



Atlanta, GA MSA

Regulatory Order/Family: Traditional/Middle America

Summary

The regulatory framework for land use in metropolitan Atlanta undoubtedly contributes to its position at the top of many sprawl indices.¹ Exclusionary zoning dominates the landscape, there is very little growth management, and urban containment is completely unknown. In many other metro areas where counties regulate development, their size allows them to make strategic decisions about preserving large amounts of land while allowing intensive development in other unincorporated areas. Indeed, many serve as de facto regional governments (albeit on a relatively small scale). This does not appear to have been the recent pattern in Atlanta.

Governance Framework and Growth Trends

The Atlanta MSA is the nation's 16th largest metropolitan area. It had 4.1 million residents in 2000, a 39 percent increase from its 1990 population. This absolute increase—1.1 million people—was approximately the total size of the Buffalo MSA in 2000. There are 110 cities and villages in the MSA, but over two thirds of the residents live in unincorporated portions of the region's 20 counties. Only three cities have over 50,000 residents, but 14 of the counties have over 50,000 residents in unincorporated areas. Another 29 cities and six counties have between 10,000 and 50,000 residents, and 78 municipalities have fewer than 10,000 residents. Together, the smallest cities account for less than five percent of the MSA's population and land area. The unincorporated portions of the large counties account for 66 percent of the land area and 64 percent of the population. Less than five percent of the Atlanta metro area is owned by government, with public ownership split evenly between state, federal, and county government.

Recent anxieties about sprawl in Atlanta have resulted in greater attention to that region's recent growth patterns.² And for good reason: the metropolitan area's urbanized land base grew 72 percent between 1982 and 1997 while its population grew 58 percent. Over 600,000 acres were converted to urban uses in Atlanta between 1982 and 1997— that's 200,000 more than the Los Angeles CMSA added while the latter grew by nearly three times as many residents.

Regulatory Environment

We received responses to our survey from 36 municipalities and 14 counties. These jurisdictions account for 65 percent of the metropolitan population and 64 percent of the land area. The results suggest that Atlanta is a fully zoned metropolitan area, and that zoning is surprisingly exclusionary for a southern region. One out of five cities and half the counties have low-density-only zoning. A

¹ See e.g., Marcy Burchfield, and others, "Causes of Sprawl: A Portrait from Space," *Quarterly Journal of Economics* 121(2) (2006): 587–633; Reid Ewing, and others, "Measuring Sprawl and Its Impact," (Washington: Smart Growth America, 2002); William Fulton and others, "Who Sprawls Most? How Growth Patterns Differ Across the U.S." (Washington: Brookings, 2001).

² "Moving Beyond Sprawl: The Challenge for Metropolitan Atlanta," (Washington: Brookings, 2000). Available at <http://www.brookings.edu/metro/atlanta/toc.htm>.



quarter of the counties and 22 percent of the cities would bar our hypothetical apartment development anywhere in their borders. Because of the extent of development in exclusionary counties, 31 percent of the people live in jurisdictions with low-density-only zoning. These municipalities and counties occupy 42 percent of the MSA's land. Thirteen percent of the residents live in jurisdictions where apartments would not be allowed, accounting for a quarter of the land.

At the upper end of the density scale, only three of the counties would permit density to exceed 15 dwellings per acre. The cities, curiously, are no more permissive than this. Only an estimated 15 percent would allow residential densities to exceed 15 dwellings per acre. About 40 percent of the residents live in these higher-density jurisdictions, which account for about 20 percent of the land.

In 1989, the state's General Assembly passed the George Planning Act—a mild form of state growth management that requires all local governments to adopt and amend plans that conform to minimum standards and procedures. Plans must be reviewed by regional development centers, which are financed by mandatory dues imposed upon local governments. Jurisdictions with approved plans are called “qualifying local governments” and are eligible for certain grants.³ As a result of the law, only one of the respondents claimed they had no comprehensive plan (but presumably it must adopt one in the next four years to be a qualifying local government.)

