

LAND-USE REGULATIONS AS TERRITORIAL GOVERNANCE IN U.S. METROPOLITAN AREAS

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ABSTRACT

This paper reports findings of a comprehensive survey of local government land use regulations in the 50 largest U.S. metropolitan areas in 2003. It demonstrates that the federal system in the United States has produced a great variety of approaches to territorial governance, ranging from “free market” deregulation in Texas, to localist land zoning and planning in most slowly growing metropolitan regions, to advanced systems of growth management and “smart growth” in coastal states. These sets of approaches, termed “families” and “orders” here, associate with widely differing outcomes in land consumption, central city-suburban disparities, and housing affordability. Rather than a direct cause-effect relationship between territorial governance systems and settlement outcomes, however, the article suggests a complex and dynamic coevolution in which land planning and regulation, infrastructure investment, the characteristics of the built and natural environments, local government structure, state and federal laws, and households’ and businesses’ decisions about where to locate all influence one another. Unraveling this complexity requires new approaches and comparisons both within and beyond the United States.

I. INTRODUCTION¹

Metropolitan areas throughout the world face a host of challenges, many of which relate directly or indirectly to development patterns. Development patterns, in turn, are partly a

Fecha de recepción: diciembre 2007.

Fecha de aceptación: abril 2008.

1 The authors would like to thank the Department of City and Regional Planning and the Cornell Institute for Social and Economic Research at Cornell University for their institutional support of this project. We also appreciate the time and effort of the patient staff and elected officials who answered our survey. All errors remain the authors’ responsibility. The Brookings Institution Metropolitan Policy Program would like to thank the Fannie Mae Foundation, the George Gund Foundation, the Joyce Foundation, the Ford Foundation, the John D. and Catherine T. MacArthur Foundation, and the Charles Stewart Mott Foundation for their support of our work on metropolitan trends. Jonathan Martin provided research assistance for this project.

consequence of decisions by local governments. In many countries, national laws specify both the process and substance of local land-use planning and regulation; the U.S., however, is an exception to this rule, thanks to provisions in the U.S. Constitution that reserve many powers to the states. Most states, in turn, have since the early 1900s allowed their local governments to plan and regulate land as they see fit, although some states have in the past 50 years begun to impose new mandates and incentives to promote better local planning. Thus, it is impossible to identify a single territorial governance system in the United States, but neither is it sensible to expect as many systems as there are local governments. (In all, the U.S. has over 35,000 general purpose local governments, most of which have regulatory powers over land use.)

For a comprehensive view of the conditions under which most housing is now built in the United States, we surveyed local governments in the 50 largest metropolitan areas to learn how they regulate land use and promote housing affordability. Over 160 million residents—57 % of the population in the United States—live in these 50 metropolitan areas, and they account for about 300,000 square miles of land. This study reports on the results of the survey (conducted in 2003) in which over 1,800 cities, townships, and counties responded to questions about land use regulations that affect housing. Their responses allow us to reach conclusions about the nature of land use regulation at the metropolitan level, where local land use regulations combine to produce sometimes unexpected regional results.

In short, this research finds that basic land use regulations like zoning and comprehensive planning continue to be employed in metropolitan jurisdictions all across the nation. Other tools associated with land use reforms—such as growth management and infrastructure regulation—are still uncommon. However, this picture varies considerably throughout the nation. Metropolitan areas in the Northeast and Midwest tend to use regulations to exclude most types of growth, while those in the West employ regulations that accommodate and manage growth. Possibly as a result, places with traditional land use regulations have lower densities and fewer opportunities for low income and minority residents than those that have embraced a new paradigm for regulating growth and development.

II. BACKGROUND: LAND USE REGULATION IN THE UNITED STATES

To provide historical and institutional context for the survey, this section discusses the evolution of land-use regulation in the U.S. The most common form of local land use regulation in the U.S. is land-use zoning, which entails separating the land in a particular area into sections, or zones, with different rules governing the activities on that land. The earliest use of zoning-like controls responded to concerns over public health, but zoning also emerged as an early mechanism to separate people by race. The U.S. Supreme Court ruled racial zoning unconstitutional in 1917, but municipalities continued to adopt and enforce racial zoning ordinances for years afterward (Pendall et al., 2006). Zoning has been much more durable as a tool to separate people by class, especially by controlling the location of multi-family housing (Pendall, 2000). In some cases, zoning has evolved away from its early 20th century roots as a rigid system that separates uses and focuses on single lots, toward a more flexible system allowing discretion, mixing of uses, and a focus on larger land areas.

Comprehensive planning, by contrast, has historically received much less enthusiastic support than zoning. A comprehensive plan, largely a policy statement of the future land use and

development goals of a particular jurisdiction, serves primarily to mitigate conflicts between different land uses. It also coordinates related issues: transportation, economic development, housing, parks and recreation. The earliest state zoning enabling laws required local zoning to be consistent with a plan, but left unclear the meaning of “plan”; state planning enabling laws (which did not mandate but allowed local planning) usually offered little more clarity.

In the late 1960s, however, some state governments began requiring local governments to plan, and others began to impose additional substantive requirements in systems that became known as “growth management.” California, for example, required local governments to adopt general plans starting in 1971, and soon thereafter required them to bring their zoning ordinances into conformity with their plans. In 1973, Oregon adopted statewide growth management legislation requiring local governments to adopt comprehensive plans that were consistent with a series of state goals. Florida adopted a comprehensive program of “critical area” protection review, also requiring local governments to plan for the first time. Starting in the mid-1980s, another wave of states passed growth management legislation.

Urban containment has become closely associated with growth management, because of its mandatory use in Oregon and Washington (Pendall et al., 2002). Containment can take a “loose” form, carried out through phasing systems that manage the spread of development without imposing an outer boundary; it can also be a result of permanent greenbelts or semi-permanent urban limit lines. To carry out these policies that shape the urban edge, local governments establish regulations to limit the extension of infrastructure; purchase or re-zone land beyond the proposed edge of development; and create incentives using regulations and public investment to spur development in designated areas.

Even in states that do not require growth management, local governments now use a wide array of procedures to influence the pace, location, and ultimate extent of development. Many local governments analyze carefully the impacts of growth on local infrastructure and environmental systems, at the scale of both individual developments (subdivisions and site plans) and larger areas (neighborhood plans and comprehensive plans). To do this, they use environmental assessment (Pendall, 1998); impose development impact fees on building permits (Nicholas, 1991); and monitor the impact of development as it occurs—also known as “concurrency”—through a so-called “adequate public facilities ordinance” (White and Paster, 2003).

The best known recent example of planning reform legislation is Maryland’s “smart growth” reforms of the mid-1990s (Burchell and Galley 2000; Knaap and Frece 2007). Its key provision for land use planning and regulation (almost all of which is carried out at the county level) provides that local governments will designate “priority funding areas” in which new growth is slated to occur, and that the state will invest in major infrastructure only in those areas (DeGrove, 2005).

Some observers distinguish growth management from “growth control.” Where growth management accommodates projected development in a manner that achieves broad public goals, growth controls limit or ration development. Typical growth control tools are moratoria, permitting caps, and development quotas (Nelson et al., 2004). Such tools are more common in states where voters may impose regulations placed on the ballot by citizen initiative. About 15 % of the California growth measures in effect in 1988, for example, were adopted by voter initiative; the availability of the initiative also influences elected officials’ growth decisions (Glickfeld and Levine, 1992).

As experimentation in land regulation has increased, so, too, has local action on the development of low-cost (“affordable”) housing in states and municipalities where housing prices began to rise dramatically. The highest-profile local regulation, inclusionary zoning (IZ), induces or requires developers to provide affordable housing as a condition of development approval. In three New England states, legislatures and courts have imposed it or made it available to builders as a remedy to local exclusionary practices; many California jurisdictions also engage in IZ because of state-level planning requirements (Pendall 2008). Local governments offer a wide array of regulatory incentives in exchange for commitments to affordability, the most common of which are density bonuses, reduced impact fees, expedited permitting, and flexible development and subdivision standards.

