999); DAVID RUSK, *CITIES WITHOUT SUBURBS* 5 (2d ed. 1995).

⁴*See* Shelby D. Green, *The Search for a National Land Use Policy: For the Cities' Sake*, 26 FORDHAM URB. L.J. 69, 73 (1998).

In recent years environmentalists,⁵ many planners,⁶ and a few politicians⁷ have sought to limit suburban sprawl. A recent survey by the General Accounting Office (GAO) revealed that 84% of county officials and 64% of city officials rate sprawl as a “high,” “very high,” or “moderate” concern.⁸

Critics of the status quo argue, *inter alia*,⁹ that suburban sprawl:

1. Destabilizes urban neighborhoods, causing “a middle class exodus from the central city, causing in turn crime and the segregation of poorer and minority populations in the declining central city.”¹⁰

2. Destroys farmland and open space; for example, “from 1982 to 1992 [America] lost to urban and suburban development an average of 400,000 acres per year of ‘prime’ farmland, the land with the best soils and climate for growing crops.”¹¹; and

⁵See, e.g., Paul Boudreaux, *E Pluribus Unum Urbs: An Exploration of the Potential Benefits of Metropolitan Government on Efforts to Assist Poor Persons*, 5 VA. J. SOC. POL’Y & L. 471, 501 (1998) (“[E]nvironmentalists . . . decry the development of metropolitan ‘sprawl’ over areas that were once farms, forests and open fields and deplore the resultant increase in automobiles, energy consumption, and air pollution.”).

⁶See Timothy V. Ramis & Andrew H. Stamp, *Integrating Procedural Aspects of Transportation and Growth Management in Oregon: A Critical Look at the Oregon Department of Transportation’s Role as a Growth Management Agency*, 77 OR. L. REV. 845, 849 (1998) (“Today’s planners favor tight street grids, mixed-use development, and higher density.”).

⁷See Michael E. Lewyn, *Suburban Sprawl: Not Just an Environmental Issue*, 84 MARQ. L. REV. 301, 302–03 (2000) (describing former Vice President Al Gore’s criticisms of sprawl); Oliver A. Pollard, *Smart Growth: The Promise, Politics and Potential Pitfalls of Emerging Growth Management Strategies*, 19 VA. ENVTL. L.J. 247, 249, 251–52, 257 (2000) (describing various state and federal “smart growth” initiatives designed to limit sprawl).

⁸Emrath, *supra* note 2. Fifty-three percent of county officials and 35% of city officials said that sprawl was a “high” or “very high” concern, and 31% of county officials and 29% of city officials said that sprawl was a “moderate” concern. *Id.*

⁹These three concerns are not the only arguments against sprawl. However, they are (a) the concerns most directly related to the policies discussed below and/or (b) easier than other citywide or regionwide impacts of sprawl to verify statistically. See BENFIELD, *supra* note 3, at 78–137 (raising additional objections to sprawl, such as effect of sprawl on sense of community and fiscal impacts of sprawl); Mann, *supra* note 1, at 1373 (noting loss of wildlife habitat in suburbanizing areas).

¹⁰Mann, *supra* note 1, at 1371; see also Lewyn, *supra* note 7, at 359–64 (describing impoverishment of cities and older suburbs).

¹¹BENFIELD, *supra* note 3, at 64; see also Dowling, *supra* note 1, at 878 (“[A]most sixteen million acres of forest, cropland and open space on private land [were] lost to development from 1992 to 1997, more than double the annual loss rate experienced from 1982 to 1992.”). But see Clint Bolick, *Subverting the American Dream: Government Dictated “Smart Growth” Is Unwise and Unconstitutional*, 148 U. PA. L. REV. 859, 861 (2000) (remarking that urban and suburban land constitutes only 3.1% of all American land).

3. Forces Americans to drive in order to meet their basic needs, increasing vehicle traffic, thus increasing air pollution¹² and traffic congestion.¹³

¹²See Mann, *supra* note 1, at 1370–71 (“The inhabitants of sprawl depend on automobiles for work and errands, because low-density development discourages walking and use of public transportation; sprawl therefore clogs highways and increases commuting time and pollution.”); BENFIELD, *supra* note 3, at 59 (“[T]he more we have to drive a given car, the more fuel we consume, and the more greenhouse gases and unhealthy pollutants our vehicles emit. . . . Research that shows a connection between sprawling land use and increased driving, as discussed above, also means that sprawling land use contributes to increased energy use and air pollution.”); Dowling, *supra* note 1, at 879 (arguing that although today’s automobiles run cleaner than cars of the 1970s, “millions of Americans still breathe unhealthy air in part because we drive more than twice as many miles as we did in 1970”).

¹³BENFIELD, *supra* note 3, at 30–36 (asserting that sprawl reduces public transit use, thus increasing congestion); Dowling, *supra* note 1, at 875 (noting that “the price tag for lost time and fuel due to sprawl-exacerbated congestion is \$72 billion per year”).

The most stringent¹⁴ anti-sprawl measure adopted by any American state is Oregon's "urban growth boundary" (UGB)¹⁵ program. Urban growth boundaries are "lines on maps, surrounding areas already marked by 'urban-type' development, within which that type of development is to be channeled and encouraged,

¹⁴WILLIAM B. STOEBOCK & DALE A. WHITMAN, *THE LAW OF PROPERTY* § 9.31, at 673 (3d ed. 2000) ("Oregon and Washington statutes have created the most complete [growth control] systems."). Washington's growth control statute is so new that its effects cannot yet be studied. See R. Gregory Nokes, *Others See The Roses, Miss The Thorns*, PORTLAND OREGONIAN, Sept. 28, 1996, at D1 (stating that Washington cities' growth boundaries were not established until 1994). Minnesota has designated a Metropolitan Urban Service Area ("MUSA") to limit the provision of urban services to already-developed areas near Minneapolis and St. Paul. Keith W. Dearborn & Ann M. Gygi, *Planner's Panacea or Pandora's Box: A Realistic Assessment of the Role of Urban Growth Areas in Achieving Growth Management Goals*, 16 U. PUGET SOUND L. REV. 975, 981 (1993). The Minnesota program is toothless, however, because the MUSA encompasses far more suburban land than does the growth boundary of Oregon's largest metropolitan area (Portland). *Id.* at 979–82 (stating that Minnesota service area encompasses 579,000 acres, more than twice as much land as Portland urban growth boundary); Dana Tims, *Standing in the Way of Suburbia*, PORTLAND OREGONIAN, Nov. 2, 2000, at O1 (noting that Portland urban growth boundary encompasses 236,000 acres); THE WORLD ALMANAC AND BOOK OF FACTS 2001, at 406 (William A. McGeveran, Jr. ed., 2001) (establishing that Portland is Oregon's largest city) [hereinafter WORLD ALMANAC]. Also, the gap between Minneapolis and Portland will grow over time because the Minneapolis/St. Paul regional government (the Metropolitan Council) plans to add over 200,000 acres to the MUSA, an area almost equivalent to the 236,000 acres of land within the Portland growth boundary. See James Poradek, Note, *Putting the Use Back in Metropolitan Land-Use Planning: Private Enforcement of Urban Sprawl Control Laws*, 81 MINN. L. REV. 1343, 1359 (1997) (discussing Metropolitan Council plans to expand MUSA).

In addition, numerous cities and counties have their own growth boundaries. See Robert Liberty, *Where Would We Be Without It? SB100 in '73 Changed the Face of Oregon*, PORTLAND OREGONIAN, May 29, 1998, at E13 (stating that twelve California cities have urban growth boundaries). Municipal urban growth boundaries are far more easily leapfrogged, however, than a statewide program; if developers prefer not to build within a municipal urban growth boundary, they can move to another nearby municipality. See Theodore C. Taub & Melissa C. Thorn, *Update on Initiative and Referenda* 505, 530 (A.L.I.-A.B.A. Course of Study, Aug. 26, 1999), WL SE11 A.L.I.-A.B.A. 505 (noting that boundaries may create "[l]eapfrog development or leakage outside the growth boundaries where jurisdictions unilaterally institute urban growth boundaries without any regional or state mandate"); Anthony Downs, *The Big Picture: How America's Cities Are Growing*, BROOKINGS REV., Oct. 1, 1998, at 8, 11 ("If there are no constraints on development in counties lying just outside the growth boundary, developers will leapfrog into those areas."); Neal Pierce, *The Latest from the Growth Wars*, NATION'S CITIES WKLY., Nov. 1, 1999, at 2 (stating that growth boundaries surrounding several California cities are "thwarted by leapfrog development").

¹⁵STOEBOCK & WHITMAN, *supra* note 14, § 9.31, at 673–74 (using term). The UGB is not, however, a new concept. The first recorded "UGB" is found in the Bible, which limited the Levite tribe to specified amounts of land for cities and pastureland. See *Numbers* 35:1–5. The first municipal UGB was established in Lexington-Fayette County, Kentucky in 1958. See Chris Poynter, *Study Finds Rapid Growth Threatens Rural Landscapes*, COURIER-J., Dec. 1, 2000, at 1A.

and beyond which such development is to be discouraged or forbidden.”¹⁶ Outside the boundary, rural industries (such as logging) and open space are promoted.¹⁷

This Article briefly describes Oregon law, and then focuses on three issues: (1) whether UGBs are constitutional under the Supreme Court’s 2001 decision in *Palazzolo v. Rhode Island*¹⁸ and other relevant precedent, (2) whether the UGB has in fact saved Portland (Oregon’s largest city)¹⁹ from the social problems caused by sprawl, and (3) whether the side effects of UGBs make them a cure worse than the disease of sprawl.

II. BACKGROUND: WHAT OREGON LAW REQUIRES

In 1973, Oregon enacted Senate Bill 100, which established a comprehensive statewide growth management program.²⁰ Senate Bill 100 was enacted based on legislative findings that “[u]ncoordinated use of lands within this state threaten the orderly development, the environment of this state and the health, safety, order, convenience, prosperity and welfare of the people of this state,”²¹ and that “[t]he promotion of coordinated statewide land conservation and development requires the creation of a statewide planning agency to prescribe planning goals and objectives to be applied by state agencies, cities, counties and special districts

¹⁶STOEBUCK & WHITMAN, *supra* note 14, § 9.31, at 673–74; *see also* City of Salem v. Families for Responsible Gov’t, 694 P.2d 965, 966 n.3 (Or. 1985) (stating that according to goals of city of Salem, “[a]n ‘urban growth boundary’ is a boundary established to separate urbanizable land from rural land”); 1000 Friends of Or. v. Land Conservation & Dev. Comm’n, 642 P.2d 1158, 1160 (Or. 1982) (“Urban growth boundaries are planning devices which bound areas composed of urban and urbanizable land, separating them from rural land.”) [hereinafter *1000 Friends I*].

¹⁷*See* Gay, *supra* note 1, at 73.

¹⁸533 U.S. 606 (2001).

¹⁹WORLD ALMANAC, *supra* note 14, at 406 (stating that Portland is state’s largest city). This Article focuses on Portland because the ill effects of sprawl, such as urban decay, are more likely to be felt in larger cities. *See* U.S. CENSUS BUREAU, U.S. DEP’T OF COMMERCE, STATISTICAL ABSTRACT OF THE UNITED STATES: 1999, at 46 (119th ed. 1999) (showing that cities with 500,000 to 1 million people lost population during 1970s and 1980s, while smaller cities gained population); Emrath, *supra* note 2 (reporting that officials of larger cities are more likely to consider sprawl “high” or “very high” concern).

²⁰OR. REV. STAT. § 197.005 (1999). More complete descriptions of Oregon planning law are contained in Robert L. Liberty, *Oregon’s Comprehensive Growth Management Program: An Implementation Review and Lessons for Other States*, 22 ENVTL. L. REP. 10367, 10368 (1992), and in *1000 Friends of Oregon v. Land Conservation & Development Commission*, 724 P.2d 268, 273–76 (Or. 1986) [hereinafter *1000 Friends II*].

²¹OR. REV. STAT. § 197.005(1); *see also* 1000 Friends of Or. v. Wasco County Court, 703 P.2d 207, 212 (Or. 1985) (“The impetus behind Senate Bill 100, codified in ORS chapter 197, the framework within which land use planning occurs, was legislative concern that state intervention was needed to stop a process of cumulative public harm resulting from uncoordinated land use.”) [hereinafter *1000 Friends III*].

throughout the state.”²² The Oregon Legislature accordingly created a new citizen commission to oversee the planning program, the Land Conservation and Development Commission (LCDC).²³ The Legislature also created the Department of Land Conservation and Development as LCDC’s staff for implementing the program,²⁴ and directed the LCDC to appoint the Department’s director and supervise its staff.²⁵ The Legislature further required all Oregon cities and counties to adopt comprehensive land use plans and regulations implementing such plans.²⁶ The Legislature defined a comprehensive plan as a “generalized, coordinated land use map and policy statement . . . that interrelates all functional and natural systems and activities relating to the use of lands, including but not limited to sewer and water systems, transportation systems, educational facilities, recreational facilities, and natural resources and air and water quality management programs.”²⁷ Such plans must be consistent with statewide planning goals²⁸ to be drafted by the LCDC.²⁹ Between 1974 and 1976, the LCDC adopted nineteen planning goals.³⁰ Local governments then adopted land use plans, which were reviewed by LCDC.³¹

Although the Oregon Legislature did not directly state that local governments must establish UGBs, it implicitly did so by using the term “urban growth boundary” in numerous statutes.³² So the LCDC satisfied legislative intent when

²²OR. REV. STAT. § 197.005(4).

²³*Id.* § 197.030(1). The LCDC is composed of seven citizens appointed by the governor, subject to state senate confirmation, to serve four-year terms. *Id.* § 197.030(1), (4).

²⁴*Id.* § 197.075.

²⁵*Id.* §§ 197.040(1)(a), .085(1).

²⁶*Id.* § 197.175(2)(a)–(b).

²⁷*Id.* § 197.015(5).

²⁸*Id.* §§ 197.175(1), .250.

²⁹*Id.* §§ 197.225, .230(1)(b).

³⁰*See Liberty, supra* note 20, at 10369.

³¹*Id.* at 10371–73.

³²*See* OR. REV. STAT. § 30.936(1) (“No farming or forest practice on lands zoned for farm or forest use occurring outside an urban growth boundary shall give rise to any private right of action or claim for relief based on nuisance or trespass.”); *id.* § 195.060(2) (“‘Urban growth boundary’ means an acknowledged urban growth boundary contained in a city or county comprehensive plan or an acknowledged urban growth boundary that has been adopted by a metropolitan service district council.”); *id.* § 195.205 (stating that local governments may annex territory “situated within an urban growth boundary”); *id.* § 197.200(1) (stating that local government may adopt plans for “a neighborhood or community . . . inside the urban growth boundary”); *id.* § 197.295(7) (“‘Urban growth boundary’ means an urban growth boundary included or referenced in a comprehensive plan.”); *id.* § 197.298(1) (stating that “land may not be included within an urban growth boundary except under the following priorities” and then setting priorities); *id.* § 197.626 (“A city with a population of 2,500 or more within its urban growth boundary that amends the urban growth boundary to include more than 50 acres . . . shall submit the amendment or designation to the Land Conservation and Development Commission in the manner provided for periodic review.”); *id.* § 197.752(1) (“Lands within urban growth boundaries shall be available for urban development.”);

it enacted Planning Goal 14, which specifically requires every incorporated community to establish a UGB³³ that excludes rural land.³⁴ The Oregon courts have interpreted Goal 14 “to prohibit urbanization outside existing UGBs”³⁵ and therefore to “preclud[e] the conversion of rural land to urban use”³⁶ outside UGBs.³⁷ Neither Goal 14 nor any other LCDC rule defines the term “urban use.”³⁸ However, the Oregon courts have held that an outdoor performing arts center seating 15,000 people is an “urban”³⁹ land use, as are “areas of half-acre residential lots to be served by community water and sewer.”⁴⁰ On the other hand, “residential density of one house per ten acres is generally not an urban intensity.”⁴¹

Land outside UGBs may be converted to “urban use” only if such land is physically developed to the extent that it is no longer available for rural land uses⁴² or is “irrevocably committed to urban levels of development”⁴³—that is, if “it is *impracticable to allow any rural uses* in the . . . area.”⁴⁴ To take advantage of these exceptions to Goal 14 (or to “take an exception,” in the terminology used by Oregon courts),⁴⁵ a local government must show not only that commercial farm or forest use is impractical, but that all other rural uses (including sparse settlement, small farms, etc.) are impractical.⁴⁶

id. § 197.754(1) (“A local government may identify land inside an urban growth boundary for which the local government intends to provide urban services.”).

³³See *Liberty*, *supra* note 20, at 10375–76.

³⁴See *1000 Friends III*, 703 P.2d at 214–15 (defining “rural land” as land which is outside urban growth boundary and devoted to “[n]on-urban agricultural, forest or open space” purposes or otherwise “not suitable, necessary or intended for urban use”). Goal 14 also creates two other categories of land, urban land and urbanizable land. See *1000 Friends I*, 642 P.2d at 1160. Urban land is land near an incorporated city that may have concentrations of population or public services. *Id.* Urbanizable land is a “transitional category” comprised of “rural land which is most suitable to become urban as needed to accommodate urban population growth.” *Id.* In other words urbanizable land is “that land within the UGB which has not yet been converted to ‘urban uses.’” *1000 Friends II*, 724 P.2d at 302.