Other tools to manage growth in Atlanta are quite limited, especially in unincorporated areas. An estimated 24 percent of municipalities impose impact fees—but these are among the larger cities, accounting for about half the municipal population. A few smaller cities—17 percent of the total, with 7 percent of the municipal population—use APFOs. Only an estimated 3 percent of municipalities, with 7 percent of the municipal population, have a containment program of some kind. No county has an APFO or any sort of containment program. Two or three larger counties, accounting for a quarter of the unincorporated population, have incentive based affordable housing programs, but neither of these is a density bonus. Only a scant 2 percent of municipalities promote affordable housing through incentive programs.

³ See: Jerry Weitz, *Sprawl Busting: State Programs to Guide Growth* (Washington: APA Planners Press, 1999).



Austin-San Marcos, TX MSA

Regulatory Order/Family: Wild Wild Texas/Austin

Summary

Fast growth in metropolitan Austin, combined with “pay as you grow” development regulation and comparatively permissive zoning for high-density housing, have helped change growth patterns there over the past 15 to 20 years. If not for its unincorporated counties, Austin would look like a model of growth management. But counties in Texas have no independent planning and zoning authority. Land developers can subdivide land fairly simply in unincorporated areas. If they wish to develop at comparatively high densities they have historically been permitted by state law to form municipal utility districts (MUDs). This places significant pressure on cities that wish to regulate land more strictly than developers will accept, especially at the city limits or within the city’s extraterritorial jurisdiction (ETJ).¹

Governance Framework and Growth Trends

The Austin-San Marcos MSA was the 38th largest in the U.S. in 2000, with a population of 1.2 million. But it had the second-fastest population growth—48 percent—in the 1990s behind only Las Vegas. About half the population lives in the city of Austin. In all, nearly three quarters of the region’s residents live inside the city limits of 44 incorporated municipalities. Among the five counties in the MSA, three have unincorporated populations over 50,000 and two have between 10,000 and 50,000. Only about 4 percent of the land is publicly owned.

Urbanized land grew about 47 percent in the Austin metro area between 1982 and 1997, a period when its population expanded 77 percent. About 135,000 acres in total were urbanized. Because its growth rate outpaced its development rate, Austin’s population density increased over this 15-year period. But it began the period as the least dense of the 50 largest metro areas, and ended at only number 44, with 2.7 people per urbanized acre: barely more dense than Atlanta (2.6) and slightly less so than Oklahoma City (2.7).

Regulatory Environment

We received responses to our survey from just 16 percent of the cities in metropolitan Austin. However, these accounted for 63 percent of the metro area’s population, though they only accounted for 8 percent of the region’s land area. Like the other Texas metro areas, only the municipalities in Austin-San Marcos may regulate development with more than rudimentary subdivision controls. While the counties account for only about a quarter of the residents, they include nearly 90 percent of the land area. Cities have planning and zoning power within an ETJ whose size varies based on city population.

¹ In this case, extraterritorial jurisdiction (ETJ), or perimeter zoning, refers to the legal ability of a municipality to exercise its authority to impose its land use ordinances a certain distance beyond its borders into unincorporated areas.



The seven municipalities (including Austin) that responded to our survey—with a total of nearly 790,000 residents all had zoning and all allowed development to exceed 15 dwellings per acre. None of them would prohibit our hypothetical apartment complex and all but one had a zone in which it could be built as of right. Based on results from other Texas metro areas, we suspect that there may be a few small cities we did not survey with low-density-only zoning and a few more with maximum residential density between 8 and 15 units per acre. Nevertheless, at least 95 percent of the municipal population lives in cities that accommodate high-density development. Density in unincorporated areas is not governed by zoning but by the public health aspects of wastewater treatment, which requires large lot sizes if on-site septic systems are required.

All seven of the municipalities that responded to the survey have impact fees. Again based on both the respondents and results from other Texas metro areas, there may be a few small cities without impact fees. Three of the seven, including Austin, have an affordable housing incentive measure, and two (also including Austin) have a dedicated source of housing funds.



Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH NECMA

Regulatory Order/Family: Traditional/Exclusion with Restriction (Massachusetts portion)
Traditional/Extreme Exclusion (New Hampshire portion)

Summary

As Metropolitan Boston spreads out into rural and exurban towns, its new growth is occurring predominantly in areas with a history of low-density zoning. In the past, most cities have accommodated high-density housing, and some have pioneered very progressive affordable housing policies as well. This legacy, however, does not hold true of the region's towns, most of which limit or bar high-density development. Nearly three-fifths of the land area is taken up by jurisdictions whose zoning by-laws or ordinances would bar the construction of a moderate-density apartment development anywhere in their boundaries.