A second innovation for affordable housing, again often sparked at least as much by state requirements and inducements as by local initiative, has been increased local spending on affordable housing. Local governments have greatly expanded their capacity to subsidize affordable housing construction partly because of national-level block grant programs. In the last 25 years, New York City has spent billions of its own general revenue funds to support affordable housing. Other jurisdictions have tapped special sources of revenue for housing; California, for example, requires local government redevelopment agencies to set aside 20% of the tax increment generated in their project areas for affordable housing (California Department of Housing and Community Development, 2004). In addition, local regulatory programs generate affordable housing fees; some localities allow developers to meet inclusionary requirements by paying an “in-lieu” fee, and others have adopted linkage fees that require developers of commercial and office space to contribute funds to offset the need for associated affordable housing. When local governments collect such fees, they often use them to capitalize dedicated housing trust funds (HTFs), which can also draw on a wide range of taxes, charges, fees, donations, and allocation of federal block grant funds.

Local regulations shape the built form and character of cities, towns, counties, and entire regions. Zoning, comprehensive plans, infrastructure finance, urban containment, building moratoria and permit caps can foster low density development and metropolitan decentralization or promote a more compact development pattern. They can also directly affect the economic composition of the local populace by opening or closing doors for renters and low-income people. Together, local land use regulations and housing programs can produce regional equity or inequity, safeguard or undermine environmental quality and public health, and create a more efficient or inefficient pattern of public services.

III. RESEARCH QUESTIONS, DATA, AND METHODS

Considering the complexity of territorial governance within the United States, it is not surprising that our knowledge about local approaches to land development is fragmentary and often anecdotal. Hence the first two research questions are simple and descriptive: First, what are the current rates of adoption of a battery of land-use regulations and housing programs? Second, to what extent are these measures adopted in distinctive combinations according to metropolitan areas and/or states?

To answer these two questions, we sent a mail survey to every local government—incorporated municipalities, townships, or counties—in the 50 largest U.S. metropolitan areas

meeting two criteria. First, they had a minimum population of 10,000 residents in 2000. Second, they were permitted to enact regulations that were covered in our survey.² The survey covers six discrete, but related areas of land use regulation: 1) zoning, 2) comprehensive planning, 3) containment, 4) infrastructure regulation, 5) growth control, and 6) affordable housing programs and funding. The eight-page survey was sent to the planning director of each jurisdiction where one existed. In jurisdictions without planning directors, we addressed the survey to either another staff member (e.g., city manager, city engineer, zoning enforcement officer) or a public official (e.g., mayor, planning board chair, clerk). To enhance response rates, we followed up with a second survey form three weeks after the first mail-out; key jurisdictions such as large cities and counties were also contacted again by e-mail, fax, and phone to boost response rates.

Our census of jurisdictions over 10,000 residents included 2,365 jurisdictions, 62 % of which responded. In 17 metropolitan areas, this census captured either fewer than 50 % of residents or less than 50 % of metropolitan land area. For 15 of these metropolitan areas, we drew a random sample of up to 50 jurisdictions under 10,000 residents. (In the other two, Buffalo and Hartford, we surveyed all jurisdictions because each had fewer than 50 jurisdictions under 10,000 residents). Among these 812 small jurisdictions, 47 % responded. In total, 1,844 of the 3,177 jurisdictions—over 58 %—responded.

Once the surveys were complete and coded, estimates were constructed of the incidence of 16 key land use regulations and housing programs at the metropolitan level and stratified by three and sometimes four dimensions. The proportion of local governments that had the regulation in question was determined by *jurisdictional type* (incorporated, township, county), in the same *state*, within the same *population range* (up to five population categories). Larger states and those with significant intra-state variation (e.g., Texas, California) were also stratified according to *metropolitan areas* or groups of metropolitan areas. The result was a table of proportions (probabilities) that were then applied to non-respondents and non-surveyed municipalities. We also estimated the share of the year-2000 population living in jurisdictions with the regulation, and the share of the 2000 land area located in these jurisdictions. Each of these were estimated by multiplying each jurisdiction's probability of having a regulation by its 2000 population and land area and then summing to a total regional estimate.

Since some metropolitan areas cross state lines, and since state law affects local land use regulations, separate sub-metropolitan areas were created for each state into which a metropolitan area extended. For example, since the St. Louis MSA includes portions of Missouri and Illinois, the region was treated as two cases. While the top 50 metropolitan areas are analyzed here, therefore, there are actually 73 geographic **units** that are considered.

2 The U.S. Office of Management and Budget (OMB) defines metropolitan areas based on threshold populations and commuting patterns in and among counties (the largest sub-state areas) or county equivalents. Metropolitan areas range in size from a single county to dozens of counties. Until 2003, the Census Bureau had three metropolitan definitions. The Metropolitan Statistical Area (MSA) has a main economic center of gravity and a population of at least 100,000. The Consolidated Metropolitan Statistical Area (CMSA) is a collection of Primary Metropolitan Statistical Areas (PMSAs), each of which has one or more economic centers but is economically connected with other PMSAs within the CMSA. Metropolitan areas are statistical, not governance, units whose boundaries shift frequently. Even the best known metropolitan governments, in Portland and Minneapolis-St. Paul, have jurisdiction over only a fraction of their Census-defined metropolitan areas. The 50 metropolitan areas in this paper are CMSAs and stand-alone MSAs.

We used factor analysis to characterize the prevalence in each metropolitan area in each of **the six areas of land use regulation** mentioned above. Responses to between one and four survey questions were used for each of the analyses. For each of the measures (see Table 1), there were three variables: the percent of jurisdictions covered, the percent of population covered, and the percent of land area covered. Thus the number of variables ranged between 3 for comprehensive planning (1 measure x 3 variables) and containment and 12 for zoning (4 x 3).

Once the factor analysis was complete, hierarchical cluster analysis was used to gain a more empirically based view of which metropolitan areas most resemble one another in their regulatory structure based on the land use tools/factors. Two metropolitan areas with identical factor scores on all factors would be clustered at an early step of the hierarchical clustering process; with each step in the process, increasingly dissimilar metropolitan areas are placed into the cluster in which they best fit. Often, an unusual metropolitan area can remain unmatched while two similar clusters of cases are matched. The cluster analysis began with the 73 metropolitan areas or subareas identified earlier. Eleven sub-regions were excluded from the cluster analysis because we had adequate responses from fewer than five jurisdictions. For this analysis, the cluster analysis grouped the remaining 62 metropolitan subareas into 12 clusters with similar approaches to residential land use regulation in the 50 largest metropolitan areas. These 12 clusters, in turn, can be combined into four major groups based on their similarity to one another. In view of the evolutionary and functional relationships among the clusters and groups, we label them as *families* and *orders* of regulatory approaches (see Table 3).

Table 1
AREAS OF LAND USE REGULATION IN FACTOR ANALYSIS, LAND USE SURVEY

Areas of land use regulation	Measures
Zoning	Presence of zoning, low density-only zoning, zoning allowed above 75 dwellings per hectare, permission for the prototype high density apartment complex
Comprehensive Planning	Presence or absence of a comprehensive plan
Containment	Presence of a containment device
Infrastructure Regulation	Presence of adequate public facilities ordinances, impact fees
Growth Control	Use of building moratoria, Presence of permit caps
Affordable Housing	Presence of a regulatory affordable housing program, existence of a funding source (such as a trust fund)

A third research question asks: do particular regulatory orders and families associate strongly with desirable outcomes for the environment, social equity, and housing affordability? Here, we examine differences of means in the *density* of development; the *central city-suburban divide* for minority households, people living in poverty, and people with college educations; and house prices, rents, and income-housing price ratios (affordability), using data from the 2000 Census of Population and Housing and the U.S. Department of Agriculture’s National Resources Inventory. This analytic result will show that there are significant differences in the correlates, but that the precise causal relationship remains to be tested.