³⁵*1000 Friends III*, 703 P.2d at 224 n.22 (citations omitted).

³⁶*Hammack & Assoc. v. Washington County*, 747 P.2d 373, 374 (Or. Ct. App. 1987).

³⁷See *1000 Friends II*, 724 P.2d at 285 (“[A]ny county whose comprehensive plan converts ‘rural land’ outside of established urban growth boundaries to ‘urban uses’ must either (1) show that its action complies with Goal 14, or (2) take an exception to Goal 14.”).

³⁸*Hammack*, 747 P.2d at 374.

³⁹*Id.* at 376.

⁴⁰*1000 Friends II*, 724 P.2d at 305.

⁴¹*Id.*

⁴²*Id.* at 300–01.

⁴³*Id.* at 291 (citation omitted).

⁴⁴*Id.* at 296.

⁴⁵*Id.* at 285.

⁴⁶*Id.* at 300.

A UGB must contain the urban core and sufficient undeveloped land to accommodate population growth.⁴⁷ UGBs are drawn and amended based on seven factors enunciated in Goal 14: (1) the need to accommodate long-term population growth consistent with LCDC goals, (2) the need for housing, employment opportunities, and livability, (3) the orderly and economic provision for public facilities and services, (4) maximum efficiency of land uses, (5) the environmental, energy, economic, and social consequences of a plan, (6) the retention of agricultural land uses, and (7) the compatibility of urban land uses with nearby agricultural activities.⁴⁸

Portland's UGB is administered by a regional agency, the Portland Metropolitan Service District (commonly known as "Metro").⁴⁹ Metro has the power to force cities and counties to amend their land use plans to conform with the boundary set by Metro.⁵⁰ The Portland metropolitan UGB was adopted by Metro in 1979, approved by LCDC in 1980,⁵¹ and encompasses twenty-four municipalities, portions of three counties,⁵² and 369 square miles (or 236,000 acres) of land.⁵³

III. CONSTITUTIONALITY: ARE UGBS AN UNCONSTITUTIONAL "TAKING" OF LAND?

The United States Constitution provides that private property may not "be taken for public use, without just compensation."⁵⁴ It is not clear that the Framers of the Takings Clause intended it to restrict regulation of property (as opposed to

⁴⁷See Liberty, *supra* note 20, at 10375–76.

⁴⁸See *1000 Friends III*, 703 P.2d at 215 (listing factors); *id.* at 222 (noting that these "seven factors for establishing a UGB are intended to determine *how much* land and *which* land may be included in a UGB" (citation omitted)).

⁴⁹Liberty, *supra* note 20, at 10377; see also OR. REV. STAT. § 268.390(3) (2001) (requiring metropolitan service district to adopt UGBs).

⁵⁰See OR. REV. STAT. § 268.390(4) (stating that district may review cities' and counties' comprehensive plans and "recommend or require cities and counties, as it considers necessary, to make changes in any plan to assure that the plan and any actions taken under it conform to the district's functional plans . . . and its urban growth boundary").

⁵¹Portland Metropolitan Service District, *Background: What Is an Urban Growth Boundary?*, at <http://www.metro-region.org/growth/ugbursa/ugb.html> (last visited Apr. 18, 2002).

⁵²See R. Gregory Nokes, *Oregon Measure 7 Clouds Future of Urban Growth Boundaries*, PORTLAND OREGONIAN, Nov. 14, 2000, at B1.

⁵³*Id.*; see also Tims, *supra* note 14 (referring to "236,000 acres girded by Portland's urban growth boundary"). The boundary encompassed about 221,000 acres when it was approved. Liberty, *supra* note 20, at 10376.

⁵⁴U.S. CONST. amend. V.

actual physical appropriation).⁵⁵ Nevertheless, the Supreme Court has held that “there will be instances when government actions do not encroach upon or occupy the property yet still affect and limit its use to such an extent that a taking occurs.”⁵⁶ Some commentators have suggested that UGBs are intrusive enough to constitute a “taking” of land, and thus cannot be implemented unless the government compensates all property owners adversely affected thereby.⁵⁷ Although no Supreme Court case is directly on point, lower court decisions have indirectly addressed the constitutionality of growth boundaries.

A. Are UGBs a “Taking” Under Supreme Court Precedent?

1. The Key Cases: A Summary

In the 1978 case of *Penn Central Transportation Co. v. New York City*,⁵⁸ the Supreme Court announced a three-part balancing test governing “regulatory takings” cases: in determining whether a land use regulation is intrusive enough to constitute a “taking,” the court weighs the regulation’s economic effect on the landowner, the extent to which the regulation interferes with a landowner’s reasonable investment-backed expectations, and the character of the government action.⁵⁹ In the *Palazzolo* case, the Supreme Court reiterated its commitment to the *Penn Central* balancing test.⁶⁰

⁵⁵See *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1028 n.15 (1992) (admitting that “early constitutional theorists did not believe the Takings Clause embraced regulations of property at all” but nevertheless holding that regulation of property may be “taking” because “the text of the Clause can be read to encompass regulatory as well as physical deprivations”); John F. Hart, *Land Use Law in the Early Republic and the Original Meaning of the Takings Clause*, 94 NW. U. L. REV. 1099, 1130–35 (2000) (noting that eighteenth-century American legislatures repeatedly enacted restrictive land use laws without compensating affected landowners, and there is no evidence that drafters of Takings Clause intended to restrict such regulation).

⁵⁶*Palazzolo v. Rhode Island*, 533 U.S. 606, 617 (2001) (citing *Pa. Coal Co. v. Mahon*, 260 U.S. 393, 415 (1922)).

⁵⁷See Bolick, *supra* note 11, at 871–72; Dowling, *supra* note 1, at 884, 885 n.64 (citing similar views).

⁵⁸438 U.S. 104 (1978). In *Penn Central*, the plaintiff unsuccessfully challenged a historic preservation regulation that prevented the plaintiff from constructing an office tower atop a train station. See Gregory Daniel Page, *Lucas v. South Carolina Coastal Council and Justice Scalia’s Primer on Property Rights: Advancing New Democratic Traditions by Defending Tradition of Property*, 24 WM. & MARY ENVTL. L. & POL’Y REV. 161, 177–79 (2000) (briefly describing facts and criticizing decision).

⁵⁹*Penn Central*, 438 U.S. at 124.

⁶⁰533 U.S. at 617 (citing *Penn Central*, 438 U.S. at 124). The Court qualified this point, however, by emphasizing that courts need not apply the balancing test where a regulation “denies all economically beneficial or productive use of land.” *Id.* (quoting *Lucas*, 505 U.S. at 1015).

Of all the Court's post-*Penn Central* cases, the case of *Agins v. Tiburon*⁶¹ is most closely on point. The *Agins* plaintiffs challenged municipal zoning ordinances that prohibited the construction of more than five single-family homes on the plaintiffs' five-acre tract of land.⁶² Specifically, the plaintiffs argued that the zoning ordinances were a "taking" because they "forever prevented [their land's] development for residential use"⁶³ and thus "completely destroyed the [land's] value."⁶⁴

The Supreme Court upheld the zoning ordinances, for two reasons. First, the ordinances "substantially advance legitimate governmental goals"⁶⁵—specifically, "protect[ing] the residents of [the city] from the ill effects of urbanization."⁶⁶ Second, the ordinances did not "prevent the best use of [plaintiffs'] land . . . nor extinguish a fundamental attribute of ownership"⁶⁷ because the plaintiffs "may be permitted to build as many as five houses on their five acres of prime residential property."⁶⁸

The zoning ordinances upheld in *Agins* are quite similar to Oregon's urban growth boundaries. Both UGBs and the zoning laws at issue in *Agins* limit development in rural areas in order to prevent urbanization of those areas.⁶⁹ And like the ordinances at issue in *Agins*, Oregon law allows some residential development on rural land: the Oregon Supreme Court has stated that residential development outside UGBs is not an "urban use" (and is therefore allowed) if the developer builds no more than one unit every ten acres,⁷⁰ and has reserved judgment on whether the one-acre lots contemplated by *Agins*⁷¹ are "urban" (and thus presumably forbidden outside UGBs).⁷² In other words, the major difference

⁶¹447 U.S. 255 (1980).

⁶²*Id.* at 257–58.

⁶³*Id.* at 258.

⁶⁴*Id.*

⁶⁵*Id.* at 261.

⁶⁶*Id.* Such ill effects, according to the defendant's city council, included "unnecessary conversion of open space land to strictly urban uses [which in turn would lead to] air, noise and water pollution, traffic congestion, destruction of scenic beauty, disturbance of the ecology and environment, hazards related to geology, fire, and flood, and other demonstrated consequences of urban sprawl." *Id.* at 261 n.8.

⁶⁷*Id.* at 262.

⁶⁸*Id.*

⁶⁹See *supra* notes 21–22, 66 and accompanying text.

⁷⁰See *1000 Friends II*, 724 P.2d at 305 (stating that "residential density of one house per ten acres is generally not an urban intensity" and thus may be allowed outside UGB).

⁷¹See 447 U.S. at 257.

⁷²See *1000 Friends II*, 724 P.2d at 305 (noting that Oregon administrative precedent defining which residential densities are urban uses "establish[es] no bright line in the range . . . [of] one-acre to five-acre" lots). The court added that other factors, such as the presence of public water and sewer facilities, proximity of a development to existing UGBs, and the size of the development, may also be relevant to whether a development is an "urban use." *Id.* at 304–06.

between the ordinances upheld in *Agins* and Oregon law is that the former allowed landowners to build one lot per acre, while Oregon law allows landowners to build one lot (and maybe more) per ten acres—a distinction of no obvious constitutional significance.

It could be argued that *Agins* is no longer dispositive, because Rehnquist Court rulings have sharply curtailed government regulation of land use.⁷³ Two decisions in particular are arguably relevant: *Lucas v. South Carolina Coastal Council*⁷⁴ and *Palazzolo v. Rhode Island*.⁷⁵

The *Lucas* plaintiff purchased two beachfront lots in South Carolina on which he intended to build houses.⁷⁶ Two years after he purchased the lots, the state enacted a law which prohibited such beachfront construction.⁷⁷ The Court assumed for the purposes of its decision that this statute “rendered [plaintiff’s] parcels ‘valueless.’”⁷⁸ The Court stated that as a general rule,⁷⁹ a taking occurs when land use regulation (1) “does not substantially advance legitimate state

⁷³See Bolick, *supra* note 11, at 868.

⁷⁴505 U.S. 1003 (1992). *Lucas* is especially relevant because it has been invoked by anti-UGB commentators. See Bolick, *supra* note 11, at 870.

⁷⁵533 U.S. 606 (2001). *Palazzolo* is especially relevant because it is the Supreme Court’s most recent Takings Clause decision. It has also been argued that the case of *Dolan v. City of Tigard*, 512 U.S. 374 (1994), may be relevant. See Bolick, *supra* note 11, at 870 (noting that *Dolan* supports proposition that government restrictions upon development “must be roughly proportionate to the costs imposed by the development”). In *Dolan*, a city planned to allow a hardware store to expand, but only if the store’s owners agreed to provide a greenway and a pedestrian/bicycle path. 512 U.S. at 379–80. The Court held that the city’s conditions constituted a taking unless the city could establish “rough proportionality” between the regulatory burden upon plaintiff and the store expansion’s environmental impact. *Id.* at 391, 394–96 (describing proportionality test and finding that city had not shown reasonable relationship between its regulation and impact of plaintiff’s proposed expansion). However, in a later case the Supreme Court stated: “We have not extended the rough-proportionality test of *Dolan* beyond the special context of exactions—land-use decisions conditioning approval of development on the dedication of property to public use.” *City of Monterey v. Del Monte Dunes*, 526 U.S. 687, 702 (1999). Thus, *Dolan* is irrelevant to the constitutionality of UGBs. Cf. Edward J. Sullivan, *Dolan and Municipal Risk Assessment*, 12 J. ENVTL. L. & LITIG. 1, 29 n.124 (1997) (stating that most *Dolan*-related challenges are likely to involve land within UGB).

⁷⁶*Lucas*, 505 U.S. at 1006–07.

⁷⁷*Id.* at 1007.

⁷⁸*Id.* (noting trial court decision to that effect). The Court explained that the trial court’s finding of valuelessness “was the premise of the petition for certiorari, and since it was not challenged in the brief in opposition we decline to entertain the argument in respondent’s brief on the merits . . . that the finding was erroneous.” *Id.* at 1020 n.9.

⁷⁹Even land use regulation that would otherwise constitute a taking may be constitutional if the plaintiff’s proposed land use is prohibited by “background principles of nuisance and property law.” *Id.* at 1031.

interests”⁸⁰ or (2) “denies an owner economically viable use of his land.”⁸¹ Because the statute at issue prevented the plaintiff from gaining any financial benefit from his land, the Court held that the plaintiff had suffered a constitutional taking unless the state could “identify background principles of nuisance and property law that prohibit the uses he now intends.”⁸² The Court reasoned that

regulations that leave the owner of land without economically beneficial or productive options for its use—typically, as here, by requiring land to be left substantially in its natural state—carry with them a heightened risk that private property is being pressed into some form of public service under the guise of mitigating serious public harm.⁸³

The Court accordingly remanded the case to the South Carolina courts so the state could have a chance to “identify background principles of nuisance and property law that prohibit the uses [Lucas] now intends in the circumstances in which the property is presently found.”⁸⁴ The Court added in dicta that a landowner “whose deprivation is one step short of complete”⁸⁵ may be entitled to compensation under certain circumstances, explaining:

Such an owner might not be able to claim the benefit of our categorical formulation, but, as we have acknowledged time and again, ‘[t]he economic impact of the regulation on the claimant and . . . the extent to which the regulation has interfered with distinct investment-backed expectations’ are keenly relevant to takings analysis generally.⁸⁶

The *Palazzolo* court elaborated on *Lucas* by clarifying the Court’s definition of a “total taking”⁸⁷ and by explaining the relationship among the factors relevant

⁸⁰*Id.* at 1016 (quoting *Agins*, 447 U.S. at 260).

⁸¹*Id.* (quoting *Agins*, 447 U.S. at 260) (emphasis omitted). The Court mentioned the third prong of the *Penn Central* test (interference with investors’ expectations) in a footnote. *Id.* at 1019 n.8.

⁸²*Id.* at 1031. Such “background principles” will allow governments to enact an otherwise confiscatory regulation where the plaintiff’s land use is a private or public nuisance. *Id.* at 1029; see also Glenn P. Sugameli, *Lucas v. South Carolina Coastal Council: The Categorical and Other “Exceptions” to Liability for Fifth Amendment Takings of Private Property Far Outweigh the “Rule,”* 29 ENVTL. L. 939, 956–77 (1999) (describing “background principles” rule in detail).

⁸³*Lucas*, 505 U.S. at 1018.

⁸⁴*Id.* at 1031.

⁸⁵*Id.* at 1019 n.8.

⁸⁶*Id.* (quoting *Penn Central*, 438 U.S. at 124).

⁸⁷533 U.S. at 629–30 (using term to describe complete deprivation of property value).

to “partial taking” cases.⁸⁸ In 1959, the *Palazzolo* plaintiff formed a corporation to develop waterfront land in Rhode Island.⁸⁹ The corporation’s applications were denied three times by various Rhode Island agencies—first for lack of essential information, and later on environmental grounds.⁹⁰ In 1971, Rhode Island enacted legislation creating the Rhode Island Coastal Resources Management Council (“the Council”), an administrative agency charged with the duty of protecting the state’s wetlands.⁹¹ In 1978, the corporation’s charter was revoked for failure to pay corporate income taxes, and title to the property passed to the plaintiff as the corporation’s sole shareholder.⁹² The plaintiff then filed two additional development applications with the Council. Both were denied because of their adverse impact on salt marshes within the property;⁹³ under the Council’s regulations, such salt marshes were “coastal wetlands” on which development must be limited.⁹⁴ The Rhode Island Supreme Court affirmed the decision of the Council.⁹⁵ The plaintiff appealed this decision to the U.S. Supreme Court, which reversed in part and remanded.⁹⁶

The Supreme Court began its opinion with a general description of the law of regulatory takings. The Court held that “a regulation which ‘denies all economically beneficial or productive use of the land’ will require compensation under the Takings Clause.”⁹⁷ The Court added that

where a regulation places limitations on land that fall short of eliminating all economically beneficial use, a taking nonetheless may have occurred, depending on a complex of facts including the regulation’s economic effect on the landowner, the extent to which the regulation interferes with reasonable investment-backed expectations, and the character of the government action.⁹⁸

⁸⁸*Id.* at 617.

⁸⁹*Id.* at 613.

⁹⁰*Id.* at 613–14.

⁹¹*Id.* at 614 (citation omitted).

⁹²*Id.*

⁹³*Id.* at 614–15.

⁹⁴*Id.* (citation omitted). The Council also noted that the first application was “vague and inadequate for a project of this size and nature,” and that the second application served no “compelling public purpose” that justified its environmental impact. *Id.* (citations omitted).

⁹⁵*Palazzolo v. State ex rel. Tavares*, 746 A.2d 707, 717 (R.I. 2000), *rev’d and remanded by* 533 U.S. 606.