Growth management is weak in the region, with modest adoption of infrastructure-related measures in the cities and very little use of such measures in the towns. To the extent that cities use fees and APFOs while towns do not, cities may potentially become relatively unattractive to residential developers. This only fuels growth into towns where it can occur on established country roadways, using septic systems and wells that require little or no public capital investment but which require the continuation of low density. This legacy has recently been reinforced in some towns and even a few cities by the imposition of annual caps on building permit issuance: metropolitan Boston ranks third behind Denver and Las Vegas in the use of such measures. The mixture of local land use regulations is considered a primary factor in that region's affordable housing crisis.¹

Governance Framework and Growth Trends

The Boston-

Worcester-Lawrence-Lowell-Brockton NECMA comprises 35 cities and 192 towns in Massachusetts and another 6 cities and 75 towns in New Hampshire. Its population of just over 6 million in 2000 was up only 5.5 percent (370,000) in the 1990s and 14 percent (720,000) between 1980 and 2000. Massachusetts accounts for 5.3 million residents, New Hampshire for 770,000. With 590,000 residents, Boston is the largest city in the region with the cities of Worcester, Manchester (NH), Lowell, and Cambridge also exceeding 100,000 residents. Twelve other cities and four towns have over 50,000 residents. Small jurisdictions dominate the landscape, with 143 towns under 10,000 accounting for 48 percent of the metropolitan land area but only 12 percent of its population; another 120 middle-sized (10,000–50,000) towns and 22 cities complete the jurisdictional setting. Together, jurisdictions under 50,000 residents occupy over 90 percent of the NECMA's land area and account for 61 percent of its 2000 population.

Metropolitan Boston sprawled dramatically between 1982 and 1997, adding nearly 50 percent to its urbanized land base—435,000 new acres—while its population grew by only 10 percent. Its density declined from 6.0 persons to 4.4 persons per urban acre, causing a drop in its density rank from 10th

¹ Charles C. Euchner and Elizabeth G. Frieze, "Getting Home: Overcoming Barriers to Housing in Greater Boston" (Boston: Pioneer Institute for Public Policy Research, 2003.)



to 14th densest among the 50 largest metropolitan areas. The federal government owns very little land in the region, but a combination of state and local ownership add up so that only about 88 percent of the land is privately owned. Scattered wetlands pose a significant constraint to development on much of the privately owned undeveloped land. Furthermore, the low-density development pattern of suburban and exurban areas has been carried out on septic systems and wells, leaving many of the region's residents dependent upon groundwater that is threatened by dense development.

Regulatory Environment

We received responses from 26 cities and 96 towns, accounting for 55 percent of the population and 40 percent of the land area. Towns under 10,000 were sampled to allow more appropriate estimation of land use regulations in the smallest jurisdictions.

All the jurisdictions in the NECMA have zoning, according to our estimates.² About seven (20 percent) of the 35 cities in Massachusetts and one or two of the six in New Hampshire have low-density-only zoning. Half the Massachusetts cities and three or four of the New Hampshire cities have zoning categories that allow over 15 dwellings per acre. Eighteen percent of the Massachusetts cities and two or three (estimated 43 percent) of the New Hampshire cities would bar our hypothetical apartment development. Hence even metropolitan Boston's cities—which account for a fairly small share of the land area—are selective about accommodating high-density housing. In the towns, low-density and exclusionary zoning predominates. About 72 percent of the towns on the Massachusetts side, and 53 percent would not permit our hypothetical apartment development. New Hampshire's towns are even more restrictive; 89 percent have low-density-only zoning, and 82 percent would not permit the prototype apartments. Adding it all up, jurisdictions with low-density-only zoning account for 40 percent of the residents and 70 percent of the land area, and those that would bar apartments account for 31 percent of the population and 57 percent of the land area.

Comprehensive planning is anemic in the Massachusetts jurisdictions, in part because state law places the zoning ordinance above the plan in the case of conflicts between the two. Only about three quarters of the cities and towns in Massachusetts reported having a comprehensive plan, whereas all the New Hampshire jurisdictions have plans.