IV. REGULATORY LANDSCAPES OF MAJOR U.S. METROPOLITAN AREAS

1. National results

The survey shows that traditional land use regulations like zoning and comprehensive planning dominate the regulatory landscape all across the U.S. More than 91 % of the jurisdictions in the 50 largest metropolitan areas have zoning ordinances of one kind or another in place (Table 2). Only 5 % of the metropolitan population lives in jurisdictions without

Table 2
LOCAL LAND USE TOOLS IN THE LARGEST U.S. METRO AREAS: SHARE OF JURISDICTIONS, POPULATION, AND LAND AREA TO WHICH THEY APPLY, 2003

	Estimated % of:		
	Jurisdictions	Population	Land
Zoning			
Ordinance in place	91.5	95.3	89.3
Maximum permitted residential density:			
<10 dwellings / urbanized hectare	22.1	5.1	11.8
10-20 dwellings / urbanized hectare	16.4	6.6	7.4
21-37 dwellings / urbanized hectare	21.5	14.5	15.9
37-75 dwellings / urbanized hectare	19.9	20.9	32.9
>75 dwellings / urbanized hectare	11.6	48.2	21.3
No zoning	8.5	4.7	11.1
No prototype apartment permitted	30.4	9.2	15.6
No mobile homes permitted	51.2	40.9	18.0
Comprehensive plan in place	84.6	84.1	92.1
Urban containment program or policy	16.4	27.1	37.9
Infrastructure tools in place			
Impact fees	37.5	55.6	45.6
Adequate public facilities ordinance	18.6	28.5	36.5
Controls on the pace of development			
Permit cap	2.4	3.5	2.9
Moratorium	3.8	6.5	6.3
Affordable housing programs			
Regulatory incentives	22.9	57.2	29.9
Dedicated funds	14.9	51.6	33.3

zoning, but as much as 11 % of the land area is estimated to be unzoned. Almost as many jurisdictions—85 %—have a comprehensive plan. As a result, 84 % of the population and 92 % of the land area is subject to a plan for how the particular jurisdiction intends to grow and develop in the future.

Nearly a quarter of the local governments, located predominantly in the Northeast and Midwest (see Figure 4), restrict the maximum permitted residential density to fewer than 10 dwellings per hectare, and another 16 % restrict the maximum density to fewer than 20 dwellings per hectare. Together, these “low density-only” jurisdictions account for 38 % of the local governments in the 50 largest metropolitan areas. Most of the low-density-only jurisdictions—30 % of the total, and half of those in the Northeast—would also prohibit a 40-unit, two-story apartment development on a 12-hectare lot. Further, about half the local governments have zoning ordinances that prohibit placement of mobile homes. Together, these conditions—low permitted density, exclusion of prototypical apartment developments, and limits on mobile homes—constitute the ingredients of exclusionary zoning, a practice designed to bar low-income households and, at least indirectly, African Americans and Latinos, from the jurisdictions. In the factor analysis described before, jurisdictions in New Jersey and New Hampshire scored highest on the “exclusion” factor.

We also use the zoning results to construct two other indices: one on the absence of zoning, and the other on the permission of high density (over 75 dwellings per hectare). Both of these also break down sharply by region. Metropolitan areas in the Midwest and especially Texas score high on the “no zoning” factor, which indicates either a decision not to zone or a prohibition on zoning. In the Midwest (e.g., Ohio), two overlapping local government units—counties and townships—can both zone areas outside municipalities. Some townships defer to their counties and vice versa; in either case the land area in question may be covered by the other jurisdiction’s regulations. In Texas, by contrast, counties have not been granted authority by the state legislature to pass zoning ordinances, and except in areas just beyond city limits where cities can extend their regulations, no other government unit can zone there. Moreover, the city of Houston—with over 2 million residents—has no zoning, though it does have subdivision regulation (Pendall, forthcoming).

The third zoning factor, high density, associates both with permissiveness toward our prototypical apartment development, and also with the lack of zoning that would otherwise restrict it. Metro areas dominated by big cities, especially New York, score high on this factor, as do many of those on the West Coast and in Texas (to the extent they zone at all).

Apart from zoning and subdivision ordinances (which we did not include in the survey because of their near omnipresence), development impact fees are the most common tool in the U.S. today for residential land use regulation. Builders pay these one-time fees, typically when they receive building permits, and governments use the proceeds to pay a portion of the capital costs of new infrastructure including major transportation, sewerage, drainage, water supply, park, open space, school, and other facilities. These investments have been conceived as a growth-facilitating alternative to development moratoria or reductions in density and are much more palatable to local residents than increases in local property taxes. Overall, about 37 % of local governments in these 50 metropolitan areas use impact fees, but nearly 90 % of Western jurisdictions use them: twice as high a share as that in the second-highest Southern region. The highest-scoring areas on the impact fee factor are Florida’s, however,

which mandates concurrency between infrastructure and development and prescribes the use of impact fees (Nelson and Moody, 2003).

Another regulatory mechanism, the adequate public facilities ordinance (APFO), is somewhat popular—used on 20 percent of jurisdictions in these 50 metropolitan areas—but less so than impact fees. A jurisdiction with an APFO constantly monitors the capacity of at least one and sometimes all of its infrastructure systems, issuing development permission only once it determines that capacity remains in that system; compared with impact fees, APFOs require more staff expertise and introduce more uncertainty into the development process. Western and Florida metropolitan areas use APFOs more than others do, as do Louisville (Kentucky), New Orleans, and the Maryland portion of Washington, DC.

Urban containment systems—greenbelts, urban growth boundaries, urban service areas, and other mechanisms to limit the outward spread of development—dominate many national planning systems, but in the United States they remain limited in their scope. An estimated 16 % of jurisdictions have urban containment in some form. Metropolitan areas that scored high on the “containment” factor are in states with growth-management laws requiring growth boundaries: Portland, Seattle, and Nashville, in Oregon, Washington, and Tennessee. Denver also ranks very high, thanks in part to the use of greenbelts in Boulder County and to a voluntary regional plan coordinated by the regional council of governments. With few exceptions, the South and the West dominate the list of metropolitan areas where urban containment policies are common.

Few land use tools generate as much interest and controversy as sharp growth controls like caps on building permits and growth moratoria. Jurisdictions with permit caps limit the annual issuance of residential building permits to a specified quota every year; they sometimes require applicants to compete with one another for permission. Moratoria simply stop development when it causes infrastructure demand to exceed capacity. At the national level, neither of these controls is very important, used by fewer than 5 % of all jurisdictions, and in fact completely absent from 33 of the 50 metropolitan areas. In some Western areas, though, the permit cap is much more common. An estimated 42 % of jurisdictions in metropolitan Denver and an estimated 33 % in metropolitan Las Vegas use caps. Caps are also becoming more common around Boston: we estimate about 20 % of the jurisdictions there. Since several very high-cost housing markets have many jurisdictions that have experimented with permit caps, this leads many observers to conclude, probably correctly, that they create serious housing shortages.

A final area of local actions that influence residential development is regulation and funding programs that encourage the development of affordable housing. Since the national government has reduced its commitment to affordable (social) housing, state and local governments have increasingly developed and adopted new programs to provide affordable housing. About 23 % of jurisdictions have an incentive-based affordable housing program of some kind; usually the incentive is an increase in the permitted density for builders who agree to provide a share of affordable housing, with fee waivers, fast permitting, and other concessions also playing a role in some jurisdictions. A small share of these jurisdictions requires for-profit builders to provide affordable housing in so-called inclusionary zoning (IZ) programs (Pendall 2008). In addition, an estimated 15 % of local governments we surveyed have begun setting aside local funds or using funds passed through from state and federal

sources to subsidize housing. In all, 15 % of jurisdictions have a dedicated source of funds for affordable housing. However, the jurisdictions that support affordable housing with these programs and funds are the larger cities, boosting the programs' impact. In the West, nearly two-thirds of the municipalities have incentive programs and half have dedicated funds established, thanks in part to strong state requirements for local housing planning in California. No other region comes close to these figures.

2. A typology: Orders and families of control

Several studies in the past have ranked or rated the degree of land use regulation in metropolitan areas (Malpezzi, 1996; Glaeser and Gyourko, 2002). Such ratings have been shown to correlate with housing prices; more highly regulated regions, for a variety of reasons, have higher housing and land prices. A simple rating system is not sufficient, however, to identify relationships between regulation and such outcomes as land consumption or regional housing opportunity for low-income residents. For example, a simple scan of the results of this survey suggests that although metropolitan Boston, New Jersey, California, and Florida all appear at or near the top of national rankings of regulatory restrictiveness, their regulations differ substantially from one another.

The cluster analysis, which built on the factor analysis, yielded a reasonable 12-cluster solution that serves as the basis for a description of families of land use regulation in the 50 largest metropolitan areas. These 12 families fall into four orders (see Table 3 and Figure 1).