⁹⁶*Palazzolo*, 533 U.S. at 632.

⁹⁷*Id.* at 617 (quoting *Lucas*, 505 U.S. at 1015).

⁹⁸*Id.* (quoting *Penn Central*, 438 U.S. at 124).

Thus, the government generally must compensate landowners for regulations that are “total takings,”⁹⁹ that is, those that deprive landowners of all “economically beneficial use” of their land.¹⁰⁰ By contrast, “partial taking[s],”¹⁰¹ that is, regulations that do not eliminate all economically beneficial use of the plaintiff’s land, are judged by the *Penn Central* three-part balancing test.¹⁰²

As to the “total takings” half of this test, the Court affirmed the Rhode Island court, holding that the Rhode Island regulations were not a “total taking” because even after the Rhode Island authorities’ adverse decision, the plaintiff could still build a \$200,000 residence on his eighteen-acre parcel.¹⁰³ The Court explained that “[a] regulation permitting a landowner to build a substantial residence on an 18-acre parcel does not leave the property ‘economically idle.’”¹⁰⁴ Further, “it is undisputed that the parcel retains significant worth for construction of a residence.”¹⁰⁵

The Court went on, however, to hold that the Rhode Island Supreme Court had erroneously analyzed the plaintiff’s “partial takings” claim, and to remand the case to the Rhode Island courts so that they could address that claim under the *Penn Central* balancing test.¹⁰⁶ The Court reversed for two reasons. First, the Rhode Island Supreme Court erred in holding that the plaintiff’s takings claim was not yet ripe for judicial review.¹⁰⁷ Second, the state court erred in holding that the plaintiff “had no reasonable investment-backed expectations that were affected by [the state’s] regulation . . . [because he] did not become the owner of the land until 1978 . . . [when] there were already regulations in place limiting Palazzolo’s ability to fill the wetlands for development.”¹⁰⁸

As to the latter issue, the Court explained that an otherwise unreasonable taking

do[es] not become less so through passage of time or title. . . . [Otherwise] the post enactment transfer of title would absolve the State of its obligation to defend any action restricting land use, no matter how extreme or unreasonable. A State would be allowed, in effect, to put an expiration date on the Takings Clause.¹⁰⁹

⁹⁹*Id.* at 631.

¹⁰⁰*See id.* at 615 (using term to characterize one of plaintiff’s claims).

¹⁰¹*Id.* at 636 (Scalia, J., concurring) (using term).

¹⁰²*Id.* at 617 (citing *Penn Central*, 438 U.S. at 124).

¹⁰³*Id.* at 630–31 (quoting *Lucas*, 505 U.S. at 1019).

¹⁰⁴*Id.* at 631.

¹⁰⁵*Id.* at 632.

¹⁰⁶*Id.*

¹⁰⁷*Id.* at 618–26.

¹⁰⁸*Palazzolo v. State ex. rel. Tavares*, 746 A.2d, 707, 717 (R.I. 2000).

¹⁰⁹*Palazzolo*, 533 U.S. at 627.

In other words, a regulation may be a compensable “taking” even if it is enacted before the plaintiff buys the land being “taken.”

Because the Court so held by a five to four margin,¹¹⁰ Justice O’Connor’s separate concurrence is especially significant as to the “investment-backed expectations” issue. Justice O’Connor wrote that “the Rhode Island Supreme Court erred in effectively adopting the sweeping rule that the preacquisition enactment of the use restriction *ipso facto* defeats any takings claim based on that use restriction,” but that nonetheless, the Court’s holding “[did] not mean that the timing of the regulation’s enactment relative to the acquisition of title is immaterial to the *Penn Central* analysis.”¹¹¹ Instead, “interference with investment-backed expectations is one of a number of factors that a court must examine. . . . [T]he regulatory regime in place at the time the claimant acquires the property at issue helps shape the reasonableness of those expectations.”¹¹² In support of this view, Justice O’Connor reasoned that if

existing regulations dictate the reasonableness of [investment-backed] expectations in every instance, then the State wields far too much power to redefine property rights upon passage of title. . . . [But] if existing regulations do nothing to inform the analysis, then some property owners may reap windfalls and an important indicium of fairness is lost.¹¹³

Justice O’Connor accordingly wrote that rather than adopting “*per se* rules,”¹¹⁴ courts “must attend to those circumstances which are probative of what fairness requires in a given case.”¹¹⁵ In other words, “investment-backed expectations” are

¹¹⁰Justice Ginsburg, joined by Justices Breyer and Souter, dissented as to the ripeness issue. *Id.* at 645 (Ginsburg, J., dissenting). Justice Stevens wrote a separate dissent asserting that the Rhode Island Supreme Court’s decision should be affirmed in its entirety. *Id.* at 637, 645 (Stevens, J., concurring in part and dissenting in part). In addition to joining in Justice Ginsburg’s dissent, Justice Breyer wrote a brief separate dissent endorsing Justice O’Connor’s view that “the simple fact that a piece of property has changed hands . . . does not always and *automatically* bar a takings claim.” *Id.* at 654–55 (Breyer, J., dissenting). Justice Scalia wrote a separate concurrence criticizing Justice O’Connor’s concurrence, and asserting that “the fact that a restriction existed at the time the purchaser took title . . . should have no bearing upon the determination of whether the restriction is so substantial as to constitute a taking.” *Id.* at 637 (Scalia, J., concurring). Because Justice Scalia’s concurrence is even more pro-plaintiff than the opinion of the Court as a whole, the former is less likely to be accepted by the majority of the Court than is Justice O’Connor’s concurrence (which sought to stake out a middle ground between the majority and the dissent).

¹¹¹*Id.* at 632–33 (O’Connor, J., concurring).

¹¹²*Id.* at 633.

¹¹³*Id.* at 635.

¹¹⁴*Id.* at 636.

¹¹⁵*Id.* at 635.

one of the three factors examined under the *Penn Central* balancing test, and a landowner's decision to acquire property already governed by the challenged regulations is in turn highly relevant to the presence or absence of such expectations.

Justice O'Connor also discussed the third of the *Penn Central* factors: the "character of the governmental action" challenged by a Takings Clause plaintiff.¹¹⁶ She explained that under this prong of the *Penn Central* test, a "use restriction on real property may constitute a 'taking' if not reasonably necessary to the effectuation of a substantial public purpose."¹¹⁷ This language echoes the *Agins* Court's requirement that a regulation "substantially advance legitimate governmental goals"¹¹⁸ in order to not constitute a taking. Because Justice O'Connor supplied the crucial fifth vote for the Court's decision, her concurrence is likely to be followed by future courts.¹¹⁹

In sum, *Palazzolo*, interpreted in light of Justice O'Connor's concurrence holds:

1. That "a regulation which 'denies all economically beneficial or productive use of land' will require compensation under the Takings Clause."¹²⁰

2. That a regulation allowing a landowner to build one house on eighteen acres of land is not such a "total" taking.¹²¹

3. That regulations other than "total takings" are governed by the *Penn Central* balancing test, under which the courts must balance: (a) "the regulation's economic effect on the landowner,"¹²² (b) "the extent to which the regulation interferes with reasonable investment-backed expectations,"¹²³ and (c) "the character of the government action"¹²⁴ (that is, the extent to which a "substantial public purpose"¹²⁵ supports the regulation at issue).

¹¹⁶*Id.* at 634 (quoting *Penn Central*, 438 U.S. at 124).

¹¹⁷*Id.* (quoting *Penn Central*, 438 U.S. at 127 (citations omitted)). The full sentence quoted is: "A use restriction on real property may constitute a 'taking' if not reasonably necessary to the effectuation of a substantial public purpose, or perhaps if it has an unduly harsh impact upon the owner's use of the property." *Id.* (citations omitted). However, the latter clause (referring to "unduly harsh impacts") by its terms merely reiterates the first of the *Penn Central* factors (the economic impact of the regulation on the claimant).

¹¹⁸*Agins*, 447 U.S. at 261.

¹¹⁹*See* *Elewski v. City of Syracuse*, 123 F.3d 51, 54 (2d Cir. 1997) (following "outcome-determinative" Supreme Court concurrences in another context).

¹²⁰*Palazzolo*, 533 U.S. at 617 (quoting *Lucas*, 505 U.S. at 1015).

¹²¹*Id.* at 631.

¹²²*Id.* at 617 (citation omitted).

¹²³*Id.* (citation omitted).

¹²⁴*Id.* (citation omitted).

¹²⁵*Id.* at 634 (O'Connor, J., concurring) (quoting *Penn Central*, 438 U.S. at 127).

2. Applying the Case Law to UGBs

(a) Are UGBs an Unconstitutional "Total Taking"?

As noted above, a regulation which "denies all economically beneficial or productive use of land"¹²⁶ will generally require compensation under the Takings Clause. UGB statutes modeled on Oregon law are clearly not such a "total taking" under *Palazzolo*.¹²⁷ The *Palazzolo* plaintiff sought to persuade the Supreme Court that he suffered a "total taking"¹²⁸ because he could only build one \$200,000 residence on his eighteen-acre parcel.¹²⁹ The Supreme Court flatly rejected this theory, holding that a regulation "permitting a landowner to build a substantial residence on an eighteen-acre parcel does not leave the property 'economically idle.'"¹³⁰

Landowners in Oregon can do far more with their land than the *Palazzolo* plaintiff could do with his, for two reasons. First, the Oregon courts have held that houses on ten-acre lots are not "urban uses"¹³¹ and thus may be built outside UGBs.¹³² By contrast, the *Palazzolo* plaintiff could only build one house on an eighteen-acre parcel.¹³³ Second, Oregon landowners are not even limited to building one house on a large parcel of land: instead, they may also use land outside UGBs for agricultural purposes,¹³⁴ and may even convert such land to urban uses if "it is impracticable to allow any rural uses"¹³⁵ on such land. Thus, Oregon law is apparently less restrictive than the regulations challenged in *Palazzolo*. It follows that if the Rhode Island regulations at issue in *Palazzolo* did not "leave the [plaintiff's] property 'economically idle,'"¹³⁶ Oregon's less

¹²⁶*Lucas*, 505 U.S. at 1015 (citations omitted).

¹²⁷533 U.S. at 631 (citations omitted).

¹²⁸*Id.*

¹²⁹*Id.* 630–31 at (noting that plaintiff "accepts the Council's contention and the state trial court's finding that his parcel retains \$200,000 in development value" and that he could thus "build a substantial residence on an 18-acre parcel").

¹³⁰*Id.* at 631 (quoting *Lucas*, 505 U.S. at 1019).

¹³¹1000 *Friends II*, 724 P.2d at 305 ("[R]esidential density of one house per ten acres is generally not an urban intensity.").

¹³²See *Hammack*, 747 P.2d at 374 (noting that LCDC Planning Goal 14 mandates creation of UGBs and precludes "conversion of rural land to urban use").

¹³³*Palazzolo*, 533 U.S. at 630–31.

¹³⁴See OR. REV. STAT. § 30.936(1) (1999) ("No farming or forest practice on lands zoned for farm or forest use occurring outside an urban growth boundary shall give rise to any private cause of action for relief based on nuisance or trespass.").

¹³⁵1000 *Friends II*, 724 P.2d at 296.

¹³⁶*Palazzolo*, 533 U.S. at 631 (quoting *Lucas*, 505 U.S. at 1019).

restrictive laws do not do so either, and thus are not a “total taking” under *Lucas* and *Palazzolo*.

Some commentators endorse a more pro-plaintiff interpretation of Supreme Court precedent. For example, one commentator writes that because UGBs “prevent development consistent with the otherwise predictable use of the property,”¹³⁷ they automatically deprive landowners of “all or mostly all of the value of their property.”¹³⁸ But this need not be the case. For example, suppose that a zoning ordinance, by preventing Blackacre from being turned into a subdivision, reduces its fair market value¹³⁹ from \$20 per square foot to \$12 per square foot. Blackacre will have lost 40% of its value—more than the owners would like, but certainly less than “all or mostly all of the value of their property.”¹⁴⁰ By contrast, in *Lucas*, the value of plaintiff’s property was allegedly reduced to zero.¹⁴¹

It has also been suggested that a taking occurs whenever property suffers “a significant diminution in value.”¹⁴² If this is the case, UGBs, although not per se unconstitutional,¹⁴³ may lead to a large number of successful takings claims, because

the creation of the boundary itself will cause dramatic differences between the value of undeveloped property inside the boundary and the value of similar property outside. . . . [T]hose on the inside can rest assured that the supply of developable land is now artificially limited, and hence more valuable. Those on the outside will be prohibited from entering the market.¹⁴⁴

¹³⁷Bolick, *supra* note 11, at 871.

¹³⁸*Id.*

¹³⁹Where property is taken by the government, the owner is generally entitled to the property’s fair market value. *United States v. 50 Acres of Land*, 469 U.S. 24, 25 (1984) (citing *United States v. Miller*, 317 U.S. 369, 374 (1943)).

¹⁴⁰Bolick, *supra* note 11, at 871.

¹⁴¹*Lucas*, 505 U.S. at 1007.

¹⁴²John M. Groen & Richard M. Stephens, *Takings Law, Lucas and the Growth Management Act*, 16 U. PUGET SOUND L. REV. 1259, 1302 (1993) (citing *Lucas*, 505 U.S. at 1019). *But see* Page, *supra* note 58, at 189 (“[T]he Supreme Court has never imposed liability for merely diminishing the underlying profit, profitability, or value of property.”).

¹⁴³*See* Groen & Stephens, *supra* note 142, at 1301–02. As these authors note:

The general requirement that urban growth boundaries be established does not in itself raise any particular taking question. Zoning property for particular purposes has been a common land use practice for many years. One may view the growth area requirement as simply another type of zoning comprised of two large overlay zones: the urban growth area and everything else. Accordingly, the takings implications of the urban growth area designations are no different than zoning generally.

Id.

¹⁴⁴*Id.* at 1303.

The “significant diminution in value” standard, however, was rejected in both *Lucas* and *Palazzolo*. The *Lucas* Court held that “in at least *some* cases the landowner with 95% loss will get nothing.”¹⁴⁵ Moreover, a year after *Lucas*, the Supreme Court cited cases rejecting challenges to regulations that diminished land value by 75% and 92.5%, in a decision unanimously reaffirming that “our cases have long established that mere diminution in the value of property, however serious, is insufficient to demonstrate a taking.”¹⁴⁶ As a result of such statements, lower courts applying *Lucas* have “not usually found a taking because the land use regulation attacked did not deny the landowner all economically viable use.”¹⁴⁷

The *Palazzolo* Court similarly held that a regulation that “places limitations on land that fall short of eliminating all economically beneficial use”¹⁴⁸ is not automatically invalid, but rather is subject to the *Penn Central* balancing test.¹⁴⁹ Thus, a regulation that significantly reduces the value of a landowner’s property is not per se unconstitutional.

(b) *Applying the Penn Central Balancing Test to UGBs*

As explained above,¹⁵⁰ even a “partial taking” (that is, one that reduces the value of a landowner’s property by less than 100%) may be a compensable regulatory taking if it “interferes with reasonable investment-backed expectations”¹⁵¹ or is not “reasonably necessary to the effectuation of a substantial public purpose.”¹⁵² Neither of these factors turns Oregon’s UGB statutes into a compensable “taking.”

i. Investment-Backed Expectations

Justice O’Connor, writing as the crucial fifth vote in support of a five to four decision,¹⁵³ wrote that “the state of regulatory affairs at the time of acquisition”¹⁵⁴

¹⁴⁵*Lucas*, 505 U.S. at 1020 n.8.

¹⁴⁶*Concrete Pile & Prods., Inc. v. Constr. Laborers Pension Trust for So. Cal.*, 508 U.S. 602, 645 (1993) (citations omitted).

¹⁴⁷DANIEL R. MANDELKER, *LAND USE LAW* § 2.19, at 38–39 (4th ed. 1997) (collecting cases); see also Sugameli, *supra* note 82, at 944 (collecting cases).

¹⁴⁸*Palazzolo*, 533 U.S. at 617.

¹⁴⁹*Id.* (citation omitted).

¹⁵⁰See *supra* notes 111–25 and accompanying text (discussing Justice O’Connor’s concurrence).

¹⁵¹*Palazzolo*, 533 U.S. at 617.

¹⁵²*Id.* at 634 (O’Connor, J., concurring) (citation omitted).

¹⁵³See *supra* notes 110, 119 and accompanying text for a discussion regarding the dissenting and concurring opinions in *Palazzolo*.