Local growth management and growth control measures are common but not the rule in the region. About a quarter of the cities in Massachusetts and four of the six New Hampshire cities use impact fees, and three of the New Hampshire cities have APFOs. Infrastructure measures are much less common in the towns; only 10 percent of the Massachusetts towns and a third of those in New Hampshire use fees, and APFOs are practically unknown in the towns. About 10 percent of the Massachusetts cities and two New Hampshire cities are estimated to have a containment system of some kind, though the respondents to these questions may simply be reflecting their cities' inability to annex into neighboring jurisdictions. Five percent and 10 percent of the towns in Massachusetts and New Hampshire respectively have containment programs of some kind. About 20 percent of the

² Quincy reported not having a zoning ordinance, but an Internet search indicated that Quincy does have a Zoning Board. This suggests that the city's response may have been a consequence of the survey's wording ("does your jurisdiction have a zoning ordinance?"), since Massachusetts law provides for local by-laws and not ordinances.



cities in each state have a building permit cap, as do 23 percent and 14 percent of the towns in Massachusetts and New Hampshire, respectively. This rate of permit cap adoption ranks metropolitan Boston third, behind only Denver and Las Vegas.

Over 60 percent of the cities in the metro area (equally in Massachusetts and New Hampshire) use incentive measures to promote affordable housing. About half of Massachusetts towns, but only 15 percent of New Hampshire towns, have an affordable housing incentive program.



Buffalo-Niagara Falls, NY MSA

Regulatory Order/Family: Traditional/Middle America

Summary

Metropolitan Buffalo's challenge is not managing growth, but rather dealing with population decline and economic stagnation. While losing about 5 percent of its residents between 1982 and 1997, it urbanized less land than any other metropolitan area: about one-tenth of the land consumption of Orlando or Charlotte, for example. Its regulatory framework is dominated by low-density zoning in most of the rural areas with very limited use of any new growth management tools.

Governance Framework and Growth Trends

The Buffalo-Niagara Falls MSA, with 1.2 million residents in 2000, is one of only two metro areas among the 50 largest (along with Pittsburgh) that lost population during the 1990s. Its population declined 1.6 percent in the 1990s after an even more depressed 1980s; in all, the MSA's population dropped by 72,000 (5.9 percent) between 1980 and 2000. Buffalo had fewer than 300,000 residents in 2000, half its peak population around World War II. Only one other city, Niagara Falls, had over 50,000 residents in 2000, and its population also fell significantly in previous decades. There are another 8 medium-sized (10,000-50,000) cities and villages in the region and 17 small ones. Town governments, 41 in all, are responsible for land use regulation outside municipal boundaries. Three towns have populations over 50,000; all of them are more populous than the city of Niagara Falls.

Perhaps because of its long economic malaise, Buffalo has not followed the general trend for slow growing or declining regions to consume huge amounts of undeveloped land. The National Resources Inventory registered an increase in developed land of only about 24,000 acres between 1982 and 1997, the smallest amount among the large metropolitan areas. Since the region's population declined 4.6 percent over those 15 years, its density dropped from 6.2 to 5.3 persons per urbanized acre. Even so, the MSA's rank dropped only from 7th to 8th most dense, placing it between Chicago and Sacramento in the rankings. Private land accounts for 89 percent of the total; most of the remainder is in county or municipal ownership, with 3 percent held in trust for Native American tribes.

Regulatory Environment

We received responses to our survey from 16 cities and villages and 24 towns; these account for 48 percent of the residents and 61 percent of the land area. The two most populous jurisdictions, Buffalo and the Town of Amherst, did not respond to the survey. We did not survey the tribes, and the regional tallies below exclude reservations from the totals (3,100 residents, 900 square miles).

Buffalo is entirely zoned. About 40 percent of the municipalities have low-density-only zoning, and 11 percent would not allow our hypothetical apartment development. Three quarters (77 percent) of towns have low-density-only zoning, and 61 percent would not permit the prototype apartment development. In all, jurisdictions with low-density-only zoning account for 32 percent of the



population and 66 percent of the land area; those that would bar the hypothetical apartment development house 10 percent of the population on 28 percent of the land. About 40 percent of the municipalities and 9 percent of the towns have zoning ordinances allowing more than 15 dwellings per acre.