This analysis refers to each of the 12 clusters as a *regulatory family*. Since the factor analysis included data on the share of jurisdictions, population, and land area covered by each regulation or policy, a combination of regulations will be most clearly “dominant” when it applies to many jurisdictions covering a large share of the land area and population of a metropolitan area. Each of the families, however, resembles at least one other, so that four regulatory *orders* also can be identified at a higher level of generality.

A) *Traditional*

The traditional regulatory order contains the largest number of metropolitan areas, with a total of 34 metropolitan area components (i.e., portions of metro areas within the same state) and residents. All these places are in the Midwest and Northeast with the exception of the Salt Lake City metropolitan area. In most of these states, the laws that govern land use planning have not been revised significantly since the promulgation of the Standard State Zoning Enabling Act and the Standard City Planning Enabling Act of the 1920s. Planning and zoning remains mostly voluntary, few local governments engage in innovative land-use regulation, and state review of local plans is mostly absent. These are also highly “fragmented” metropolitan areas with large numbers of local governments, each of which regulates land use based mainly on its own calculus.

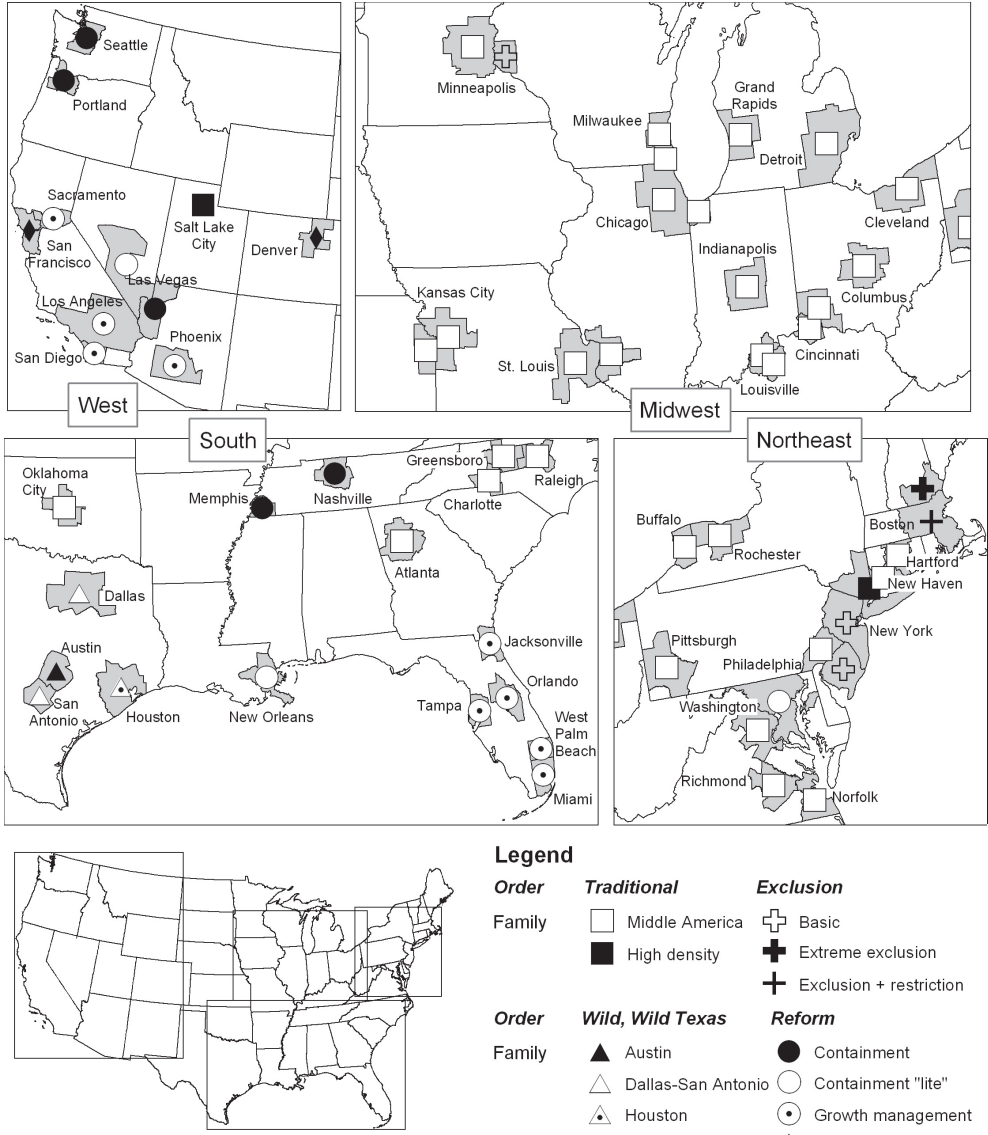
Table 3
REGULATORY ORDERS AND FAMILIES, MAJOR U.S. METROPOLITAN AREAS, 2003

Regulatory Orders / Families	N° of Metropolitan Areas or sub-areas	Total Population
Traditional	34	75,483,321
<i>Middle America</i>	32	61,459,742
<i>High Density</i>	2	14,023,579
Exclusion	5	14,621,514
<i>Basic Exclusion</i>	3	8,563,688
<i>Exclusion with Restriction</i>	1	5,287,393
<i>Extreme Exclusion</i>	1	770,433
Wild Wild Texas	4	12,733,518
<i>Austin</i>	1	1,249,763
<i>Houston</i>	1	4,669,571
<i>Dallas/San Antonio</i>	2	6,814,184
Reform	19	59,340,464
<i>Containment</i>	5	7,838,637
<i>Containment-Lite</i>	3	7,496,135
<i>Growth Management</i>	9	34,384,824
<i>Growth Control</i>	2	9,620,868

The Traditional order has two regulatory families: Middle America and High Density. The Middle America family includes 32 metropolitan areas and components in the Midwest and Northeast. Because it includes so many metropolitan areas, it approximates the national average on most regulatory factors, but three ways in which it departs from the national average are telling. First, these metropolitan areas have more restrictive densities in their zoning ordinances than the national norm. Second, Middle America has more modest commitments than the national average to infrastructure-based growth management. Third, the Middle America metropolitan areas make very little use of affordable housing mechanisms.

The second family in the Traditional order differs from the Middle America family mainly in its openness to high-density residential development, but it resembles Middle America in its tepid adoption of new planning tools. This family includes only two metro areas: the portions of the New York metropolitan area in New York State and the Salt Lake City metropolitan area. Although zoning is strong in these two metro areas, New York City itself lacks a comprehensive plan and neither New York State nor Utah requires that local governments adopt comprehensive plans. Urban containment and adequate public facilities ordinances, both of which perform better in the presence of comprehensive planning, are comparatively

Figure 4
REGULATORY ORDERS AND FAMILIES, 50 LARGEST U.S. METROPOLITAN AREAS, 2003



weak in this family, but the share of jurisdictions and land area in jurisdictions with impact fees exceeds the national average.

B) Exclusion

We call the second regulatory order “exclusion” for its extensive use of measures that restrict apartment construction. They also share a comparatively low use of tools to require that development “pay its own way.” Four of the five metropolitan components in this family are suburban components of major cities (the Wisconsin suburbs of Minneapolis; the New Jersey suburbs of

Philadelphia and New York; and Boston’s New Hampshire suburbs); the fifth is the Massachusetts component of metropolitan Boston. Together they account for over 14 million residents. This order has three families.

The first exclusionary family, Basic Exclusion, includes all of New Jersey and the jurisdictions in the far eastern reaches of the Minneapolis metropolitan area in Wisconsin. On average, about two-thirds of the jurisdictions in these areas have low density-only zoning and would prohibit our hypothetical apartment development, thereby precluding anything like a “compact city” development pattern. These low density jurisdictions account for about half the population and three-quarters of the land area. Furthermore, the share of the population (18 %) and area (29 %) covered by jurisdictions that have reduced permitted density by over 10 % in the past 10 years is well above the national averages (7 and 5 %, respectively.) This family has higher than average incidence of incentive-based affordable housing among its jurisdictions (32 %) and land area (34 %) than the national averages (23 and 30 %, respectively). This is a consequence of the *Mount Laurel II* ruling and the New Jersey Fair Housing Act, which endorsed the use of inclusionary zoning as an affordable housing mechanism (Calavita et al., 1997). Although comprehensive planning is generally at least as common as the national average—thanks probably to New Jersey’s planning statute—growth management tools are not widely used in this family, with low incidence of containment mechanisms and infrastructure measures.