¹⁵⁴*Palazzolo*, 533 U.S. at 634 (O’Connor, J., concurring).

is relevant to the extent of landowners' investment-backed expectations, and that "the nature and extent of the permitted development under the regulatory regime vis-a-vis the development sought by the landowner may also shape legitimate expectations."¹⁵⁵ It follows that a UGB is unlikely to interfere with landowners' investment-backed expectations where, as in Oregon, UGBs have existed for over two decades,¹⁵⁶ because a property owner will rarely have an "investment-backed expectation" in resisting enforcement of statewide statutes and regulations enacted decades ago.¹⁵⁷

Even in states where UGBs have not yet been enacted, proposed UGBs are likely to interfere with a landowner's reasonable investment-backed expectations only if a landowner reasonably relied on their absence—for example, where property outside the UGB has previously been zoned for (or was about to be zoned for) intensive development, and a landowner bought the property in reliance upon such zoning.¹⁵⁸ Otherwise, the landowner's reasonable expectations will not have been affected by the newly enacted UGB. State and local governments can easily minimize such problems by including land already zoned for development within UGBs.¹⁵⁹ It therefore appears that even if UGBs do diminish rural property values, rural landowners will rarely have constitutional claims under Supreme Court precedent.

ii. Substantial Public Purpose

Finally, a "partial taking" may also be a compensable taking if it is not supported by a "substantial public purpose."¹⁶⁰ As noted above, the *Agins* court held that limiting the spread of urbanization is a legitimate state interest justifying restrictions upon development of rural and suburban land.¹⁶¹ Thus, UGBs (which, in Oregon, were enacted at least partially in order to protect rural land from the

¹⁵⁵*Id.*

¹⁵⁶See *supra* notes 20–53 and accompanying text for a discussion of Oregon law and UGBs development.

¹⁵⁷Sugameli, *supra* note 82, at 979 ("[C]ourts reject takings claims involving land that was acquired with actual or constructive knowledge of existing or pending regulatory limitations."); *Dodd v. Hood River County*, 855 P.2d 608, 615–16 (1993) (holding that plaintiffs had no investment-backed expectation in residential development where land was already zoned for forest use at time of purchase); *cf. Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1006–07 (1984) (holding that plaintiff had no investment-backed expectation in confidentiality of information submitted to government after statute limiting confidentiality was enacted).

¹⁵⁸Groen & Stephens, *supra* note 142, at 1302.

¹⁵⁹*Id.*

¹⁶⁰*Palazzolo*, 533 U.S. at 633–34 (O'Connor, J., concurring).

¹⁶¹*Agins*, 447 U.S. at 261 (upholding zoning ordinances that advanced legitimate state interest of "protect[ing] the residents of [the city] from the ill effects of urbanization").

spread of suburbia)¹⁶² are clearly supported by a “substantial public purpose” under *Agins*.

In sum, three factors are relevant to whether a land use regulation constitutes a taking: the weight of the state interests favoring the regulation; whether the regulation renders plaintiff’s property valueless or nearly so; and whether the regulation interferes with plaintiff’s reasonable investment-backed expectations.¹⁶³ None of these factors supports a finding that UGBs generally constitute a “taking” that requires governments to compensate adversely affected landowners. Thus, UGBs are constitutional under Rehnquist Court case law.

B. Lower Courts Address UGBs (Sort Of)

Although the Oregon courts have upheld Oregon’s land use laws,¹⁶⁴ they have never specifically addressed the constitutionality of UGBs. However, one federal decision indirectly supports the constitutionality of UGBs. In *Buckles v. King County*,¹⁶⁵ plaintiffs challenged a county’s decision to zone their property as “Rural Area” pursuant to the Washington growth management statute (which established “urban growth areas” similar to the Oregon UGBs).¹⁶⁶ Plaintiffs

¹⁶²See *supra* notes 20–22 and accompanying text for a discussion regarding the enactment of Senate Bill 100. Oregon’s UGB has also protected cities from the decay that might otherwise have resulted from suburbanization. See *infra* Part IV.A. (discussing UGB related to the city of Portland’s recent growth). This goal, too, is a legitimate public purpose justifying government regulation. See, e.g., *Norfolk Fed’n of Bus. Dists. v. Dep’t of Hous. & Urban Dev.*, 932 F. Supp. 730, 741 (E.D. Va. 1996) (referring to “legitimate governmental interests of economic development and eliminating urban blight”); *Obendorf v. City of Denver*, 696 F. Supp. 552, 561 (D. Colo. 1988) (“[T]he economic revitalization of the downtown Denver area constitutes a legitimate public purpose underlying the urban renewal project. No unconstitutional ‘taking’ of the plaintiffs’ property has occurred.”); *State v. Russo*, 745 A.2d 540, 545 (N.J. Super. Ct. App. Div. 2000) (stating that “preventing urban blight” is “substantial public purpose”).

¹⁶³*Palazzolo*, 533 U.S. at 617 (citing *Penn Central*, 438 U.S. at 124).

¹⁶⁴In *Tillamook County v. Land Conservation & Development Commission*, 642 P.2d 691, 691–92 (Or. Ct. App. 1982), *review denied*, 648 P.2d 854 (Or. 1982), the court dismissed a suit that it described as a “blunderbuss attack on the validity of the legislative act which created the Land Conservation and Development Commission (Or. Laws 1973, ch. 80) and the state-wide planning goals thereafter promulgated by the Commission pursuant to that act.” As those planning goals included Goal 14 (which mandated urban growth boundaries), see *supra* notes 33–37 and accompanying text, the *Tillamook County* decision upheld Goal 14. But the precedential weight of *Tillamook County* is limited by the fact that the court did not specifically describe plaintiffs’ claims or explain why it rejected those claims on the merits.

¹⁶⁵191 F.3d 1127 (9th Cir. 1999).

¹⁶⁶*Id.* at 1131–32 (describing procedural history of plaintiffs’ zoning claims). When King County adopted new zoning pursuant to the Washington statute, plaintiffs were notified that their property would be zoned as residential. *Id.* at 1131. Plaintiffs then successfully lobbied to have the property zoned as “Rural Neighborhood,” that is, for limited retail and commercial use. *Id.* After the Washington Growth Management Appeals Board reversed the county’s decision on procedural

argued, *inter alia*, that this “designation ‘fails to advance a legitimate county interest and thereby takes Plaintiffs’ property without payment of just compensation.’”¹⁶⁷

The U.S. Court of Appeals for the Ninth Circuit began its discussion by noting that, as a general rule, “a land use regulation does not constitute a taking if the regulation does not deny a landowner all economically viable use of the property and if the regulation substantially advances a legitimate government interest.”¹⁶⁸ The court then held that the county had advanced numerous substantial interests in support of its decision, one of which was “complying with the Growth Management Act’s limitation on urban development outside of the urban growth boundary because the [plaintiffs’] property lies outside of King County’s urban growth boundary.”¹⁶⁹ If “limitation on urban development outside of the urban growth boundary” is a legitimate state interest, it arguably follows that a UGB statute specifically designed to limit such development advances a legitimate state interest. Thus, *Buckles* supports the constitutionality of UGBs.

IV. HAVE UGBS CURED THE MISCHIEFS OF SPRAWL?

Although UGBs are probably constitutional, they may nevertheless be unwise if they fail to prevent problems associated with sprawl, such as urban decay, destruction of farmland, and automobile dependency. Oregon’s UGBs appear to have prevented the urban decay that other cities have suffered as a result of sprawl. However, the impact of the UGB upon the Portland region’s land use and transportation patterns has been less dramatic.

A. Saving the City

As suburbs have grown, older central cities throughout America have emptied out. Between 1900 and 1950, every large American city gained

grounds, the county reversed itself and zoned the property as “Rural Residential.” *Id.* at 1132.

¹⁶⁷*Id.* at 1138.

¹⁶⁸*Id.* at 1140 (citations omitted).

¹⁶⁹*Id.* at 1142; *see also* Martin County v. Section 28 P’ship, 772 So. 2d 616, 620–21 (Fla. Dist. Ct. App. 2000) (rejecting substantive Due Process challenge to county’s zoning decision because government actions violate due process only if they are unrelated to any rational purpose, and county “has a substantial interest in developing only those areas within its Primary Urban Service Area, so that urban growth is well-planned, predictable and economically sound”). The *Buckles* court emphasized, however, that the county’s zoning decision “did not destroy all economically viable use of [the plaintiffs’] property, and [the plaintiffs] do not argue that the redesignation [of the property as residential] interfered with any investment-backed expectations.” 191 F.3d at 1140. Had plaintiffs suffered either type of harm, their claim might have been successful.

population.¹⁷⁰ But most older cities have been devastated by sprawl: of the eighteen American cities with over 500,000 people in 1950, thirteen lost population in the 1950s, fifteen in the 1960s, and sixteen in the 1970s.¹⁷¹ For example, by 2000 St. Louis had lost almost 60% of its 1950 population, while Buffalo and Cleveland had lost nearly half of their 1950 population.¹⁷² Those cities that have gained population have done so either by becoming hubs for foreign immigration or by annexing newly developed areas that would be considered suburbs in other cities.¹⁷³ As cities have become smaller, they have become poorer. In 1990, thirty-one of America's thirty-seven largest cities had poverty rates above the national average,¹⁷⁴ and central cities contained half of America's poor (as opposed to one-third in 1960).¹⁷⁵ Jobs, as well as people, have fled to suburbia: about 95% of the fifteen million new jobs created in the 1980s were in suburbs.¹⁷⁶

In some regions, city life is not a viable choice for any residents other than the poorest or most adventurous. For example, only 4% of Cleveland-area households earning over \$100,000 live in the city of Cleveland.¹⁷⁷ Even institutions that would be urban in other communities are suburban in Cleveland: the office of EcoCity Cleveland, one of the area's leading anti-sprawl groups, is located in the suburb of Cleveland Heights.¹⁷⁸

Middle-class flight feeds upon itself: as cities become more and more dominated by the poor, who cannot afford to move to suburbia, city neighborhoods become more dangerous (because poverty-packed areas have higher crime

¹⁷⁰Lewyn, *supra* note 7, at 301.

¹⁷¹*Id.* at 320.

¹⁷²WORLD ALMANAC, *supra* note 14, at 376 (listing 1950 populations of three cities as follows: St. Louis 856,796, Cleveland 914,808, Buffalo 580,132); U.S. CENSUS BUREAU, U.S. DEP'T OF COMMERCE, POPULATION AND HOUSING TABLES, Census 2000 PHC-T-5, at <http://www.census.gov/population/www/cen2000/tablist.html> (April 2, 2001) (listing 2000 populations of three cities as follows: St. Louis 348,189, Cleveland 478,403, Buffalo 292,648) [hereinafter CENSUS TABLE T-5].

¹⁷³RUSK, *supra* note 3, at 8–10, 14.

¹⁷⁴Lewyn, *supra* note 7, at 302 n.10 (citation omitted).

¹⁷⁵BENFIELD, *supra* note 3, at 123.

¹⁷⁶*Id.* at 14.

¹⁷⁷See U.S. CENSUS BUREAU, U.S. DEP'T OF COMMERCE, 1990 CENSUS OF POPULATION AND HOUSING, POPULATION AND HOUSING CHARACTERISTICS FOR CENSUS TRACTS AND BLOCK NUMBERING AREAS: CENSUS TRACTS, CLEVELAND, OH. 512–13 (1993) (reporting that 29,159 area households earned over \$100,000, but only 1310 of these were located in city of Cleveland) [hereinafter CLEVELAND CENSUS TRACTS]. By contrast, over two-thirds of area households earning under \$5,000 were located in the city of Cleveland. *Id.*

¹⁷⁸Lewyn, *supra* note 7, at 352 n.378 (citations omitted).

rates),¹⁷⁹ city schools become less prestigious (because children from poor backgrounds are typically less academically proficient than students from affluent backgrounds),¹⁸⁰ and city tax bases dwindle due to the city's poverty (thus causing higher taxes and inadequate services)¹⁸¹—thus causing additional middle-class flight.¹⁸²

While some older cities have decayed, Portland has grown and prospered. From 1980 (when the Portland UGB was created)¹⁸³ to 2000, the city of Portland's population grew by over 40%¹⁸⁴ after declining for several decades.¹⁸⁵ Moreover, Portland's population growth compared favorably to that of the central cities of the most comparable western metropolitan areas. Table 1 compares Portland's growth to that of Denver, Salt Lake City, and Seattle—three regions

¹⁷⁹See *Patrolmen's Benevolent Ass'n v. City of New York*, 74 F. Supp. 2d 321, 336 (S.D.N.Y. 1999) (citing *Bridgeport Guardians, Inc. v. Delmonte*, 553 F. Supp. 601, 610–11 (D. Conn. 1983) (equating “high-crime” areas with “low-income” areas)); Douglas S. Massey, *Getting Away with Murder: Segregation and Violent Crime in Urban America*, 143 U. PA. L. REV. 1203, 1215 (1995) (estimating, based on regression analysis, “the relationship between crime and poverty to be: Major Crime Rate = 36.55 + .02 (percentage white) + .79 (poverty rate) where the units are census tracts and crime rates are expressed per 1000 inhabitants”—suggesting, in other words, that neighborhoods with high poverty rates have more crime than other neighborhoods).

¹⁸⁰See *Reed v. Rhodes*, 1 F. Supp. 2d 705, 739 (N.D. Ohio 1998) (“[S]ocioeconomic status (‘SES’) and family background influence a student’s achievement in school. . . . [C]hildren reared in lower socioeconomic status [households] tend to be less intellectually stimulated and consequently, tend to be less prepared for school which ultimately impacts on the child’s achievement.”); see also JOHN E. CHUBB & TERRY M. MOE, *POLITICS, MARKETS AND AMERICA’S SCHOOLS* 107 (1990) (explaining that mean income in “high performance schools” is 36% higher than mean income in low performance schools); CHRISTOPHER JENCKS ET AL., *INEQUALITY* 109, 159 (1972) (stating that only 2% of test score inequality is caused by quality of elementary schools, while 25–40% is caused by family environment).

¹⁸¹See Richard Briffault, *Our Localism: Part II—Localism and Legal Theory*, 90 COLUM. L. REV. 346, 352 & n.37 (1990) (demonstrating that cities tend to have smaller tax bases and higher taxes than suburbs).

¹⁸²See *Pa. Human Relations Comm’n v. Sch. Dist. of Phila.*, 681 A.2d 1366, 1374 (Pa. Commw. Ct. 1996) (attributing Philadelphia’s population losses to high taxes); JOHN NORQUIST, *THE WEALTH OF CITIES* 52, 83 (1998) (stating that crime and schools are two major factors causing people and businesses to move to suburbs); Vicki Been, Comment, *The Geography of Community*, 48 STAN. L. REV. 1109, 1110 (1996) (noting that decaying urban school systems drive middle-class families to suburbs).

¹⁸³See *supra* note 51 and accompanying text for a discussion regarding Portland’s adoption of UGBs.

¹⁸⁴See U.S. CENSUS BUREAU, U.S. DEP’T OF COMMERCE, 2000 STATISTICAL ABSTRACT OF THE UNITED STATES 41 (120th ed. 2001) (reporting that Portland had 368,000 residents in 1980) [hereinafter 2000 ABSTRACT]; see also CENSUS TABLE T-5, *supra* note 172 (reporting that Portland population grew to 529,121 in 2000).

¹⁸⁵See *WORLD ALMANAC*, *supra* note 14, at 376 (noting that between 1950 and 1980, Portland’s population declined from 373,628 to 368,148, while Seattle’s and Denver’s rose).

that, although otherwise comparable,¹⁸⁶ have lacked UGBs for most or all of the past two decades.¹⁸⁷

¹⁸⁶These three metropolitan areas are comparable to Portland for three reasons. First, they are of comparable size: all have between 1.3 and 3.5 million residents. See U.S. CENSUS BUREAU, U.S. DEP'T OF COMMERCE, POPULATION AND HOUSING TABLES, Table PHC-T-3, at <http://www.census.gov/population/www/cen2000/tablist.html> (last visited May 8, 2001) [hereinafter CENSUS TABLE T-3]. Second, all grew at a 43–48% rate between 1980 and 2000. See 2000 ABSTRACT, *supra* note 184, at 33, 35; CENSUS TABLE T-3, *supra* (reporting that Seattle grew from 1.652 million residents to 2.416 million, Salt Lake City from 0.91 million to 1.334 million, and Denver from 1.429 million to 2.109 million while Portland grew from 1.334 million to 1.918 million). Third, all four areas are in America's western half. Western cities, as a group, are more similar to each other than to eastern cities because "[m]ountains and other natural barriers and limited supplies of water have prevented many Western cities from sprawling [while] flat lands and plentiful water have allowed most Eastern cities to grow as they please." Haya El Nasser & Paul Overberg, *What You Don't Know About Sprawl*, USA TODAY, Feb. 22, 2001, at 1A. The West's natural barriers to sprawl may at least partially explain why even western cities without growth boundaries have gained in population, while some eastern cities in high-growth areas have been bled dry by their suburbs. See *infra* notes 189–95 and accompanying text (stating that Denver, Salt Lake City, and Seattle have grown while Atlanta and Washington have not, even though latter cities are part of high-growth metropolitan areas).

¹⁸⁷See Nokes, *supra* note 14 (noting that Seattle had no UGB until 1994); Justin Phillips & Eban Goodstein, *Growth Management and Housing Prices: The Case of Portland, Oregon*, 18 CONTEMP. ECON. POL'Y 334, 344 (2000) (reporting that Salt Lake City has no UGB); Alan Katz, *Building the Future*, DENV. POST, Feb. 9, 1997, at A1 (reporting that Denver has no UGB). Denver's regional planning agency, the Denver Regional Council of Governments, recently drafted a regional growth management plan with voluntary urban growth boundaries; however, two suburban counties (Arapahoe and Adams Counties) have already repudiated the plan. See Bob Ewegen, *Home, Home, Quite Deranged*, DENV. POST, Jan. 15, 2001, at B6; see also M.E. Sprengelmeyer, *Metro Growth Pact to Be Signed*, DENV. ROCKY MOUNTAIN NEWS, Aug. 5, 2000, at 5A (quoting statement by Rich McClintock, executive director of environmentalist lobby CoPIRG, that proposal "lacks the tools or teeth to effectively limit sprawl outside of the proposed urban growth boundaries").