Comprehensive planning is relatively weak in New York State; zoning ordinances prevail over plans in the event of a conflict between the two. Between 80 and 85 percent of the towns and municipalities in the Buffalo MSA are estimated to have a plan. There is little growth management in the region; about a third of the towns and a small handful of cities or villages may have impact fees on some systems, and a fifth of the towns have an APFO. Containment is practically unknown; one or two jurisdictions have adopted a pace control, but in such a slow growth region such controls are probably mostly symbolic. Between 10 and 15 percent of municipalities and townships have incentive programs for affordable housing.



Charlotte-Gastonia-Rock Hill, NC-SC MSA

Regulatory Order/Family: Traditional/Middle America

Summary

Metropolitan Charlotte appears ripe for more thorough growth management. It has a jurisdictional matrix with strong counties and a few large cities that could adopt a coordinated system of growth and development. But the regulatory environment that currently exists is one that encourages low density growth at the fringe while discouraging higher densities in developing areas. Residential density ceilings are not low enough to exclude low-cost housing, but neither are they universally high enough to accommodate significant areas of multi-family density in at least some areas of the region's largest jurisdictions. The region has few jurisdictions that require growth to pay its own way, nor are there many that deliberately contain the spread of growth. This neglect undoubtedly contributes to the intense growth pressures in the region.

Governance Framework and Growth Trends

North Carolina's largest city, Charlotte, anchors an MSA of about 1.5 million residents. Its population grew 29 percent in the 1990s, adding 337,000 new residents. There are 59 cities and seven counties in the metro area; 50 cities and six counties are in North Carolina, with the balance in South Carolina. About 70 percent of the residents live in incorporated areas. Three cities have more than 50,000 residents, as do six of the seven counties in their unincorporated areas. Another nine cities and one county have between 10,000 and 50,000 residents, leaving 47 jurisdictions with fewer than 10,000 residents to account for about 5 percent of the metro area's population. Only about 3 percent of the land was owned by some level of government in 2000.

The Charlotte region has few rivals in terms of low density, dispersed development. Its density ranking placed it 49th out of the 50 largest metropolitan areas in 1982, and it slipped to last place in 1997 when its density dropped 17 percent to 2.3 people per urban acre.

Regulatory Environment

We received responses to our survey from seven municipalities (14 percent of the total) and six counties. Although this is a small number of municipalities, it includes 733,000 of the 1 million municipal residents and about one-third of the municipal land area. The counties that responded account for another 300,000 residents. In all, 75 percent of the metro area population and 77 percent of its land area are represented in the respondents to the survey.

Based on these responses and from results elsewhere in North Carolina, we estimate that all the cities and counties have zoning. About 17 percent of them have low-density-only zoning, and only 2 percent would not allow the prototype apartment development. Two or three of the counties (about 15 percent) have low-density-only zoning, but none would bar our hypothetical apartment complex. All in all, 13 percent of the population lives in jurisdictions with low-density-only zoning; accounting for about 15 percent of the land. Only 2 percent live in jurisdictions that would ban our hypothetical



apartment building completely. Over half the municipalities have residential density maximums exceeding 15 dwellings per acre, as do half the counties. These jurisdictions are home to about 45 percent of the region's population and account for 38 percent of its land area.

All the counties in the Charlotte MSA have comprehensive plans, but an estimated 14 percent of cities (about 7 percent of the population) do not. About 35 percent of cities and one of the seven counties have impact fees. Together, these account for about 15 percent of the population and 23 percent of the land area. APFOs are somewhat less popular, in place in about 17 percent of cities and two counties, and again apply to about 15 percent of the population and 21 percent of the land area. About 30 percent of the cities claim an urban containment program of some kind, as do two counties. Even so, only 15 percent of the land area and 12 percent of residents are in contained jurisdictions.

A quarter of the cities and perhaps two counties have incentive based affordable housing programs, most of which are density bonuses in exchange for affordability commitments. Half the population lives in these jurisdictions.



Chicago-Gary-Kenosha, IL-IN-WI CMSA

Regulatory Order/Family: Traditional/Middle America

Summary

Metropolitan Chicago is dynamic and rapidly expanding with many jurisdictions vying for growth. Exclusionary zoning, while not uncommon, is not as dominant as in some other Great Lakes and Northeastern metropolitan areas. The most common approach appears, to the contrary, to be quite favorable toward growth and development. A vast number of cities and villages—especially those in Illinois—have rapidly annexed outlying areas. Most of these municipalities have permissive residential zoning ordinances and growth accommodating impact fees, while few restrict development with growth boundaries or other tools.