The second exclusionary family, Exclusion with Restriction, covers the Massachusetts portion of the Boston metropolitan area. Nearly half of the family’s jurisdictions, with 28 % of its residents and about half its land area, would bar our hypothetical apartment development. This level of exclusion is not as high as the Basic Exclusion family, but it still much higher than the national average. Adding to the possibility for exclusion here, however, is the widespread adoption of building permit caps. An estimated 22 % of jurisdictions, with 14 % of the population and 22 % of the land area, use permit caps—one of the highest rates of permit cap adoption in the nation. Like New Jersey, Massachusetts has legal institutions that permit the “builder’s remedy” as an override of exclusionary zoning. Perhaps as a defense mechanism against builders’ “Chapter 40B” appeals against local denials for permission to build high-density and affordable housing, a large number of towns in the Boston suburbs (as well as Boston itself) have embraced density bonuses and inclusionary zoning (Perlman Krefetz, 2001). Over half the jurisdictions, with 60 % of the population and half the land area, have incentive-based affordable housing mechanisms of some kind. Planning and growth management tools are weak in the Exclusion with Restriction family, with very low

use of impact fees, APFOs, and containment. Only three-quarters of the jurisdictions have comprehensive plans.

Most exclusionary of all three of these families are the suburbs of Boston in southern New Hampshire, where 84 % of jurisdictions (47 % of population, 81 % of land area) have low density-only zoning and 79 % (53 % of population, 77 % of land area) would bar our hypothetical apartment development. Moreover, like in Massachusetts, permit caps have caught on in the New Hampshire suburbs. An estimated 14 % of municipalities use caps, accounting for 22 % of the population and 16 % of the land area. Permitted density has also fallen in the past 10 years in 19 % of jurisdictions with 17 % of the land area.

C) *Wild Wild Texas*

The Texas metropolitan areas form a regulatory order of their own. They have in common an unparalleled openness to growth and development. It all starts with zoning. Texas counties are not allowed to adopt zoning, nor can they adopt binding comprehensive plans. Cities are authorized to zone unincorporated land within specified distances of their city limits (up to five miles for the largest cities), but any land outside that extraterritorial jurisdiction is regulated only by minimal subdivision regulation. The variation in the three Texas families is primarily on the degree to which “no zoning” dominates the landscape.³

The Houston metropolitan area is justifiably renowned for its lack of zoning. About 45 % of its jurisdictions have no zoning, and they include about 90 % of the land area and population. However, the jurisdictions that do have zoning tend to be small enclaves that use zoning to exclude high-density development. Over half of jurisdictions would bar our hypothetical apartment development, but they include only 9 % of the population and 20 % of the land area in the region. Planning is weak in Houston; only 63 % of the jurisdictions, with just over a quarter of the population, have comprehensive plans. But other growth management tools, especially those to manage infrastructure, are common among the larger jurisdictions, with three-quarters of the population living in incorporated jurisdictions with APFOs and 85 % of the population with impact fees.

In Dallas and San Antonio, unlike Houston, the incorporated cities tend to have zoning, and since most of the growth has occurred in or near incorporated limits, much more development is subject to zoning. Also unlike Houston, very few cities use exclusionary zoning devices or would bar our hypothetical apartment complex. Infrastructure regulation is commonplace among the cities, with around three-quarters of the municipalities using impact fees, especially the larger ones; about a third use APFOs, but they tend to be smaller jurisdictions. Other growth management tools are less common; permit caps are not used. About a quarter of the cities, with an average of about 75 % of the municipal population, use affordable housing programs.

The degree of regulation in Austin is not too dissimilar from the Dallas-San Antonio regulatory family. The main difference is in the use of comprehensive plans. Most of the jurisdictions we surveyed in these three metropolitan areas have a comprehensive plan, inclu-

³ Except for the results on the presence or absence of zoning, the Texas results discussed here are based on responses only from cities. Texas counties were not surveyed since they do not regulate land use.

ding the large ones. However, the city of Austin does not have one. As a result, only 29 % of the population of the metropolitan area and 46 % of the land area is covered.

D) Reform

The final regulatory order includes four very distinct families with a range of metropolitan areas that use tools beyond comprehensive plans, zoning, and subdivision regulation to manage and control land use. They differ mainly in the extent to which they include local affordable housing measures, in their emphasis on containment or infrastructure regulation, and in the importance of building-permit caps in the regulatory toolkit.

The Growth Management family includes nine metropolitan areas: five in Florida, Phoenix, and three in California. It is so called because of the high use of containment policies and infrastructure management as logical counterpoints to zoning ordinances that permit comparatively high-density housing development. This family features universal adoption of comprehensive plans. Also, on average over a quarter of the jurisdictions, with 41 % of the population and 55 % of the land area, have containment mechanisms. An average of 88 % of the jurisdictions (88 % of population, 86 % of land area) imposes impact fees, and 69 % have APFOs. A third of the jurisdictions, with an average of 62 % of the population and 46 % of the land area, have a residential density zoning category that exceeds 75 dwellings per hectare, and an average of 17 % of jurisdictions have increased their permitted maximum density by over 10 % between 1994 and 2003. Only 5 % of jurisdictions dropped their maximum density by more than 10 %. And just 3 % of the population in these places—containing only 1 % of the land area—would bar the multi-family apartment development. Over half the jurisdictions on average in the growth management family have affordable housing programs, with an average of 45 % using dedicated funds for affordable housing. These tend to be populous and extensive jurisdictions, so that 75 to 80 % of the population of the average growth-management metropolitan area lives in jurisdictions with active housing programs.

The second reform family, Growth Control, is made up of just two metropolitan areas: Denver and San Francisco. This family closely resembles the Growth Management family in the extensiveness of planning, its zoning framework, the importance of impact fees, and its use of affordable housing programs. But unlike Growth Management, the Growth Control family ranks first in the use of permit caps: a quarter of jurisdictions on average use them, accounting for about a fifth of the population and land area. The Growth Control family also makes more extensive use of containment (62 % of jurisdictions, 83 % of land area) than the Growth Management family. APFOs, by contrast, rank less important on average than in any of the Reform families; this suggests that APFOs and permit caps may be substitutes for one another.

The Containment family includes Seattle, Portland, the two Tennessee metropolitan areas, and the Arizona component of the Las Vegas metropolitan area. As its name indicates, this family depends much more than the others do on containment mechanisms, averaging 80 % of jurisdictions (85 % of population, 87 % of area), largely a consequence of mandates in state growth management laws. Other land use tools are weaker on average in this family than in the Growth Management and Growth Control families. A few Containment jurisdictions—all of them in the Tennessee metros—lack comprehensive plans. Two-thirds of Con-

tainment jurisdictions use impact fees on average, and 45 % use APFOs, compared with 90 and 70 % in the Growth Management family. Only a quarter of jurisdictions allow densities to exceed 75 dwellings per hectare, on average, compared with nearly 40 % in the Growth Control family. The Containment family also has a weaker commitment to affordability than other reform families. An average of 12 % of jurisdictions on average would exclude our hypothetical apartment development, and under 20 %—with less than half the population and only 30 % of the land area—have a regulatory affordable housing program.

The final reform family, “Containment Lite,” includes the Maryland portion of the Washington, DC metropolitan area, New Orleans, and the Nevada portion of metropolitan Las Vegas. As suggested by the title, “Containment Lite” means a moderate level of containment among the Reform families: 52 % of jurisdictions on average, with 65 % of the population and land area. But it also involves a more modest commitment to other growth management tools and a more active growth control agenda. A third of jurisdictions have impact fees on average and two-fifths have APFOs, much lower levels than in the other reform families. Low density-only zoning is rare, as is the exclusion of the hypothetical apartment complex, but permissive high-density zoning is less common than in the growth management or growth control families (25 % of jurisdictions, 64 % of population, 29 % of land). While none of the metropolitan areas had substantial reductions in permitted density, neither did any of them permit substantial increases. Finally, an average of 18 % of the jurisdictions used permit caps and 21 % used moratoria in the Containment Lite family.