TABLE 1: POPULATION GROWTH

	City population % increase/decrease		Metropolitan area population % increase
	1950–80 ¹⁸⁸	1980–2000 ¹⁸⁹	1980–2000 ¹⁹⁰
Portland	-1.5	43.7	43.8
Denver	18.4	12.3	47.5
Seattle	5.6	14.0	46.2
Salt Lake City	10.4	11.0	46.5

As Table 1 shows, the UGB allowed Portland to gain a proportionate share of the region's population growth, while Denver, Seattle, and Salt Lake City were left in the dust by their suburbs. By contrast, in the decades before the UGB was adopted, Portland was losing population while Denver and Seattle gained population—even though Portland annexed thirty-nine miles of land between 1950 and 1980, increasing its land mass by nearly 60%.¹⁹¹

Moreover, Denver, Seattle, and Salt Lake City are far healthier than some other cities in high-growth regions. For example, the Atlanta metropolitan area's population grew by over 80% (far faster than metropolitan Portland) during the 1980s and 1990s¹⁹²—yet while the Atlanta region's population surged, Atlanta's central city population actually declined from 425,000 to just over 416,000.¹⁹³

¹⁸⁸See WORLD ALMANAC, *supra* note 14, at 376 (reporting statistics for Portland, Denver, and Seattle); INFORMATION PLEASE ALMANAC 1955, at 198 (Dan Golenpaul ed., 1954) (reporting that Salt Lake City's 1950 population was 182,121); 2000 ABSTRACT, *supra* note 184, at 41 (reporting that Salt Lake City's 1980 population was about 163,000).

¹⁸⁹See 2000 ABSTRACT, *supra* note 184, at 39, 41 (listing 1980 city populations as follows: Denver 493,000, Portland 368,000, Salt Lake City 163,000, Seattle 494,000); CENSUS TABLE T-5, *supra* note 172 (listing 2000 city populations as follows: Denver 554,636, Portland 529,121, Salt Lake City 181,743, Seattle 563,374).

¹⁹⁰See *supra* note 186 for a listing of the population increases for all four metropolitan areas.

¹⁹¹Between 1950 and 1980, the city of Portland grew from 64 square miles to 103 square miles, Denver grew from 62 square miles to 111 square miles (about an 80% increase), and Seattle grew from 71 square miles to 84 square miles (an 18% increase). See Wendell Cox, *U.S. Urbanized Areas: 1950–90, Central City Rankings*, at <http://www.demographia.com/dm-uacr.htm> (last visited Jan. 15, 2001). Thus, Portland's land area grew by a slightly slower rate than that of Denver, but a faster rate than that of Seattle.

¹⁹²See 2000 ABSTRACT, *supra* note 184, at 33 (reporting that 1980 metro-Atlanta population was 2.233 million); CENSUS TABLE T-3, *supra* note 186 (reporting that 2000 Atlanta-area population was 4.112 million); *supra* note 190 and accompanying text (reporting that Portland metro-area population grew by just over 40%).

¹⁹³See 2000 ABSTRACT, *supra* note 184, at 39 (reporting that Atlanta's 1980 population was 425,000); CENSUS TABLE T-5, *supra* note 172 (reporting that Atlanta's 2000 population was 416,474).

Similarly, metropolitan Washington, D.C. grew by over 40% from 1980 to 2000¹⁹⁴ while the central city population tumbled from 638,000 to just over 572,000.¹⁹⁵

Because Portland annexed almost twenty-two miles of previously suburban territory in the 1980s,¹⁹⁶ it could be argued that annexation rather than UGBs caused Portland's startling growth. This argument is probably incorrect, for two reasons. First, as Table 2 shows, Salt Lake City and Denver annexed even more territory than Portland did, yet they failed to experience comparable urban growth.

TABLE 2: CENTRAL CITY GROWTH THROUGH ANNEXATION, 1980-1990

	% increase in city land area ¹⁹⁷	% increase in population ¹⁹⁸
Portland	21.0	43.7
Seattle	0	12.3
Denver	37.7	14.0
Salt Lake City	47.7	11.0

Second, Portland annexed land during the 1950s, 1960s, and 1970s just as it did in the 1980s, yet failed to gain population because the city's land area failed to keep up with the migration of city residents to suburbia: Portland encompassed 64 square miles in 1950 and 103 square miles in 1980—yet the city

¹⁹⁴See 2000 ABSTRACT, *supra* note 184, at 35 (reporting that Washington, D.C.-area population was 3.478 million in 1980); CENSUS TABLE T-3, *supra* note 186 (reporting that area population was 4.923 million in 2000).

¹⁹⁵See 2000 ABSTRACT, *supra* note 184, at 41 (reporting that Washington's 1980 population was 638,000); CENSUS TABLE T-3, *supra* note 186 (reporting that city's 2000 population was 572,059).

¹⁹⁶See Cox, *supra* note 191 (reporting that Portland encompassed 103 square miles in 1980 and 125 in 1990); WORLD ALMANAC, *supra* note 14, at 440 (reporting that Portland now encompasses 124.7 square miles). Cox apparently rounds square mileage figures up and down in his tables, since no city's land mass is calculated in tenths of a mile.

¹⁹⁷See Cox, *supra* note 191 (providing 1980 land area statistics); U.S. CENSUS BUREAU, DEP'T OF COMMERCE, 1986 STATISTICAL ABSTRACT OF THE UNITED STATES, 16-18 (106th ed. 1987); WORLD ALMANAC, *supra* note 14, at 435, 440-41 (reporting recent statistics for Portland, Denver, and Seattle); Salt Lake City, *City Demographics*, at http://www.ci.slc.ut.us/info/area_info/demos.htm (last visited Feb. 6, 2001) (reporting recent land area statistics for Salt Lake City).

¹⁹⁸See *supra* note 189 and accompanying text for a listing of population information.

actually lost population.¹⁹⁹ Without UGBs to limit sprawl, Oregonians moved to suburbia faster than the city of Portland could expand its boundaries.²⁰⁰

As Portland's population has grown, its economy has grown as well. The number of private sector jobs increased by 21.4% in the city of Portland between 1992 and 1997²⁰¹ while jobs in Salt Lake City, Denver, and Seattle increased by 6.6%, 8.8%, and 8.4% respectively.²⁰²

Because of Portland's growth and prosperity, Portland is one of the few central cities that has not become a dumping ground for the region's poor. Table 3 compares poverty trends in Portland and other western cities to poverty trends in their suburbs.

¹⁹⁹See Cox, *supra* note 191 (comparing Portland's rate of growth with those of Denver and Seattle).

²⁰⁰*Id.*

²⁰¹See SOCDS *State of the Cities 2000 Fast Look: Portland, OR*, at <http://www.webstage1.aspensys.com/socds/scripts/obdic.exe/SOCDs/fastlook/output.htm> (last visited Feb. 12, 2001) [hereinafter *Portland Fast Look*].

²⁰²See SOCDS *State of the Cities 2000 Fast Look: Denver, CO, Salt Lake City, UT and Seattle, Wa*, at <http://www.webstage1.aspensys.com/socds/scripts/obdic.exe/SOCD/fastlook/output.htm> (last visited Feb. 12, 2001) [hereinafter *Fast Look*]. This disparity is not due to changes in region-wide growth; though jobs in Seattle's suburbs grew more slowly than jobs in Portland's (14.9% as opposed to 29.1%), job growth was actually higher in the suburbs of Denver and Salt Lake City. *Id.* Incidentally, Portland's job growth disproves the claim that the UGB adversely affects economic growth by increasing the cost of living. See *They Can Yet Be Resurrected*, THE ECONOMIST, Jan. 10, 1998, at 17 ("William Fischel, of Dartmouth College, has written an amusing parable comparing Portland to an island whose inhabitants think it so special that they restrict the right to build. As house prices rise, wages rise too—and the island prices its manufactured goods right out of the export market.").

TABLE 3: POVERTY TRENDS, 1979–97²⁰³

	Poverty rate ²⁰⁴ 1979	Poverty rate 1997
Denver City	13.7	16.4
Denver suburbs	5.4	6.5
Seattle City	11.2	12.9
Seattle suburbs	6.1	5.9
Salt Lake City	14.2	16.2
Salt Lake City suburbs	6.3	6.7
Portland City	13.0	12.6
Portland suburbs	7.2	7.8

In Denver, Seattle, and Salt Lake City, the central city poverty rate is more than twice the suburban poverty rate, and the gap between city and suburb has stayed roughly the same or grown.²⁰⁵ By contrast, Portland has actually narrowed the city-suburb economic gap: its poverty rate was 1.8 times the suburban poverty rate in 1979, and was only 1.61 times the suburban poverty rate in 1997.²⁰⁶

In sum, Portland's UGB has arguably enhanced rather than reduced consumer choice, by making the city of Portland a viable option for middle-class households. Before the UGB was created in the 1980s, Portland was losing population while other western cities were gaining population. But over the past two decades, Portland has (unlike other western cities) grown as fast as its suburbs, and has narrowed the city-suburb economic gap. So for city-dwellers and would-be city-dwellers, the UGB has been a success on this ground alone.

B. Protection of Natural Resources

The preservation of agricultural and other natural resources areas was a

²⁰³*SOCDS Census Data Output: Denver, CO, Portland, OR, Seattle, WA and Salt Lake City, UT*, at <http://www.webstage1.aspensys.com/socds/scripts/odbic.exe/SOCDS/Census/incpov.htm> (last visited Feb. 12, 2001) [hereinafter *Poverty Data*].

²⁰⁴By "poverty rate" I mean the percentage of the population earning less than the federally designated poverty level. See U.S. CENSUS BUREAU, U.S. DEP'T OF COMMERCE, *Poverty*, at <http://www.census.gov/hhes/www/poverty.html> (last visited July 15, 2001) (linking to various explanations of poverty statistics).

²⁰⁵The city/suburb poverty gap (that is, the ratio of city poverty to suburban poverty) decreased minutely from 2.53 to 2.52 in Denver, but increased from 1.89 to 2.18 in Seattle, and increased from 2.25 to 2.43 in Salt Lake City. See *Poverty Data*, *supra* note 203 (discussing ratios calculated by author).

²⁰⁶*Id.* (discussing ratios calculated by author).

primary motivation behind Oregon's planning statutes.²⁰⁷ For example, Oregon law justifies the creation of LCDC by stating that the "promotion of coordinated statewide *land conservation* and development requires the creation of a statewide planning agency."²⁰⁸ Presumably, the UGB's success in this respect can be measured by Oregon's success in preserving farmland.

Table 4 shows the amount of farmland in the counties that are part of the Portland, Denver, Seattle, and Salt Lake City metro areas.

TABLE 4: ACRES OF FARMLAND IN METRO-AREA COUNTIES²⁰⁹

	1987	1992	1997 ²¹⁰	% loss 1987-97
Portland	605,201	571,588	596,903	1.4
Seattle	154,628	135,969	118,141	23.5
Salt Lake City	418,138	414,542	263,120	37.0
Denver	1,311,463	1,312,770	1,308,710	0.2

²⁰⁷See Daniel R. Mandelker, *Managing Space to Manage Growth* 12 (A.L.I.-A.B.A. Course of Study, Aug. 26, 1999), WL SE11 A.L.I.-A.B.A. 77.

²⁰⁸OR. REV. STAT. § 197.005(4) (1999) (emphasis added).

²⁰⁹U.S. CENSUS BUREAU, DEP'T OF COMMERCE, 1997-98 STATE AND METROPOLITAN AREA DATA BOOK 142, 149, 151 (1998) (identifying counties in all relevant metro areas) [hereinafter DATA BOOK]. Specifically, Denver's metropolitan counties are Adams, Arapahoe, Denver, Douglas, and Jefferson; Portland's are Clackamas, Columbia, Multnomah, Washington, and Yamhill; Salt Lake City's are Davis, Salt Lake, and Weber; and Seattle's are Island, King, and Snohomish. *Id.* Acreage figures for these counties were found in the following sources: 1992 CENSUS OF AGRICULTURE, HIGHLIGHTS OF AGRICULTURE: 1992 AND 1987, at <http://www.nass.usda.gov/census/census92/atlas92/datafile> (last modified July 22, 1997); U.S. DEP'T OF AGRIC., 1997 CENSUS OF AGRIC., COLORADO STATE AND COUNTY DATA 164-71 (1999); U.S. DEP'T OF AGRIC., 1997 CENSUS OF AGRIC., OREGON STATE AND COUNTY DATA 166-70 (1999); U.S. DEP'T OF AGRIC., 1997 CENSUS OF AGRIC., UTAH STATE AND COUNTY DATA 164-67 (1999); U.S. DEP'T OF AGRIC., 1997 CENSUS OF AGRIC., WASHINGTON STATE AND COUNTY DATA 167-70 (1999). I have excluded Clark County, Washington (which is technically part of the Portland area) because it is not in Oregon and thus not affected by Oregon's land use planning statutes. If Clark County is included, metro Portland lost 6.4% of its farmland; it would have had 699,847 acres in 1987, 654,555 acres in 1992, and 669,744 acres in 1997. See U.S. DEP'T OF AGRIC., 1992 CENSUS OF AGRIC., OREGON STATE AND COUNTY DATA, COUNTY DATA tbl. 6, at 1, 4, 5; U.S. DEP'T OF AGRIC., 1992 CENSUS OF AGRIC., WASHINGTON STATE AND COUNTY DATA, COUNTY DATA tbl. 6, at 6; 1997 CENSUS OF AGRIC., OREGON STATE AND COUNTY DATA, COUNTY DATA, *supra*, tbl. 6, at 1, 4, 5; 1997 CENSUS OF AGRIC., WASHINGTON STATE AND COUNTY DATA, COUNTY DATA, *supra*, tbl. 6, at 6.

²¹⁰The 1997 figures are not entirely comparable to earlier data. See U.S. DEP'T OF AGRIC., 1997 CENSUS OF AGRIC., OREGON STATE AND COUNTY DATA app. A (1999) (describing changes). Thus, between 1992 and 1997, metropolitan Portland may have merely lost farmland at a slower pace than other regions, rather than actually gaining farmland as Table 4 implies.

Table 4 suggests that Oregon's policies have been only moderately successful at preserving rural land. The Portland region has slowed farmland loss, but one of the three comparable metro areas (Denver) has been slightly more successful in doing so. On the other hand, the Portland region actually gained agricultural land between 1992 and 1997, while Denver's progress in farmland preservation was reversed. Thus, it is too early to tell whether the UGB is increasing the supply of farmland and/or rural land.

The inconclusive results of the UGB were hardly unforeseeable, because at the time of its creation, the Portland UGB included some vacant buildable land, thereby allowing developers to urbanize rural land without running afoul of the UGB.²¹¹ This "land cushion" constituted 37% of the buildable land within the UGB,²¹² giving developers ample opportunity to urbanize inside the UGB land. Presumably, a stricter UGB would have reduced development of rural land, but might have created negative side effects (such as land shortages leading to higher housing prices).²¹³ Moreover, thousands of "exurban" houses have been built outside the UGB, either on lands zoned for commercial farm and forest production or on "exception lands" (that is, land outside the UGB but identified as "committed" to urban land uses).²¹⁴ Thus, the UGB was lenient enough to allow development of a significant amount of rural land.

In sum, the Oregon UGB has been at best moderately successful in slowing the urbanization of rural areas: metropolitan Portland lost farmland in the 1980s and early 1990s, but may have slowed or halted those losses in recent years.

C. Sprawl, Automobile Dependency, and Portland

Thanks in part to suburban sprawl,²¹⁵ Americans drive more than ever. Between 1983 and 1995, the length of the average American commute increased by 37%.²¹⁶ As a result, vehicle miles traveled (VMT) grew four times faster than the driving-age population, as Americans spread farther and farther apart.²¹⁷ Also, because more Americans than ever live far from bus stops and other transit

²¹¹See Dearborn & Gygi, *supra* note 14, at 996 (discussing Portland's formulation and reformulation of UGB).

²¹²*Id.*; see also Gay, *supra* note 1, at 16 (stating, location of UGB "based upon anticipated land use needs over a projected twenty-year period").

²¹³See *infra* Part V.A. regarding the argument that UGBs increase housing prices.

²¹⁴Dearborn & Gygi, *supra* note 14, at 1007–09; see also *supra* notes 42–46 and accompanying text, which describe the law governing "exceptions" to UGB.

²¹⁵See *supra* notes 12–13 and accompanying text.

²¹⁶BENFIELD, *supra* note 3, at 34.

²¹⁷*Id.* at 30.

facilities,²¹⁸ public transit usage in the U.S. is far lower than in other affluent countries,²¹⁹ and many jobs are simply inaccessible to the carless urban poor.²²⁰ By making automobile ownership virtually mandatory for a normal life,²²¹ sprawl limits consumers' transportation choices²²² while arguably increasing traffic congestion²²³ and air pollution.²²⁴

One measure of automobile dependency is the growth or decline of public transit use. Table 5 addresses this issue.

²¹⁸See Paul M. Weyrich & William S. Lind, *Does Transit Work? A Conservative Reappraisal* (1999), at <http://www.apta.com/info/online/weyrich2new.htm> (citing Commerce Department survey showing that only 28.8% of Americans have satisfactory public transit available to them, down from 54.52% in 1974).