Meanwhile, the counties, which have little power to control rapid expansion of city boundaries in Illinois, have widely varying growth policies.¹ The counties all appear to accommodate growth at suburban or even urban densities and most of the collar counties use impact fees to assure that growth defrays some of its costs. By contrast, west and northwest of Chicago and south of the city around Kankakee, county governments have stronger policies to control and manage development, using a combination of very low density zoning, formal growth containment policies, impact fees, and adequate public facilities ordinances. Kenosha County, in southern Wisconsin, has more in common with the Illinois fringe counties, with a more overt and coordinated containment policy.

Governance Framework and Growth Trends

The Chicago-Gary-Kenosha CMSA takes in parts of three states (Wisconsin, Illinois, and Indiana). With 355 incorporated cities and villages, 13 counties, and 177 townships—many of which regulate land use—the Chicago metropolitan area is among the most complicated and fragmented in the United States. Only the New York metropolitan area has more local governments (669)—but New York does not feature the complex overlay of county and township government in its unincorporated areas that are present in Illinois and Wisconsin.

Almost 8.4 million of the metro area's 9.2 million residents live in Illinois, with 630,000 in Lake and Porter Counties, Indiana and 150,000 in Kenosha County, Wisconsin. The city of Chicago accounts for 2.9 million residents, but the rest of the over 8 million residents who live in incorporated jurisdictions are widely distributed. The second largest jurisdiction—the city of Aurora, Illinois—has only 140,000 residents; only five other jurisdictions (Naperville and Joliet, Illinois; Gary, Indiana; and the unincorporated portions of Illinois's Will, Cook, and DuPage counties) have more than 100,000 residents each. In all, about 780,000 people live in unincorporated areas.

The Chicago metro area urbanized nearly 300,000 acres of land between 1982 and 1997, a 23 percent increase when the population grew by only 9.1 percent. As a result, density dropped from

¹ Wim Wiewel, Joseph Persky, and Kimberly Schaffer, "Chicago: Metropolitan Decentralization," in *Sunbelt/Frostbelt: Public Policies and Market Forces in Metropolitan Development*, J.R. Pack, ed. (Washington: Brookings, 2005).



6.4 to 5.7 persons per urbanized acre over the period. The Illinois portion of the metro area lost density less rapidly (-10 percent) than either the Indiana portion (-18 percent) or the Wisconsin portion (-29 percent). The decentralization is coupled with population decline in some central cities; Gary, for example, dropped from 117,000 to 103,000 residents in the 1990s. But the city of Chicago reversed previous declines in the 1990s, picking up more than 100,000 residents to a population just under 2.9 million.

Regulatory Environment

Zoning is nearly omnipresent in this metropolitan area among both cities and counties. About 45 percent of the cities and villages in the Illinois part have low-density-only zoning ordinances, and 23 percent would bar our hypothetical apartment development entirely. The six cities and villages in Wisconsin and the 30 in Indiana are somewhat less restrictive. About 35 percent of jurisdictions in each state have low-density-only zoning. The survey suggests that exclusionary cities and villages tend to be smaller than average, encompassing just 13 percent of the residents of Illinois cities and 4 percent of Kenosha County's municipal residents. No more than 5 percent of the population in any of the three states lives in a municipality that would bar our hypothetical apartment development. About 20 percent of Illinois cities and villages with around 60 percent of Illinois city residents (4.9 million in all), 26 percent of Indiana cities with a third of residents (175,000), and two or three of the six municipalities in Wisconsin (with 105,000 residents, over 90 percent of city residents) allow residential densities to exceed 15 dwellings per acre.

Seven of the 13 counties restrict density to fewer than 8 dwellings per acre with five of these maintaining maximum densities of less than quarter acre lots. But only two counties would entirely preclude development of our hypothetical apartment building, and four would permit it as of right in at least some zone. This reflects past and ongoing development intensity in unincorporated areas of metropolitan Chicago which varies from restrictive counties that seek to protect farmland, to DuPage and Cook Counties, which have unincorporated pockets areas where the zoning ordinance would allow apartment development.