V. CORRELATES OF REGULATORY FAMILIES

Ultimately, the regulatory family under which a jurisdiction operates matters little on its own; rather, the concern is about the effects of regulatory institutions. Here, we identify associations between regulatory families and important on-the-ground conditions: land consumption in the form of density; central city-suburban disparities; and housing affordability.

1. Density

Between 1982 and 1997, the amount of urbanized land in the U.S. increased over 20 %. But land consumption varied dramatically among metropolitan areas, with some regions retaining or increasing their density and others losing density at a rapid pace (Fulton et al., 2001). The regulatory families with the highest densities in both 1982 and 1997 included, naturally, the High Density family (mean density of 20.6 persons per urban hectare in 1997), the Exclusion with Restriction family (12.7 persons/urban hectare), and three of the four Reform families: Growth Management (13.6 persons/urban hectare), Growth Control (15.3 persons/urban hectare), and Containment Lite (13.4 persons/urban hectare).

The Middle America, Basic Exclusion, Dallas-San Antonio, and Containment families had moderate densities in both 1982 and 1997, ranging from 10.4 to 12.8 persons per hectare in 1982 and from 7.4 to 8.6 in 1997. Middle America, with 32 cases, had three high outliers: Chicago (IL), Philadelphia (PA), and Buffalo, all of which had density between 13.6 and 16.1 persons per urbanized hectare in 1997. Extreme Exclusion (Boston’s New Hampshire suburbs), Austin, and Houston all occupy lower positions in the range of densities among

the families, at between 6.2 and 10,0 persons per hectare in 1982 and between 7.2 and 8.4 persons per urban hectare in 1997. All these low-end families, however, fall well within the range of density in both the containment and Middle America families.

Changes in density (1982-1997) have somewhat different associations with family types. The Texas families and the Reform families all lost density at lower rates than the families in the Traditional and Exclusionary orders. Considering that the Texas families began with extremely low density, especially Austin, they had many opportunities for infill and increasing density, especially in the face of rapid growth. Dallas and San Antonio lost about 4 % and 7 % of their density, respectively; Houston lost 9 %; and Austin gained 14 %. The big surprise is that the figures for the three densest Reform families (excluding "Containment"), where density was already fairly high in 1982, did not decline much in the 1980s and 1990s. The Growth Management family lost 3 % on average and the Growth Control family lost 6 %. The Containment Lite family actually gained 6 %.

The Traditional and Exclusionary orders lost substantial density in the 1980s and 1990s. Nowhere was this clearer than in the Exclusionary order, where density declined by averages between 23 and 27 %. The loss was almost as great in the Middle America family, where the average density decline was 19 %. The Containment family, however, is the exception to the rule that Reform families tended to lose less density than the Exclusion families. Density dropped an average of 15 % in the five Containment metro areas, a consequence of the inclusion in this family of Memphis and Nashville, where density dropped 28 and 35 %, respectively. Neither of these two regions would have registered as "Containment" had the survey been taken between 1982 and 1997, since Tennessee's mandate for urban growth boundaries did not become law until 2001 (Pendall, Fulton, and Martin, 2002). But even Portland and Seattle, where containment policies have had a longer run, lost more density than most of the other Reform families did on average.

How do we explain these differences? Traditional zoning continues to dominate the Northeast and Midwest, where urbanization has left a legacy of high-density urban cores. With the exception of New York, where redevelopment and immigration have led to new growth in the central city, the regions that rely on traditional zoning are losing that historic density at very rapid rates. The density loss is especially acute in regions where exclusionary zoning prevails and is combined with controls on the issuance of building permits.

The Wild Wild Texas order, where zoning is less powerful than elsewhere but where "pay-as-you-grow" has taken root fairly broadly, tends like the traditional zoning families to have fairly low base density, but its metropolitan areas also have lost less density than some of the faster-growing metropolitan areas in the Middle America family. For example, Austin's density shot up by 14 %, leading it to surpass more exclusionary Atlanta between 1982 and 1997. Houston, the least-zoned region in the U.S., lost less than 10 % of its density.

In the Reform order, a combination of "pay as you grow" regulations on infrastructure, permissive high-density zoning, and urban containment probably increased density somewhat. Conversely, high established density can also encourage crowded residents to demand urban containment and infrastructure controls. The cause-effect relationship in the Containment family needs consideration in future research. Rapid sprawl in Tennessee may have encouraged its legislature to adopt urban growth boundaries in the early 2000s. Similarly, Washington did not adopt its growth management act until 1990, exactly in the middle

of the 1982-1997 period over which land use data are available. Several observers, too, have noted that Portland's urban growth boundary was defined with substantial room for expansion in the early 1980s (Pendall, Fulton, and Martin, 2002). It is possible, then, that containment has not had adequate time to work. But the Containment family also less actively regulates infrastructure and has fewer jurisdictions allowing high-density zoning than the other reform families. Further investigation might determine whether Containment regions could accommodate or encourage higher density by pursuing more aggressive increases in permitted density.

2. Central city-suburban disparities

Often, the term "central city" conjures up bleak images of abandonment and deterioration. Such images, however, do not apply to all U.S. metropolitan areas. Research shows that as of 1990, the majority of 508 central cities were "healthy," including subsets of "competitive," "sunbelt," and "knowledge" central cities (Hill, Brennan, and Wolman, 1998). Among the "stressed" central cities, about 11 % of the total was "stereotypical" distressed central cities and about another third were "manufacturing" central cities.

Regulatory orders and families at the metropolitan level probably shape central cities (Nelson et al., 2004). To see whether certain kinds of people or households are concentrated in central cities, we computed the poverty rates, percent black, percent Hispanic, percent college educated, and home ownership rates separately for central cities and suburbs of each metro area or component. We then divided the central city percent by the suburban percent to yield an index of concentration. For example, if the poverty rate in the central cities of a metro area were 20 % while poverty outside the metro area's central city was 10 %, the central city poverty concentration would be 2.0. If these were reversed, the poverty concentration would be 0.5.

Our research suggests a strong relationship between regulatory orders and families, on the one hand, and central city opportunity or distress. Central cities in the Traditional and Exclusion areas have very high levels of concentration of low income people and people of color and low concentrations of college graduates and home owners. By contrast, the Wild Wild Texas and Reform areas have higher concentrations of college graduates and home owners in their central cities than in their suburbs. While black and Hispanic residents as well as people living in poverty are still concentrated in the central cities of these metropolitan areas, they are much more dispersed to suburban jurisdictions than in the other two major orders (Table 5).

On average, the Traditional and Exclusionary orders have central city poverty rates three times higher than their suburban poverty rates; in Detroit, Rochester, Buffalo, Minneapolis, Philadelphia, Hartford, and Milwaukee—all in the Middle America family—central city poverty exceeded suburban poverty by a factor of at least 4.0. Reform metropolitan areas occupied the other end of the spectrum, with an average poverty concentration index of just 1.9. In Texas, the average level of concentrated poverty was 2.14, lower than in the Exclusionary order but somewhat higher than in the Reform metropolitan areas.

Racial concentration is among the hallmarks of American metropolitan areas, but not all regions have equally high or equally persistent segregation and concentration of minorities in central cities (Massey and Denton, 1993; Wilkes and Iceland, 2004). The survey results allow us to identify clear correlations between land-use regulation and the concentration of

African Americans (blacks) and Latinos (Hispanics) in these large metropolitan areas. On average, central cities in the Reform and the Wild Wild Texas orders had concentrations of African Americans that exceeded the suburban concentrations by a factor of 2.7, but that ratio in Middle America was 6.2.⁴ The Exclusionary metropolitan areas had the highest concentration of Hispanic population; their central cities had four times the percent of Hispanic residents, on average, that their suburbs did in 2000. This high concentration probably relates to the racial composition of the Hispanic population in the Exclusionary metropolitan areas, most of which have Hispanic populations with large shares of Afro-Caribbean Latinos (Puerto Rican, Dominican).