²¹⁹BENFIELD, *supra* note 3, at 35.

²²⁰See CONSERVATION LAW FOUNDATION, CITY ROUTES, CITY RIGHTS 20 (1998) (stating that in metropolitan Boston, just 43% of entry level employees are located within half a mile of bus or train stop); Marcia Myers, *Jobs Out of Reach for the Carless*, BALT. SUN, Nov. 14, 1999, at 10 (citing similar statistics for Baltimore region).

²²¹See *Miller v. Anckaitis*, 436 F.2d 115, 120 (3d Cir. 1970) ("For the urban poor, in particular, remoteness from the thriving suburban segment of the industrial economy and a deteriorating public transportation system often make use of an automobile the only practical alternative to welfare."); *People v. Coutard*, 454 N.Y.S.2d 639, 642 (1st Dist. 1982) ("In a suburban county such as ours, the use of an automobile by most of its citizens is often as necessary as placing bread upon their tables."); *Cent. Towers Co. v. Borough of Fort Lee*, 390 A.2d 677, 680 (N.J. Super. Ct. Law Div. 1978) ("Automobiles are a necessity and not a luxury in the suburbs where mass transit facilities are not as readily available to residents as they are to city dwellers."); NORQUIST, *supra* note 182, at 172 ("As in the rest of the advanced industrial world, driving a car in Canadian cities is a travel choice, not a necessity. Only the U.S. government denies this choice to its citizens.").

²²²Lewyn, *supra* note 7, at 348–50.

²²³BENFIELD, *supra* note 3, at 34–35.

²²⁴*Id.* at 55–62.

TABLE 5: ANNUAL TRANSIT BOARDINGS, 1980–96 (IN MILLIONS)²²⁵

	1980 boardings	1996 boardings	% increase
Denver	46.9	69.8	48.7
Portland	50.3	79.8	58.7
Salt Lake City	19.1	23.8	24.9
Seattle	98.2	115.5	17.6

All four metropolitan areas experienced increased transit ridership at a time when the majority of metropolitan transit systems actually lost riders²²⁶—but transit ridership grew faster in Portland than in Denver, Seattle, or Salt Lake City. Because cities tend to be more transit-accessible than suburbs,²²⁷ UGB-related growth in city population²²⁸ may have contributed to Portland’s surge in transit ridership.

It does not appear, however, that automobile use has decreased in Portland. Table 6 compares vehicle miles traveled (“VMT”) in Portland to VMT in other urbanized areas.

²²⁵See Wendell Cox, *Urban Transport Fact Book: U.S. Metropolitan Areas, Public Transport Ridership Trend: 1980–96*, at <http://www.publicpurpose.com/ut-us96ride.htm> (last visited Feb. 25, 2001) [hereinafter Cox, *Ridership Trend*]. Cox asserts that public transit’s “market share” decreased between 1980 and 1990, that is, car use increased faster than transit use. See Wendell Cox, *Urbanization and Transport Trends: Seattle & Portland*, at <http://www.publicpurpose.com/dmseapor.htm> (last revised May 22, 1999) [hereinafter Cox, *Seattle/Portland*]. However, two-thirds of Portland’s added ridership occurred after 1990. See Cox, *Ridership Trend*, *supra* (reporting that Portland boardings increased from 50.3 million to 60.9 million between 1980 and 1990, and from 60.9 million to 79.8 million between 1990 and 1997).

²²⁶Cox, *Ridership Trend*, *supra* note 225.

²²⁷See *Cent. Towers Co.*, 390 A.2d at 680 (noting that automobile is generally luxury in cities but necessity in suburbs).

²²⁸See *supra* notes 183–99 and accompanying text.

TABLE 6: DAILY VMT PER CAPITA IN URBANIZED AREAS, 1989–99²²⁹

	1989	1999	% increase
Denver	17.3	23.2	34.1
Portland	18.9	20.8	10.0
Salt Lake City	18.5	22.6	22.1
Seattle	24.2	25.9	7.0

Table 6 shows that Portlanders drive less than other westerners, and that their per capita VMT has grown more slowly than that of Salt Lake City and Denver commuters. Table 6 also shows, however, that Portland's VMT has grown more quickly than that of Seattle commuters. Although city residents drive less than suburbanites,²³⁰ the number of city residents arguably added by the UGB (161,000 if every single city resident added between 1980 and 2000 would have lived in the suburbs otherwise)²³¹ comprised only 8.3% of the region's population²³²—not enough to massively reduce automobile use, especially since most residents of the city of Portland drive to work.²³³

In sum, Portland's transportation patterns differ only modestly from those of its western neighbors: transit use has risen, but automobile use has risen as well (albeit more slowly than in some other metropolitan areas).

²²⁹See U.S. DEP'T OF TRANSP., FED. HIGHWAY ADMIN., HIGHWAY STATISTICS 1989, at 179 (1990); U.S. DEP'T OF TRANSP., FED. HIGHWAY ADMIN., HIGHWAY STATISTICS 1999, Table HM-72, at <http://www.fhwa.dot.gov/ohim/hs99/hm72.htm> (last modified May 28, 2002).

²³⁰See U.S. CENSUS BUREAU, U.S. DEP'T OF COMMERCE, TRAVEL TO WORK CHARACTERISTICS FOR THE 50 LARGEST METROPOLITAN AREAS BY POPULATION IN THE UNITED STATES: 1990 CENSUS, at <http://www.census.gov/population/socdemo/journey/msa50.txt> (last modified Feb. 26, 1997) [hereinafter METRO AREA TRAVEL] (reporting that 6% of Portland area residents used transit to get to work in 1990); U.S. CENSUS BUREAU, U.S. DEP'T OF COMMERCE, TRAVEL TO WORK CHARACTERISTICS FOR THE 50 LARGEST CITIES BY POPULATION IN THE UNITED STATES: 1990 CENSUS, at <http://www.census.gov/population/socdemo/journey/city.txt> (last modified Feb. 26, 1997) [hereinafter CITY TRAVEL] (reporting that 11% of Portland city residents used transit to get to work in 1990).

²³¹See *supra* note 189 (reporting that city population increased from 368,000 to just over 529,000 between 1980 and 2000).

²³²See CENSUS TABLE T-3, *supra* note 186 (reporting that regional population comprised 1.918 million people in 2000).

²³³CITY TRAVEL, *supra* note 230.

V. ARE UGBS A CURE WORSE THAN THE DISEASE?

The case against the UGB has been stated succinctly by the Almanac of American Politics, an authoritative guide²³⁴ to American politics:

[Portland's] 'livable community' comes at a price. The Portland area was recently rated the fourth-least affordable place in the nation to purchase a new home. Portland's policies guarantee greater traffic congestion; even optimistic planners acknowledge that its population growth will be much larger than the number of people who can be persuaded to use mass transit. Greater population densities produce more intense pollution²³⁵

In other words, the Almanac suggests that the UGB: (1) reduces housing affordability by limiting development; and (2) creates traffic congestion and pollution by increasing density. Other commentators have suggested that the UGB reduces housing quality by increasing density, and that regardless of their beneficial effects, such land use controls are an inappropriate government intrusion into property rights.²³⁶ Each of these arguments will be addressed in turn.

A. Portland's So-Called Affordability Crisis

By most measures, Portland is not one of America's most expensive metropolitan areas. According to the National Association of Home Builders (NAHB), Portland's median home sale price in 2000 was \$168,000, far less than

²³⁴See MICHAEL BARONE & GRANT UJIFUSA, THE ALMANAC OF AMERICAN POLITICS 2000, back cover (quoting *Washington Post's* description of Almanac as "indispensable" and *The Economist's* reference to Almanac as "a legendary standby").

²³⁵*Id.* at 1340. The Almanac also suggests without elaboration that increased densities may lead to unspecified "[i]ncome disparities" and higher property taxes. *Id.* But the city/suburb income gap has actually declined in metropolitan Portland. See *supra* notes 203–06 and accompanying text. Additionally, property taxes in Portland are below the national average. See CNNmoney, *Best Places to Live*, at http://money.cnn.com/best/bplive/details/PORTL_OR.html (last visited July 22, 2002).

²³⁶See Bolick, *supra* note 11, at 864–68; Alan Katz, *Developing the Future*, DENV. POST, Feb. 10, 1997, at A1 (quoting Bill Moshofsky of anti-UGB Oregonians in Action as follows: "Property rights have been swept under the rug. And the high density is going to reduce the quality of life. People will be crowded together, living on small lots.").

San Francisco (\$505,000), New York (\$237,000), Seattle (\$220,000), Denver (\$183,000) and literally dozens of other metropolitan areas.²³⁷

It could be argued that even though Portland is not incredibly expensive, the UGB has nevertheless triggered an affordability crisis by creating a rapid increase in home prices.²³⁸ Table 7 tests this theory by comparing Portland's housing price increases to those of comparable metropolitan areas.

TABLE 7: HOUSING PRICE INCREASES IN THE URBAN WEST, 1991–2000²³⁹

	1991 median price (in thousands of dollars) (1 st quarter)	2000 median price (in thousands of dollars) (3 rd quarter)	% increase
Denver	84	183	117
Portland	80	168	110
Salt Lake City	76	151	98
Seattle	130	220	69

Table 7 shows that home prices in Portland have increased more slowly than home prices in Denver, and that Portland-area housing price appreciation has been only slightly more rapid than price appreciation in other western regions.

It could be argued that despite Portland's perfectly ordinary rates of housing appreciation, Portland's houses are nevertheless relatively more expensive than houses in other regions because wages are lower in Portland. Table 8 sets forth the ratio between median income and median home price for Portland and comparable metropolitan areas.

²³⁷See NATIONAL ASSOCIATION OF HOMEBUILDERS, HOUSING OPPORTUNITY INDEX, THIRD QUARTER 2000, at http://www.nahb.com/facts/hoi/2000_3Q/complete_ranking.htm (last modified Nov. 2, 2001) [hereinafter 2000 NAHB RANKING].

²³⁸See, e.g., Bolick, *supra* note 11, at 864 (asserting that UGB-induced “artificial diminution of suburban housing development has led to sharply escalating prices”); Phillips & Goodstein, *supra* note 187, at 334 (“Articles in the local daily paper, the Oregonian, also appear to accept as a fact of life that the UGB is partially if not largely responsible for the runup in housing prices.” (citations omitted)).

²³⁹Statistics were supplied by the National Association of Homebuilders [hereinafter NAHB Statistics] (on file with author). Even UGB critics admit that Portland-area housing prices did not increase during the first decade of the UGB. See Samuel R. Staley & Gerard C.S. Mildner, *Urban-Growth Boundaries and Housing Affordability: Lessons from Portland*, at <http://www.rppi.org/urban/pb11.html> (Oct. 1999) (criticizing UGBs, but admitting that “from 1985 to 1990 . . . the Portland area experienced a housing recession,” after which prices increased).

TABLE 8: MEDIAN INCOMES AND MEDIAN HOME PRICES, 2000 (in thousands of dollars)²⁴⁰

	Median income	Median home price	Income as % of home price
Denver	62.1	183	33.9
Portland	53.7	168	31.9
Salt Lake City	53.4	151	35.3
Seattle	65.8	220	29.9

Table 8 shows that even after Portland's lower wages are accounted for, Portland is more affordable than Seattle and only slightly less affordable than Denver or Salt Lake City. In all four areas, the median home price exceeds median income by about a three to one margin.

If Portland's housing appreciation rate is lower than Denver's and its overall prices are lower than Seattle's, then why is it so often argued that Portland is unaffordable? UGB critics rely on the NAHB Housing Opportunity Index (HOI)²⁴¹ which, in recent years, has consistently labeled Portland as one of the nation's most expensive metropolitan areas.²⁴² The HOI, however, yields preposterous results. For example, metropolitan New York City's median income is only \$2500 higher than Portland's (\$56,200 as opposed to Portland's \$53,700), and New York City's median home price is \$69,000 higher (\$237,000 as opposed to Portland's \$168,000). Yet, the NAHB considers New York City more affordable than Portland!²⁴³

Why does the NAHB claim that New York is more affordable than Portland? The NAHB's affordability index is the percentage of homes allegedly "affordable" to a hypothetical household earning the median regional income.²⁴⁴ Thus, NAHB reasons, New York is more affordable than Portland because New

²⁴⁰See 2000 NAHB RANKING, *supra* note 237.

²⁴¹See, e.g., D. Michael Heywood, Editorial, *Affording a House*, VANCOUVER COLUMBIAN, Feb. 11, 2001, at C8 ("Vancouver-Portland area is the 25th least affordable housing market among 192 ranked by the National Association of Home Builders . . ."); Steve Stephens, *Cheap Homes in the Burbs Are a Casualty of Zoning Law*, COLUMBUS DISPATCH, Mar. 19, 2000, at 1D ("According to the National Association of Home Builders, Portland has one of the least-affordable housing markets in the country . . ."); Staley & Mildner, *supra* note 239 (citing NAHB statistic that Portland ranks "among the bottom 10 percent" of markets in housing affordability); see also Bob Young, *Portland's Housing Myth*, WILLAMETTE WEEK, Jan. 13, 1999, at 11 (quoting Doug Porter of Growth Management Institute as follows: "The home builders really did a job on Portland. . . . They've really been successful in selling the line that the UGB is driving up housing prices.").

²⁴²See, e.g., 2000 NAHB RANKING, *supra* note 237.

²⁴³*Id.*

²⁴⁴*Id.*

York households earning the median income can allegedly afford 29.3% of homes, while Portland households earning Portland's median income can only afford 27.6% of homes.²⁴⁵ This means that the prices of homes above the NAHB-designated "affordability level" (as well as the price and desirability of homes below this "affordability level") are irrelevant to the NAHB index.

Portland's apparent unaffordability may be related to the fact that the gap between Portland's most expensive and least expensive housing is smaller than similar gaps in New York or other cities. Thus, a homeowner who cannot afford the average house also cannot afford many of the area's cheaper-than-average houses.²⁴⁶ For example, only about one-third of Portland-area homeowners have unusually high (50% over the regional median) or unusually low (50% below the regional median) housing costs.²⁴⁷ In contrast, a majority of Los Angeles-area homeowners²⁴⁸ and over 40% of New York-area homeowners have unusual housing costs.²⁴⁹

It follows that under the NAHB's criteria, the metropolitan areas with the largest gap between the most expensive and least expensive homes may seem

²⁴⁵*Id.*

²⁴⁶Young, *supra* note 241, at 11 (quoting Jon Chandler of Oregon Building Industry Association, who explained that most Portland-area homes are unaffordable because "[w]e don't have a wide range of distribution").

²⁴⁷See U.S. DEP'T OF COMMERCE & U.S. DEP'T OF HOUS. AND URBAN DEV., AMERICAN HOUSING SURVEY FOR THE PORTLAND METROPOLITAN AREA IN 1995, at 8 (1997) [hereinafter 1995 PORTLAND SURVEY]. The median cost was \$704 per month; 96,300 out of 424,000 homeowners (or 22.7%) paid under \$350 per month, while 59,800 (or 14.1%) paid over \$1250 per month. Because the survey groups homeowners into \$1000–1250, \$1250–1500, and \$1500 or over brackets, there is no way to tell exactly how many paid over \$1056, exactly 150% of the median housing cost; similarly, there is no way to tell exactly how many paid under \$352 per month, exactly 50% of the median.

²⁴⁸See U.S. DEP'T OF COMMERCE & U.S. DEP'T OF HOUS. AND URBAN DEV., AMERICAN HOUSING SURVEY FOR THE LOS ANGELES-LONG BEACH METROPOLITAN AREA IN 1995, at 8 (1997) [hereinafter LOS ANGELES SURVEY]. The median housing cost was \$943 per month; 417,100 out of 1.375 million homeowners (or 30.3%) paid under \$450 per month, while 362,900 (or 26.3%) paid over \$1500 per month. Because the survey groups homeowners into \$1000–1250, \$1250–1500, and \$1500 or over brackets, there is no way to tell exactly how many paid over \$1414.50, exactly 150% of the median housing cost; similarly, because the bracket closest to 50% of the average home price was \$450–500, there is no way to tell exactly how many paid under \$471.50, 50% of the median cost.