Table 5
METROPOLITAN OPPORTUNITY: SUBURBAN OPPORTUNITY, MAJOR FAMILIES, 2000

Regulatory Order	Regulatory Family	Average ratio of central city to suburbs				
		Poverty rate	% of			
			Black	Hispanic	Home ownership	College graduates
Traditional	<i>Middle America</i>	3.00	6.25	2.71	0.69	0.89
	<i>High Density</i>	2.96	2.70	2.38	0.55	0.97
Exclusion	<i>Basic Exclusion</i>	3.49	3.35	4.20	0.56	0.46
	<i>Exclusion with Restriction</i>	3.12	6.54	4.47	0.57	0.74
	<i>Extreme Exclusion</i>	1.88	3.66	4.09	0.68	0.83
Wild Wild Texas	<i>Dallas-San Antonio</i>	2.02	1.82	2.00	0.70	0.91
	<i>Austin</i>	2.40	1.74	1.50	0.56	1.22
	<i>Houston</i>	2.11	2.43	1.64	0.63	0.97
Reform	<i>Containment</i>	2.12	4.11	1.59	0.74	1.12
	<i>Containment Lite</i>	2.31	2.25	0.72	0.79	0.97
	<i>Growth Control</i>	2.01	2.21	1.55	0.74	1.03
	<i>Growth Managment</i>	1.59	2.24	1.24	0.75	1.11
Total Avenge		2.60	4.61	2.30	0.69	0.94

Source: 2000 U.S. Census of Population and Housing, Summary File 3 (Poverty) and Summary File 1 (Black, Hispanic), extracted from the State of the Cities Data System, accessed June 2005 at <http://socds.huduser.org/index.html>.

4 Black residents are non-Hispanic blacks in these calculations. Respondents had the option of selecting multiple races in 2000; year-2000 data are based on the share of residents who identified themselves only as black (no other races).

Unlike measures of concentrated poverty and racial minorities, home ownership and college education indicate opportunity and upward mobility. For home ownership, central cities in Reform metropolitan areas offer more opportunity than those in the other orders, even though suburbs still outperform central cities on average even in the Reform order. Central cities in the Reform and Wild Wild Texas orders both appear to offer wider opportunities for college graduates to find a place to live than those in the Exclusion and Traditional orders.

3. Housing costs

For at least 20 years, the main metric that has been used to determine the impact—and the acceptability—of land use regulations has been the cost of housing (and usually the sale price of owner-occupied housing). While this study does not evaluate whether particular regulatory approaches cause higher housing costs, it does identify those that associate with systematically higher self-reported housing values and contract rent.⁵ By far the highest housing prices in the U.S. are in the Growth Control metropolitan areas, owing mainly to the sky-high prices of the San Francisco metropolitan area (Table 6). The monthly average rent there in 2000

Table 6
HOUSING PRICES BY FAMILY, 1990 AND 2000

Regulatory Order	Regulatory Family	Average Monthly Rent		Average House Value (not condominiums)	
		1990	2000	1990	2000
Traditional	<i>Middle America</i>	\$376	\$522	\$98,366	\$147,768
Exclusion	<i>High Density</i>	423	658	153,239	225,327
	<i>Basic Exclusion</i>	455	598	135,431	177,241
	<i>Exclusion with Restriction</i>	533	677	194,873	249,089
Wild Wild Texas	<i>Extreme Exclusion</i>	521	618	154,400	170,855
	<i>Dallas-San Antonio</i>	371	550	84,147	117,068
	<i>Austin</i>	375	663	91,627	164,223
Reform	<i>Houston</i>	365	547	82,977	124,074
	<i>Containment</i>	377	554	99,221	168,700
	<i>Containment Lite</i>	428	580	114,070	160,105
	<i>Growth Control</i>	536	825	194,739	322,102
	<i>Growth Management</i>	482	640	139,857	183,885
TOTAL AVERAGE		\$409	\$570	\$113,535	\$165,747

5 This analysis uses data from the 1990 and 2000 U.S. Censuses of Population and Housing. Data on housing values are based on self-reporting by respondents who may not be well informed about local housing market conditions. Contract rent data are more reliable.

(around the peak of the dot-com bubble) was \$970, about \$75 higher than the average in the Virginia suburbs of Washington, DC (the next highest region). The average house value in the San Francisco metropolitan area that year was nearly \$425,000, a value \$130,000 higher than in the next-highest New Haven area. Rents and home prices in metropolitan Denver, the other Growth Control family, are much lower than in San Francisco (\$680 average rent, \$220,000 average housing value), but the most “growth controlled” parts of the Denver metropolitan area (Boulder County) have high prices that are balanced by lower prices elsewhere in the metropolitan area. Thus it appears inarguable that the Growth Control regulatory family, which combines a series of locally imposed and generally uncoordinated urban growth boundaries with widespread building permit caps, associates with high housing prices.

The other Reform families associate much less strongly with high housing prices. Average rent in the Growth Management family is \$640, and average home value is about \$185,000. The Containment and Containment Lite families had still lower rents (\$554 and \$580, respectively) and house values (\$170,000 and \$160,000), on average. The High Density family also has very high housing prices because of New York City. Salt Lake City has more modest, but still higher than national average, housing costs.

The Exclusionary family also has higher prices than the national average. Boston’s Exclusion with Restriction leads, with average rent of \$675 and housing value of \$250,000 in 2000. Basic Exclusion and Extreme Exclusion have somewhat lower average rents of \$600 and \$620, respectively, and housing values in the \$170,000 to \$180,000 range. In Middle America a large share of the rental housing stock is old; new development at the urban fringe has left large amounts of housing vacant in many central cities. Contract rents in these regions, consequently, are the lowest of any regulatory family on average (\$520). Average house values are also very low at \$145,000.

The less regulated environments of Dallas-San Antonio and Houston have the lowest average house values of the metropolitan areas we examined at \$115,000 and \$125,000, respectively. But their rents, at about \$550, are higher than the average contract rent of just \$520 among the Middle America metropolitan areas. Overall housing costs for home owners are increased in the Texas metro areas, however, by comparatively high property tax rates and assessments in new-growth areas. The Austin metropolitan area was much closer to the other two areas in Texas in 1990, but the fast growth of well paid technology employment raised Austin’s average rent to \$665 and its average house value to \$165,000. The precise relationship between deregulation and housing costs in Texas—which came first, and how they relate to one another in the short- and long-term futures—remains to be explored.

4. Toward a balanced appraisal of the impacts of regulation

Local zoning and comprehensive plans are the default land use regulations in the United States. The Middle America and Exclusionary families are still dominated by local governments that rely primarily, or even exclusively, on these tools and very little on growth management measures. Metropolitan areas in these families have a series of regional problems not associated with most reform families. They are less dense. They have less opportunity for low income residents and minority households to live in suburbs. They offer less opportunity for people to own homes in central cities, and have central cities that appeal less to college gradua-

tes. The Exclusionary metropolitan areas also have fairly high housing prices. The end result is that these places fail on multiple indicators. To the extent that their regulatory environments are responsible for those failures, wholesale regulatory reform is probably called for.

Metropolitan areas in the Middle America family suffer from many of the same problems of sprawl and segregation that the Exclusionary families do. In their favor are lower average housing prices. It is likely, however, that for low income households, blacks, and Hispanics, these low housing prices buy lower quality living environments and public services. We need to know more about the precise dynamic that supports a combination of low housing prices, rapid sprawl, a high concentration of disadvantaged people in central cities, and weak home ownership attainment for central city residents compared with their suburban counterparts. To the extent that regulatory reform can reduce the worst of the problems without raising housing costs to unsustainable levels, such reform is probably called for.

Wild Wild Texas presents the closest thing the United States has to land use deregulation. How does this deregulation play out? With the exception of booming high-tech Austin, it has lower home prices than most other Sunbelt areas. Texas' large metropolitan areas also have lower concentration of poverty and minority residents, and higher home ownership and college graduation concentrations in central cities than the exclusionary families. Finally, density did not drop much in the Texas metropolitan areas in the 1980s and 1990s, and in Austin density increased. But Houston, Dallas, Austin, and San Antonio started out as some of the least dense large metropolitan areas in the United States, and maintaining that level of density should hardly be treated as a badge of honor. Continued low density development in Texas, especially in fringe and unincorporated areas with little or no regulation to mitigate environmental impacts, is bound to produce environmental, economic, and social costs that will mount with the decades. This is especially true to the extent that rural development occurs in flood and hurricane prone areas. Internalizing some of these costs would undoubtedly mean higher housing prices, a trade-off that the Texas Legislature is unlikely to accept anytime soon.

The Reform families offer almost the polar opposite of either the Traditional or the Wild Wild Texas regulatory families. Generally, they are denser both as a current picture and over time, and they offer more regional opportunity for low-income residents, blacks, and Hispanics than the other families. These good outcomes come at the cost of higher average housing costs. But housing costs are much higher when reform turns growth *management* into growth *control*, choking off development inside urban growth boundaries as well as beyond them. In the other Reform families, especially Containment and Containment Lite, rents and housing values are substantially lower than in the Exclusionary metropolitan areas. To the extent that regulatory reform should be pursued in the Reform families, it can build upon strong comprehensive planning and permissive zoning to pursue more thorough land supply monitoring and incentives for local governments to designate much more land for housing development at medium and high densities.

VI. CONCLUSION: TERRITORIAL GOVERNANCE IN THE UNITED STATES

This paper has shown a series of correlations between regulatory systems, which few people care about intrinsically, and a series of important "on-the-ground" conditions that most people care about much more. It has shown that no metropolitan region in the United

States has a monopoly on problems or success; rarely do metropolitan regulatory systems deliver equal levels of compactness, geographic opportunity, and housing affordability.

In metropolitan areas with “reform” systems of land-use regulation, most of which are in the Sunbelt and on the Pacific Coast, high housing prices accompany some of the most compact urban form of any U.S. metropolitan area, central cities that feature lower poverty than those in other parts of the nation, and suburbs that offer more opportunities for African Americans and Latinos. High-density development in these reform areas has led to and been supported by massive investment in transportation, sewer, and water infrastructure. Together, these conditions increase land prices, contributing to a residential construction industry that requires more capital intensiveness and thus more sophistication and vertical integration. Reform-area suburbanites accept higher residential densities than those in other metropolitan regions, and their local governments do more to accommodate low-income households. These metropolitan regions have growth-governance institutions that operate at a generally large scale of counties and large cities, and many have highly centralized infrastructure agencies that have the power and scope to secure and provide water and sewage treatment to hundreds of thousands of customers. With scale, coordination, high land prices, and established infrastructure networks, the reform regions have a synergistic set of features that are likely to propel them onto a development path that is both more compact and less restrictive of opportunity for disadvantaged people than that in most of the rest of the nation.

Some observers have suggested that the most regulated of these metropolitan areas—notably, San Francisco—ought to loosen their development restrictions so that their housing prices will fall (or at least not rise as rapidly). With such a complex interweaving of regulations, land prices, construction industry, growth governance institutions, consumer expectations, and governing traditions, such deregulation is highly unlikely because it might come at the expense of many of the advantages with which it currently associates. Even if it were to occur, deregulation would bring prices down only if restrictive conditions were met about the responses of both developers and established property owners. Rather than deregulation, more realistic solutions to high housing costs in these regions will capitalize on what they already do well: build moderately high density housing spread out among many suburbs; capture land value for social benefit; and create new regional institutions that encourage better collaboration among jurisdictions to solve joint problems.

A second group of highly regulated metropolitan areas, those of Boston, New York, and Philadelphia, appears to be on a development path that differs fundamentally from the reform metropolitan areas. These exclusionary regions have high-density central cities, but their new growth has occurred at very low density at the suburban edge, making them the antithesis of compact metropolitan areas: whereas Phoenix is a density “mesa,” Boston and New York are density “buttes” (or “Fujis”) with very high centers but low-density edges. The suburban growth in these regions disproportionately consists of upper-income white and Asian non-Hispanics, while high concentrations of low-income people, Latinos, and African Americans remain in central cities. Some of these central cities—especially New York and Boston—have recently experienced revivals, thanks in part to international working-class immigration and in part to their reimagination as playgrounds of the international upper class and intelligentsia. Many small older cities, however, remain distressed. Local growth-governance institutions in this part of the country tend to be small, highly fragmented, and

uncoordinated with one another; local governments also, however, tend to be fiercely protective of their planning and regulatory powers, making deregulation at least as unlikely as in the reform regions. Lacking either scale or coordination, and with relatively lower suburban land prices, these regions also have synergistic features that will continue to propel them to become lower density (and thus auto-dependent) and more spatially differentiated by class and race than metropolitan areas in the rest of the nation. Solutions to the high housing costs of these regions will arrive with difficulty. They do, however, have one important asset that most other U.S. metropolitan areas lack: a well developed system of commuter rail, subways, and light rail that, if more fully exploited, could serve as the spine for a nodal system of mixed-income housing and mixed-use development for new generations of residents in locations that currently accommodate only the suburban upper middle class.

The least regulated metropolitan areas of the U.S., in Texas, have much lower house prices than metropolitan regions in the reform and exclusionary orders. But they also have very low densities, and residents there drive more miles every day than those in the reform and exclusionary regions. As a consequence, they may spend in transportation costs what they save in housing costs. The housing they buy, also, appreciates less rapidly than that in many other regions, and the lowest-cost housing is often built in areas that are exposed to environmental and anthropogenic hazards ranging from hurricanes and tornados to oil-refinery explosions and incinerator pollution. Furthermore, the deregulatory mindset in these regions extends to modest construction of social housing and reinforces the ideology that many people earn low incomes only because they lack initiative (and therefore do not deserve housing assistance). These deregulated regions will face huge challenges if they are to become more compact and socially just, but these goals seldom appear on the political agenda in the face of powerful interests who benefit from an auto-dependent, highway-intensive, hazardous regional development model.

The remaining metropolitan areas—the “traditional” ones in the Midwest and South—feature a mix of the conditions of deregulated Texas and the exclusionary New Jersey and Boston suburbs. Here, the challenges may be most acute, because many of these metropolitan areas lack either the transportation systems of the Northeastern U.S. or the regulatory openness of Texas, resulting in perhaps less acute problems but also less evident solutions than we can see in the reform and exclusionary areas of the nation. Some of these regions also are mired in a long-term economic transition from a manufacturing to a service economy that has depleted their populations and extinguished optimism. Even here, however, there are glimmers of hope in the development of civil-society and business coalitions that seek to unite central city and suburban actors, forge new alliances among local governments, and provide a “high-road” economic development through investment in higher education and medical research.

Driven by concern about sprawl, traffic, open space, infrastructure capacity and costs, state and local governments throughout the U.S. are in the throes of a long term process of reform in their land use policies. In none of these states and local governments is the discussion a choice between regulation and no regulation. Rather, they are choosing either more or different regulation. As a practical matter, then, the contestable argument that total deregulation will produce better results across a wide array of indicators is not really worth addressing. The real focus of any analysis going forward should be the alternatives between better and worse systems of land use regulation.

Will the reform process ever overcome the localism that is a hallmark of U.S. land regulation? In a word, no. The most aggressive effort at growth management—in Oregon—

has recently been constrained by a movement to strengthen private property rights (Howe, Abbott, and Adler 2004). Other reforms, such as those in Maryland, rely on incentives and technical assistance and not on mandates and penalties. A more conservative national mood, coupled with the aging of baby boomers, their movement into suburbs, and the growth of political power in suburban localities, have combined to dampen the enthusiasm for state laws that might reduce local governments' liberty.

These "smart growth" legislative reforms respond to some of the same goals that previous growth management systems did, but the political coalitions behind them lack the political strength and probably the motivation to enforce either procedural or substantive compliance. This shift has reduced the breadth and vigor of deliberate metropolitan governance. On the procedural side, previous reforms such as those in Florida, Oregon, coastal California, and elsewhere required local governments to participate in multi-jurisdiction planning efforts or to undertake a lengthy process of plan review that undoubtedly improved the clarity and scope of their territorial governance. Procedural requirements often result in wider knowledge about and broader participation in planning processes among a wide group of actors from government, civil society, and businesses. Substantive requirements—for urban growth boundaries, infrastructure "concurrency," or affordable housing, for example—also clearly result in improvements in the quality of plans and indirectly in the level of engagement of all actors in planning because the stakes are higher.

Deliberate efforts to create a coordinated system to govern land use in metropolitan regions will not come, then, through land-use planning and regulation reform. Instead, regional planning for other systems—especially transportation and water—is likely to compel states and localities to coordinate efforts at open-space protection and land-use planning. Only as it becomes evident that resolving environmental and economic crises requires more coordination will such deliberate regional territorial governance to emerge.

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