²⁴⁹See U.S. DEP'T OF COMMERCE & U.S. DEP'T OF HOUS. AND URBAN DEV., AMERICAN HOUSING SURVEY FOR THE NEW YORK-NASSAU-SUFFOLK-ORANGE METROPOLITAN AREA IN 1995, at 8 (1997) [hereinafter New York Survey]. The median cost was \$931 per month; 334,000 out of 1.877 million homeowners (or 17.8%) paid under \$450 per month, while 463,700 (or 24.6%) paid over \$1500 per month. Because the survey groups homeowners into \$1000–1250, \$1250–1500, and \$1500 or over brackets, there is no way to tell how many paid over \$1396.50, exactly 150% of the median housing cost; similarly, because the bracket closest to 50% of the median regional housing cost is \$450–500, it cannot be determined exactly how many paid over \$465.50, 50% of the median housing cost.

quite affordable, because such areas will have a large number of low-cost homes affordable to median-income homeowners. It further follows that the most dangerous cities are by definition relatively affordable under the NAHB's methodology, because the very cheap houses in expensive cities may be located in run-down, dangerous areas.²⁵⁰

The following hypothetical illustrates how the NAHB test may lead to absurd results. Imagine two cities, City A and City B. In both, the median housing price is \$150,000. A household earning the median income can afford a \$50,000 to \$100,000 house, and any house costing under \$50,000 is likely to be in a crime-ridden neighborhood and thus undesirable to all but the most adventurous (or desperate) homebuyers. Suppose that City A is a socially homogeneous city with very low crime rates, and that as a result the price gap between the best and the worst neighborhood is lower than in most big cities (as appears to be the case in Portland).²⁵¹ City A's housing prices are thus distributed as follows:

Over \$200,000:	5%
\$150-200,000:	40%
\$100-150,000:	25%
\$50-100,000:	20%
Under \$50,000:	5%

Although City A has very few "high-end" houses, the remaining houses are so clustered in the \$100,000 to \$200,000 range that a median income household can afford only 25% of them. Thus, City A has an affordability index of 25 under the NAHB methodology. However, most of the low-end houses are not in crime-infested neighborhoods, so 20% of houses are both affordable and relatively desirable (i.e., not in a dangerous neighborhood). Thus, the *real* affordability index—that is, the percent of houses that are both affordable to middle-class homebuyers *and* located in neighborhoods that middle-class homebuyers would actually be willing to consider—is 20, almost as high as the NAHB affordability rating.

²⁵⁰I reason as follows: if a neighborhood has high crime, this fact will reduce demand for that neighborhood, which in turn will reduce housing prices in that neighborhood. Cf. David T. Kraut, Note, *Hanging Out the No Vacancy Sign: Eliminating the Blight of Vacant Buildings from Urban Areas*, 74 N.Y.U. L. REV. 1139, 1139 (1999) (linking vacant buildings, crime, and declining property values).

²⁵¹See *supra* note 247 and accompanying text (noting that in metropolitan Portland, gap between most expensive and least expensive houses is relatively narrow); *infra* notes 252–54 and accompanying text (noting crime and poverty are relatively low in Portland).

Portland closely resembles City A. Portland's murder rate (5.3 murders per 100,000 residents in 1998) is lower than that of most big cities.²⁵² The Portland metropolitan area is significantly safer than most cities.²⁵³ Portland's urban poverty rate is lower than the national poverty rate²⁵⁴ and (as in City A) the price gap between Portland's most and least expensive houses is lower than in other metropolitan areas.²⁵⁵

By comparison, City B is a two-class city. It has a number of relatively safe elite neighborhoods and/or suburbs, an equally large number of cheap, crime-infested slums, and a tiny middle class. As a result, its housing prices are distributed as follows:

Over \$200,000:	40%
\$150-200,000:	10%
\$100-150,000:	5%
\$50-100,000:	5%
Under \$50,000:	40%

Because 45% of City B houses are theoretically affordable to a median-income household (i.e., one who can only afford a \$100,000 house), the NAHB would give City B an affordability index of 45—nearly twice that of City A. But because of City B's crime problem, many of its housing units are simply unthinkable to the average homebuyer concerned about his or her safety. In fact, when the dangerous "under \$50,000" neighborhoods are excluded, City B's affordability rating drops to 5, one-fourth that of City A.

Thus, the NAHB index yields absurd results because it systematically disfavors relatively safe, homogenous cities and metropolitan areas (like City A and Portland), and favors cities and metropolitan areas sharply divided into rich and poor, safe and unsafe (such as city B). The relative affordability of America's most dangerous regions supports this interpretation of NAHB's tabulations. The five metropolitan areas with the highest violent crime rates in 1998 all had higher

²⁵²See 2000 ABSTRACT, *supra* note 184, at 205 (noting, of sixty-five cities listed, all but eight had higher murder rates than Portland).

²⁵³See THE NEW YORK TIMES ALMANAC 2001, at 303–06 (John W. Wright ed., 2000) (explaining that in 1998, metropolitan Portland's murder rate of 3.1 per 100,000 people was less than half national rate of 6.3, and overall violent crime rate of 565.5 per 100,000 was slightly lower than national rate of 566.4).

²⁵⁴See 2000 ABSTRACT, *supra* note 184, at 477 (listing national poverty rate as 13.3% in 1997); *supra* note 203 and accompanying text (listing Portland's poverty rate as 12.6% in 1997).

²⁵⁵See *supra* notes 247–49 and accompanying text.

“affordability scores” than Portland.²⁵⁶ Table 9 compares Portland with two of these “City B”-type areas.

TABLE 9: HOUSING COSTS IN NEW YORK, PORTLAND, AND LOS ANGELES (4th quarter 1998)²⁵⁷

	Median income (in thousands)	Median home price (in thousands) score	NAHB affordability score
Portland	49.6	155	38.7
Los Angeles	49.8	179	50
New York	49.8	160	56

Los Angeles and New York had median incomes virtually identical to those of Portland, and higher median home prices. Yet according to the NAHB, Los Angeles and New York (whose violent crime rates were nearly double those of Portland)²⁵⁸ are far more affordable, presumably because they have more extremely inexpensive neighborhoods. For example, New York and Los Angeles have higher median home prices than Portland,²⁵⁹ but also have more homes that cost under \$200 per month than Portland.²⁶⁰ Thus, the NAHB index appears to

²⁵⁶See NEW YORK TIMES ALMANAC, *supra* note 253, at 306 (listing Albuquerque, Baltimore, Los Angeles, Miami, and New York City as five metropolitan areas with highest crime rate in 1998); 2000 NAHB RANKING *supra* note 237 (noting all five metropolitan areas were more affordable than Portland according to NAHB index).

²⁵⁷See NAHB Statistics, *supra* note 239. I use 1998 statistics because I do not yet have regional crime statistics for 1999 or 2000.

²⁵⁸See NEW YORK TIMES ALMANAC, *supra* note 253, at 306 (explaining that Los Angeles and New York metro areas had 1017 and 1037.2 violent crimes per 100,000 residents respectively, while Portland had 565.5). In fact, Los Angeles has suburbs more dangerous than the city of Portland. See F.B.I., U.S. DEP'T OF JUSTICE, UNIFORM CRIME REPORTS FOR THE UNITED STATES 1997, at 119, 151 (1998) (indicating that Compton, California had 6.6 murders per 100,000 people in 1997, about one and a half times as many as Portland); Anthony Venutolo, *A Feast of Festivals*, THE STAR-LEDGER, Jan. 19, 2001, at 26 (characterizing Compton as “a rough suburb outside Los Angeles”).

²⁵⁹See *supra* notes 239, 257 and accompanying text.

²⁶⁰See 1995 PORTLAND SURVEY, *supra* note 247, at 8 (indicating 28,000 of Portland's 655,100 occupied housing units, or 4.3%, cost under \$200 per month); LOS ANGELES SURVEY, *supra* note 248, at 8 (indicating 185,600 of 2.947 million occupied housing units, or 6.3%, cost under \$200 per month); NEW YORK SURVEY, *supra* note 249, at 8 (indicating 213,800 of 4.207 million occupied housing units, or 5%, cost under \$200 per month). New York and Los Angeles also have more housing perceived as low quality. For example, less than 10% of Portland-area householders (64,500 out of 655,100) said crime was a problem in their neighborhood, as opposed to 13% of New York-area householders (548,300 out of 4.207 million), and over 15% of Los Angeles-area householders (468,000 out of 2.947 million). See 1995 PORTLAND SURVEY, *supra* note 247, at 18; LOS ANGELES SURVEY, *supra* note 248, at 18; NEW YORK SURVEY, *supra* note 249, at 18.

reward cities with a profusion of dangerous, low-cost slums. The NAHB index of affordability may be flawed in other respects. The index fails to consider Oregon's lack of a sales tax (thus underestimating buyers' income). It also fails to account for the fact that second- and third-time buyers benefit from the rising resale value of their first homes, because they can make larger down payments on later homes.²⁶¹

Even though Portland's housing prices have exploded in recent years, its overall cost of living has not. Between 1995 and 1999, Portland's consumer price index for all items increased by 12.7%—no more than in Denver (12.7%), and less than in Seattle (13.5%).²⁶² Thus, there is no reason to believe that Portland consumers are being impoverished by high housing prices.

In sum, Portland's property values have indeed gone up over the past decade, but its price increases and home values are in line with those of comparable metropolitan areas. The UGB may have had a marginal effect on Portland's housing costs, but it has hardly been the disaster that some have claimed.²⁶³

B. Portland's So-Called Congestion Crisis

Environmentalists argue that suburban sprawl increases traffic congestion, by increasing the number of cars on the road and the distances that drivers travel.²⁶⁴ UGB critics argue, on the other hand, that anti-sprawl policies such as UGBs actually increase congestion by forcing a constant or growing number of

²⁶¹See Young, *supra* note 241. The latter advantage, of course, does not help first-time homebuyers.

²⁶²See *Portland Fast Look*, *supra* note 201; *Fast Look*, *supra* note 202.

²⁶³Even if the UGB has significantly increased home prices, eliminating or diluting the UGB is not the only plausible remedy. Portland-area municipalities, like those in other metropolitan areas, have other land use restrictions that make it more difficult to build affordable housing within the UGB. See Heywood, *supra* note 241 (noting that most Portland-area municipalities prohibit inexpensive "manufactured homes" that apply principles of factory production to homes). If such restrictions were eliminated, the Portland market could become more affordable without any additional policy changes.

²⁶⁴See BENFIELD, *supra* note 3, at 35–36.

cars onto the same amount of land.²⁶⁵ It follows, according to UGB critics, that Portland's UGB, by increasing density, has increased traffic congestion.²⁶⁶

The Texas Transportation Institute (TTI), a state research agency affiliated with Texas A & M University,²⁶⁷ regularly conducts "urban mobility studies" that evaluate the extent of congestion in America's largest metropolitan areas. Its 2001 study²⁶⁸ contains numerous measures of congestion trends, including increases in annual delay per person.²⁶⁹ TTI ranked Portland number eleven (out of sixty-eight metropolitan areas ranked) in the 1982–99 increase in delay caused by traffic congestion—that is, TTI found that congestion increased at a more rapid rate in Portland than in all but ten metropolitan areas. But two of those ten were comparable areas which lacked UGBs for some or all of the relevant period—Seattle (no. 5) and Denver (no. 8).²⁷⁰ In other words, congestion increased dramatically in Portland, but no more dramatically than in other areas without UGBs.

Moreover, there is no reason to believe that Portland's congestion increase was the result of increased density. According to TTI, Portland's population density actually decreased slightly from 1982 to 1999, from 3230 people per square mile to 3040.²⁷¹

²⁶⁵See Will Jones, *Road to Where? More People, More Cars, More Asphalt*, RICHMOND TIMES-DISPATCH, Sept. 12, 2000, at A1 (citing assertion of transportation consultant, Wendell Cox, that traffic congestion increases as development densities increase); Wendell Cox, *How "Smart Growth" Intensifies Traffic Congestion and Air Pollution*, Independence Institute, at <http://www.i2i.org/SuptDocs/Enviro/AirPollutionSmartGrowth.htm> (Sept. 25, 2000) [hereinafter Cox, *Smart Growth*] (setting forth theory in more detail).

²⁶⁶Cox, *Smart Growth*, *supra* note 265 (explaining that in Portland, "[t]raffic congestion has intensified rapidly"). In fact, one UGB critic asserts that Portland policymakers seek to "deliberately increas[e] traffic congestion over the next 40 years." Steven Hayward, *Legends of the Sprawl*, POL'Y REV., Sept.–Oct. 1998, at 30–31. This claim appears to misconstrue Portland's land use plans. In fact, Portland's planning agency asserts that although congestion will increase under any foreseeable policy, congestion may grow even faster if the UGB is watered down. See METRO, CONCEPTS FOR GROWTH 41, 47 (1994) (explaining that "Concept A," which would expand UGB by 25%, "would have the worst overall congestion of any growth concept" and would have "the lowest daily transit ridership[] of the three growth concepts"); *id.* at 53, 65 (showing, by contrast, Concepts B and C would add little or no land to UGB); *id.* at 88 (listing congestion projections under several possible regional plans).

²⁶⁷Brock Read, *The Confederacy Writhes Again*, CHRON. OF HIGHER EDUC., June 30, 2000, at A8.

²⁶⁸TEXAS TRANSPORTATION INSTITUTE, THE 2001 URBAN MOBILITY STUDY, at <http://mobility.tamu.edu> (last visited May 8, 2001) [hereinafter TTI STUDY].

²⁶⁹*Id.* at app. A–5 (describing measure in detail).

²⁷⁰*Id.* at tbl. A-5 (noting that Denver has no UGB); see also Katz, *supra* note 187 (noting that Seattle UGB was only recently instituted).

²⁷¹TTI STUDY, *supra* note 268, Abridged Tables: Urban Area Information, The Mobility Data for Portland-Vancouver OR-WA, at 1–2.

Seattle's brief experience with UGBs supports the view that UGBs do not cause congestion. Seattle instituted UGBs in 1994²⁷²—so if UGBs cause congestion, congestion in Seattle should have risen more dramatically in recent years than in earlier years. Instead, Seattle's delay per person exploded from nineteen hours per driver in 1982, to fifty-five hours in 1992, and then decreased to fifty-three hours in 1999.²⁷³ Thus, the Seattle UGB has not increased traffic congestion.

It could be argued that the UGB has failed to dramatically increase congestion only because Portland has not yet become particularly dense, and if Portland does not dilute or eliminate the UGB in the future, density may increase and thus cause congestion.²⁷⁴ The link between density and congestion, however, is weak. Table 10 lists the urbanized areas with more congestion than Portland, and compares their density to Portland.

TABLE 10: DENSITY AND DELAY PER PERSON, 1999²⁷⁵

	Delay per person (hours)	Population per square mile
Los Angeles	56	5575
Atlanta	53	1585
Seattle	53	2295
Houston	50	1830
Dallas	46	1455
Washington	46	3420
Austin	45	1585
Denver	45	2240
St. Louis	44	1775
Orlando	42	1780
Miami	42	3785
Boston	42	2605
San Jose	42	4340
Nashville	42	1085
San Francisco	42	3205
San Berardino	38	2600

²⁷²Nokes, *supra* note 14.

²⁷³TTI STUDY, *supra* note 268, tbl. A-5.

²⁷⁴See Cox, *Seattle/Portland*, *supra* note 225 (explaining that Portland-area density grew only modestly between 1980 and 1990); TTI STUDY, *supra* note 268 (illustrating that density actually declined in metropolitan Portland between 1982 and 1999).

²⁷⁵TTI STUDY, *supra* note 268, tbls. A-1, A-5.

Minneapolis	38	1900
San Diego	37	3575
Indianapolis	37	2050
Louisville	37	2060
Tampa	35	1530
Portland	34	3040

Table 10 shows no link between density and congestion: of twenty-one areas with more congestion than Portland, fifteen (including Seattle and Denver) are *less* densely populated. Thus, density either (a) does not cause traffic congestion or (b) increases traffic congestion so minutely that the congestion-causing effect of density is overwhelmed by other relevant factors.

In sum, traffic congestion in metropolitan Portland has grown about as fast as in other western metropolitan areas without UGBs—a fact that suggests UGBs neither cause nor cure traffic congestion to a significant extent. And if the UGB increases regionwide density in the future, traffic congestion will not necessarily increase as a result, because there is no clear correlation between regionwide population density and regionwide traffic congestion.

C. Density, UGBs, and Air Quality

Air quality is widely acknowledged to be linked in some way to density, sprawl, and UGBs, but there is no consensus as to how these problems are linked to UGBS. Environmentalists assert that sprawl creates pollution by increasing automobile use,²⁷⁶ and that Oregon's land use policies might therefore limit pollution by limiting sprawl.²⁷⁷ UGB opponents argue, however, that UGB-induced increases in density will lead to increases in pollution. One commentator reasons that "[a]s density rises, so does congestion."²⁷⁸ "[G]iven the fact that air pollution rises as urban automobile speeds decline and as 'stop and start' operation increases, the result is greater air pollution."²⁷⁹

As noted above,²⁸⁰ Portland's traffic congestion is no worse than that of less densely populated metropolitan areas, including otherwise comparable regions such as Seattle and Denver.²⁸¹ If Portland's policies are not certain to

²⁷⁶BENFIELD, *supra* note 3, at 55–62.

²⁷⁷*Id.* at 45–47, 153–54 (describing study showing that if Portland-area development was redirected towards areas within UGB, energy consumption and air pollution would be reduced).

²⁷⁸Cox, *Smart Growth*, *supra* note 265.

²⁷⁹*Id.*

²⁸⁰*See supra* notes 270, 275 and accompanying text.

²⁸¹*See supra* note 275 and accompanying text (explaining that Seattle drivers experienced 53 hours of delay per person; Denver drivers, 45 hours of delay per person; and Portland drivers, only 34 hours of delay per person).

cause increased traffic congestion, those policies obviously will not cause congestion-related pollution.

Moreover, air pollution in Portland is comparable to that of nearby metropolitan areas. Table 11 lists trends in carbon monoxide emissions for Portland and comparable western metropolitan areas.

TABLE 11: CARBON MONOXIDE EMISSIONS IN PARTS PER MILLION, 1989–98²⁸²

	1989	1998	% REDUCTION
Denver	7.8	3.9	50.0
Portland	8.2	5.1	37.8
Salt Lake City	7.7	4.9	36.3
Seattle	8.5	4.5	47.0

Table 11 reveals that all four metropolitan areas reduced carbon monoxide pollution by roughly similar amounts, and that Portland was slightly less successful in reducing carbon monoxide than Seattle and Denver but slightly more successful than Salt Lake City. Thus, it appears that Oregon's land use and transportation policies, to the extent those policies differ from those of other western states, have not significantly affected air quality. Portland's rather ordinary air quality performance should not be surprising, in view of Portland's apparent failure to reduce automobile use during the 1990s.²⁸³

It could be argued that even if the UGB has not yet increased pollution, it will do so in the future by encouraging higher density (which will in turn allegedly increase pollution by increasing traffic congestion).²⁸⁴ To be sure, a scintilla of evidence supports this theory: Los Angeles has a higher population density than any other urbanized area²⁸⁵ and has more carbon monoxide pollution

²⁸²I use carbon monoxide emissions as a measurement of air pollution because carbon monoxide is the pollution most closely related to automobile use; 62% of carbon monoxide is emitted from motor vehicles, as opposed to less than one-third of other major pollutants. Mann, *supra* note 1, at 1375 n.172. For statistics on pollution in individual metropolitan areas, see U.S. E.P.A., NATIONAL AIR QUALITY AND EMISSIONS TRENDS REPORT, 1998, tbl. A-14, at <http://www.epa.gov/oar/aqtrnd98/appenda.pdf> (last visited Feb. 16, 2001) [hereinafter 1998 AIR QUALITY].

²⁸³See *supra* note 229 and accompanying text.

²⁸⁴See Cox, *Smart Growth*, *supra* note 265 (asserting that density, congestion, and pollution go together).

²⁸⁵TTI STUDY, *supra* note 268, tbl. A-1.

than most other large urbanized areas.²⁸⁶ But Los Angeles is unusual in that it combines high density with high automobile dependency,²⁸⁷ perhaps because its central core is far less dense than that of less automobile-oriented cities: the central city of Los Angeles had only 7426 people per square mile in 1990.²⁸⁸ By contrast, each of the eight large metropolitan areas included in the study where at least 10% of commuters used public transit in 1990²⁸⁹ included or was near a central city with 9500 persons or more per square mile.²⁹⁰

Metropolitan areas with high levels of public transit use tend to have relatively clean air. Table 12 lists the five metropolitan areas with the highest public transit ridership, and their pollutant levels, and compares them to Portland and other comparable metropolitan areas.

TABLE 12: PUBLIC TRANSIT RIDERSHIP AND CARBON MONOXIDE, 1998

	% of commuters 1998 using public transit ²⁹¹	Carbon monoxide emissions (parts/million) ²⁹²
New York City	47.3	3.7
San Francisco	19.5	3.5
Chicago	17.1	3.4
Boston	14.2	2.9
Washington	13.7	3.3
Denver	4.4	3.9
Portland	6.0	5.1
Salt Lake City	3.0	4.9
Seattle	7.4	4.5

²⁸⁶See 1998 AIR QUALITY, *supra* note 282, tbl. A-14 (reporting that Los Angeles has 6.1 parts per million of carbon monoxide, second only to Las Vegas). One small metropolitan area, Huntington, West Virginia, has 7.2 parts per million of carbon monoxide. *Id.*

²⁸⁷See METRO AREA TRAVEL, *supra* note 230 (reporting that in Los Angeles, public transit's 6.5% market share of commuters is equal to that of average metropolitan area).

²⁸⁸NEW YORK TIMES ALMANAC, *supra* note 253, at 230.

²⁸⁹The eight large metropolitan areas included in the study were New York, Chicago, Philadelphia, Washington, Boston, Nassau-Suffolk, Newark, and San Francisco. METRO AREA TRAVEL, *supra* note 230.

²⁹⁰NEW YORK TIMES ALMANAC, *supra* note 253, at 229-31. Because Nassau-Suffolk is near New York City, I count New York City as Nassau-Suffolk's central city. See 2000 ABSTRACT, *supra* note 184, at 34 (categorizing Nassau-Suffolk part of New York metropolitan area).

²⁹¹METRO AREA TRAVEL, *supra* note 230.

²⁹²1998 AIR QUALITY, *supra* note 282.

The most public transit-friendly metropolitan areas are all less polluted than Portland, Denver, Seattle, or Salt Lake City. Therefore, if Portland can ever densify its central core and reduce automobile dependency to the extent that those metropolitan areas have done, air pollution is unlikely to increase.

D. Do UGBs Reduce Housing Quality?

UGB opponents argue that even if the Portland UGB does not increase housing costs, traffic congestion, or air pollution, it has reduced the quality of the housing stock by reducing the amount of buildable land, thus reducing home and lot sizes. For example, one anti-UGB article is titled: *Squeezed Out: No Swingset, No Sandbox, No Space Left for the American Dream*.²⁹³ The article asserts that because few new homes are built on half-acre lots, “[t]he American Dream is dead in Portland.”²⁹⁴ Similarly, one anti-UGB activist asserts that if the UGB is not expanded or eliminated, “[p]eople will be crowded together, living on small lots.”²⁹⁵

But in fact, the specter of a hyper-dense Portland is imaginary; Portlanders’ homes and lots are as large as ever. Between 1986 and 1995, the median-sized owner-occupied home in Portland grew from 1674 square feet²⁹⁶ to 1764 square feet.²⁹⁷ The median lot size grew slightly, from .22 acre²⁹⁸ to .23 acre.²⁹⁹ The number of houses sitting on over half an acre of land grew from 74,000³⁰⁰ to 98,700.³⁰¹ And during the 1990s, “nearly 800,000 of the 1.4 million people living in the Portland area . . . saw no change in the density of their neighborhoods.”³⁰² As a result, “only 5% of the region’s residents live in areas with population density greater than 10,000 people per square mile.”³⁰³ In

²⁹³See John A. Charles, *Squeezed Out: No Swingset, No Sandbox, No Space Left for the American Dream*, CASCADE INST. POL’Y PERSP. NO. 1014 (Feb. 2000), at http://www.CascadePolicy.org/pdf/env/P_1014.pdf.

²⁹⁴*Id.* (quoting would-be homebuyer Julie Riggs).

²⁹⁵See Katz, *supra* note 236 (quoting anti-UGB activist Bill Moshofsky).

²⁹⁶See U.S. DEP’T OF COMMERCE & U.S. DEP’T OF HOUS. AND URBAN DEV., AMERICAN HOUSING SURVEY FOR THE PORTLAND METROPOLITAN AREA IN 1986, at 3 (1990) [hereinafter 1986 PORTLAND SURVEY].

²⁹⁷1995 PORTLAND SURVEY, *supra* note 247, at 3.

²⁹⁸1986 PORTLAND SURVEY, *supra* note 296, at 3.

²⁹⁹1995 PORTLAND SURVEY, *supra* note 247, at 3.

³⁰⁰1986 PORTLAND SURVEY, *supra* note 296, at 3.

³⁰¹1995 PORTLAND SURVEY, *supra* note 247, at 3.

³⁰²Bill Graves & Steve Suo, *A Decade of Orderly Growth*, PORTLAND OREGONIAN, Apr. 8, 2001, at A1.

³⁰³*Id.*

Portland, as in other areas, more people are building bigger houses on more land.³⁰⁴

Critics argue that even if Portland has no density crisis today, a refusal to expand the UGB could eventually force Portlanders to live in an overcrowded, congested environment.³⁰⁵ But in fact, Portland has plenty of room to grow. The city of Portland has just over 529,000 people living within its 124.7 square miles.³⁰⁶ If the city's population tripled, it would have about 1.587 million people living within those 124.7 square miles, thus creating a density of 12,726 people per square mile, which is still a lower density than that of San Francisco.³⁰⁷ In other words, if a million people moved to Portland in the next few decades, every single one of them could, in theory, be placed in the city of Portland without either making Portland inordinately dense or increasing suburban densities by one iota.

E. The Libertarian Argument Against UGBs

Libertarians argue that regardless of its utilitarian benefits, Portland's UGB should not be imitated because restricting landowners' use of their land violates their property rights.³⁰⁸ This argument makes sense in principle: in a society that truly valued minimal government, any form of land use regulation would obviously be inappropriate.³⁰⁹

However, the United States is not such a society: even in colonial times, states and cities enacted planning statutes similar to UGBs. For example, the

³⁰⁴I question whether this trend is desirable, given the arguably undesirable side effects of unlimited low-density development. See Mann, *supra* note 1, at 1371 (asserting that low-density development increases automobile dependency, traffic congestion, and air pollution).

³⁰⁵See Bolick, *supra* note 11, at 864 (commenting that if UGB not diluted, "residents will be forced to live in more crowded cities, smaller houses, and more congested neighborhoods") (citation omitted).

³⁰⁶See CENSUS TABLE T-5, *supra* note 172; WORLD ALMANAC, *supra* note 14, at 440.

³⁰⁷See WORLD ALMANAC, *supra* note 14, at 441 (indicating San Francisco has 15,969 people per square mile).

³⁰⁸See Bolick, *supra* note 11, at 867 (attacking UGBs and other anti-sprawl policies as product of "social engineers" who "indulge the conceit that they are better able to plan efficaciously on a grand scale than the market"); Katz, *supra* note 236 (quoting assertion by anti-UGB activist that "[p]roperty rights have been swept under the rug"); Rex Springston, *Regional Sprawl Rules Encouraged*, RICHMOND TIMES-DISPATCH, Jan. 21, 2001, at C1 ("Growth boundaries are unpopular with Virginia lawmakers, who fear they impinge on property rights."); Michael Pena, *Urban Sprawl's a Big Issue*, S.F. CHRON. (Contra Costa and the Bay), Oct. 21, 2000, at A17 (stating that in response to proposals to slow proliferation of new suburban homes, "[l]andowners retort that growth boundaries unfairly rob them of their property rights").

³⁰⁹To phrase the point another way: "Government by definition is coercive." Ruth Eckdish Knack, *PLANNING*, Dec. 1, 2000, at 20 (quoting planning commissioner Sam Staley of Bellbrook, Ohio, director of Reason Foundations Urban Futures Program).

Massachusetts Bay Colony “prohibited dwellings more than one-half mile from town meeting houses without court permission.”³¹⁰ Today, as UGB critic Clint Bolick admits, “minimum lot sizes and restrictions on multiple uses, often popular tactics among suburban governments to keep their communities pristine and exclusive, definitely contribute to ‘sprawling’ suburbs.”³¹¹ A typical zoning ordinance has separate zones for: single-family large lot, single-family medium, single-family standard, multi-family low density, multi-family medium density, multi-family high density, general office, neighborhood commercial, community commercial, service commercial, central business district, limited industrial, and heavy industrial.³¹² These regulations contribute to sprawl by separating residential and commercial uses, thereby making it difficult for people to go from their residences to shops and workplaces without driving.³¹³ Municipalities also reduce housing supplies and force Americans to drive by mandating minimum lot sizes and house sizes within zones.³¹⁴ These regulations were frequently enacted for the purpose of increasing housing prices.³¹⁵ They also inadvertently reduce transit use, because as residences are spread farther apart, fewer people can conveniently walk to bus and train stops.³¹⁶ If pro-sprawl land use restrictions such as separation of land uses, minimum house sizes, and minimum lot sizes do not unduly infringe landowners’ rights, neither do UGBs.

Similarly, UGB critics often support pro-sprawl government transportation policies. For decades, government has accelerated sprawl by building new roads into suburbia, thus encouraging development to shift from cities to suburbs.³¹⁷ But many critics of UGBs and other anti-sprawl measures are less than

³¹⁰Dowling, *supra* note 1, at 881.

³¹¹Bolick, *supra* note 11, at 865.

³¹²MANDELKER, *supra* note 147, § 5.01, at 137.

³¹³See Pollard, *supra* note 7, at 261 (“[S]egregation of commercial and residential uses into different geographical areas . . . requires people to use automobiles to get to work or to shopping areas, to reach a park or a school, or to conduct most other activities.”); see also KUNSTLER, *supra* note 1, at 110–11 (arguing that zoning residential apart from retail encourages sprawl).

³¹⁴See MANDELKER, *supra* note 147, §§ 5.23–26, at 157–61 (outlining large lots and minimum house size zoning); Pollard, *supra* note 7, at 261–62 (“[L]ess land-intensive forms of development that typified American cities and towns prior to World War II . . . would be illegal to build under many current zoning codes.”).

³¹⁵See MANDELKER, *supra* note 147, § 5.24, at 157 (“Proponents of minimum house size restrictions also argue that they implement the statutory purposes of zoning by conserving property values.”).

³¹⁶See *supra* notes 289–90 and accompanying text (reporting highest transit use in regions with densely populated central cities).

³¹⁷See Lewyn, *supra* note 7, at 312–22 (describing effects of government spending on roads, and noting that according to NAHB survey, 55% of Americans would consider moving to new neighborhood or suburb if highway access to that area improved); see also *Sierra Club v. U.S. Dep’t of Transp.*, 962 F. Supp. 1037, 1043 (N.D. Ill. 1997) (“Highways create demand for travel and [suburban] expansion by their very existence.”) (citing *Swain v. Brinegar*, 517 F.2d 766, 777 (7th

critical of road spending. For example: (1) The Independence Institute, which purports to address “public policy issues from a free-market, pro-freedom perspective”³¹⁸ published an anti-UGB paper asserting that “[f]or traffic congestion to be mitigated . . . [r]oadway expansions will be necessary.”³¹⁹ (2) Steven Hayward of the Heritage Foundation complained in a 1998 article that “Portland’s planners . . . are substituting political decisions for marketplace decisions,”³²⁰ yet claimed in the same article that Portland will suffer increased traffic congestion because “the region deliberately avoids road-building.”³²¹ (3) Grant Gulibon, a policy analyst for Pennsylvania’s conservative Commonwealth Foundation, complains that the UGB “created an artificial scarcity of land Whenever a commodity becomes scarce the price goes up.”³²² Yet Gulibon asserts that “[t]he reason [new roads] fill up right away is because you didn’t build enough in the first place.”³²³

UGBs undeniably increase government’s voice in land use decisions—but so do a variety of well-established government policies, some of which are supported even by prominent UGB critics. Thus, UGBs are not uniquely intrusive.

VI. CONCLUSION

As explained above, UGBs are probably constitutional under Supreme Court Takings Clause precedent for two reasons. First, a UGB will rarely, if ever, cause a complete deprivation of economically beneficial use, and is thus unlikely to be a compensable “total taking” under *Lucas* and *Palazzolo*. Second, UGBs

Cir. 1975)); Knack, *supra* note 309, at 20 (quoting suburban planning board chair’s statement that his hometown was “a small bedroom community [until] in the mid-’80s, the beltway came through”).

³¹⁸*About the Independence Institute*, Independence Institute, at <http://www.i2i.org/about/aboutii.htm> (last modified Nov. 12, 2001).

³¹⁹Cox, *Smart Growth*, *supra* note 265.

³²⁰Hayward, *supra* note 266, at 31.

³²¹*Id.* Incidentally, the claim that Portland policymakers “deliberately avoid[] road-building” is highly questionable given the substantial increase in Portland-area road miles in recent decades. See TTI STUDY, *supra* note 268, Abridged Tables: Urban Area Information, The Mobility Data for Portland OR-Vancouver WA, at 1–2 (explaining that region’s roadway mileage increased from 3810 miles to 5540 miles between 1982 and 1999).

³²²Jon Rutter, *Progress Is in the Eye of the Beholder*, LANCASTER NEW ERA, Jan. 16, 2000, at A1.

³²³*Id.* The validity of Gulibon’s claim that roads actually reduce congestion is beyond the scope of this Article; however, I have discussed the issue elsewhere. See Lewyn, *supra* note 7, at 368–70 (describing studies showing that new road capacity does not increase congestion because development and traffic quickly shift to areas served by road and noting that, as a result, there was little correlation in 1980s and 1990s between metro areas’ rate of roadway expansions and changes in congestion patterns).

will generally not be compensable “partial takings” under the *Penn Central* balancing test, because they are typically justified by a legitimate state purpose (that of preventing the urbanization of rural areas) and will, if prudently drafted, rarely interfere with landowners’ investment-backed expectations.

The question of whether UGBs are wise public policy is a more difficult one. The Oregon UGB has apparently had one major benefit: enhancing consumer choice, by making the city of Portland a viable lifestyle choice for middle-class Portlanders, instead of merely a holding pen for people too poor to move to suburbia. And by making it easier for Portlanders to live in the city, the UGB has arguably made it somewhat easier for them to use public transit instead of being enslaved by their cars.

In other ways, Portland has continued to evolve in the same directions as nearby metropolitan areas without UGBs. On the negative side, this means that the UGB has not had an enormous effect upon automobile use, traffic congestion, or urban consumption of farmland. Although Portland’s air is cleaner than it was a decade ago, the same is true for other western cities without UGBs. On the positive side, the UGB has not led to the horrors imagined by UGB critics. Portland’s real estate is not significantly more expensive than that of comparable western cities, its traffic congestion is no more annoying, and its air is no more polluted. In sum, UGB supporters and opponents alike may have overestimated both the positive and negative effects of UGBs.