Planning was not mandatory in either Wisconsin or Illinois when our survey was completed, but it was in Indiana. Only about three quarters of the Wisconsin municipalities and 90 percent of those in Illinois had adopted comprehensive plans in 2003. The largest cities in Illinois were less likely to plan than middle-sized cities. Chicago, for example has no comprehensive plan. The counties, by contrast, do tend to have comprehensive plans. Wisconsin jurisdictions are currently in the process of updating or creating new comprehensive plans, owing to the state's recent adoption of smart growth legislation. According to planning staff from Kenosha County, "Since 1983, when the County adopted a comprehensive zoning ordinance, the County has encouraged each Township to adopt a land use plan. Of the seven Townships, four have adopted a land use plan, and a fifth is considering [one]. One Township is working with an adjacent Village on a Smart Growth Plan. The County as a whole in conjunction with the Towns, Villages, and the city of Kenosha will be working on a Smart Growth Plan as required by State Law."²

² For more information on comprehensive planning in Southeast Wisconsin, see: Southeast Wisconsin Regional Planning Commission, "Comprehensive Planning ("Smart Growth")" (Waukesha, WI, undated.) Available at <http://www.sewrpc.org/smartgrowth>.



Like others in the Midwest, jurisdictions in the Chicago metro area guide growth primarily with impact fees, although some also use adequate public facilities ordinances and a few use urban containment measures. Impact fees are nearly omnipresent; almost all the counties that responded to the survey in Illinois use them, and between 60 and 65 percent of cities in Illinois and Kenosha County, Wisconsin do. Only 15 to 20 percent of the Indiana cities use fees, however, and the one county that responded to the survey did not. All these cities tend to be more populous than the average, taking up about 80 percent of the city population in Illinois, 95 percent of that in Kenosha County, and a quarter of that in Indiana. A few jurisdictions use APFOs to complement or supplement their impact fees, though only a small number use APFOs alone. McHenry County, northwest of Chicago, uses an APFO in conjunction with its impact fees.

Containment programs are fairly rare, reported by only three counties, one in each state. In addition, a few small to mid-sized cities and villages use containment, but some of these—for example, East Chicago, Indiana—are mostly surrounded by other municipalities, and it is unclear what containment would mean in such cases. Only about 10 percent of cities and a few counties in Indiana have a formal containment policy. Containment is a higher priority in Kenosha County than in most of the rest of metropolitan Chicago. The county itself has a containment policy in its comprehensive plan, and one village practices containment. According to County planning staff three towns (township equivalents) in Kenosha County have a sewer service area, but this may no longer serve to limit much development in rural areas. “The requirements for sitting an on-site septic system has in the past limited some growth,” according to the staff, “but since the State changed the requirements this is no longer seen as a tool to limit growth. The new requirements for an on-site septic system now allow for any soil type, except wetlands, to be suitable for some type of system.”



Cincinnati-Hamilton, OH-KY-IN CMSA

Regulatory Order/Family: Traditional/Middle America

Summary

Metropolitan Cincinnati is rapidly decentralizing within a fragmented jurisdictional framework. Township governments vie with cities for growth—and the townships are winning. Cincinnati lost 9 percent of its population in the 1990s, while the region as a whole grew by 9 percent. Much of that growth spread through the north central part of the metropolitan area in suburban townships that permit moderate-density residential development, but other areas east of Cincinnati—west into Indiana, and south in Kentucky—also saw substantial land conversion thanks in part to permissive planning and zoning. Impact fees and adequate public facilities ordinances have become more common in some of the faster growing cities, but only about a quarter of the land area is in jurisdictions with such measures. Several counties, including the three in northernmost Kentucky have adopted urban containment policies.

Governance Framework and Growth Trends

The Cincinnati-Hamilton CMSA is a complex, polarized, and highly fragmented region.¹ It has nearly 2 million residents who live in three states, about 1.6 million in Ohio, 370,000 in Kentucky, and 50,000 in Indiana. The metro area's population grew by about 160,000 (9 percent) in the 1990s, with growth rates running twice as fast in Kentucky and Indiana but most of the new growth (100,000 new residents) occurring on the Ohio side. Between 1982 and 1997, the metro area added about 157,000 acres of developed land, with density declining 21 percent, from 4.4 to 3.5 persons per urbanized acre. Sprawl has been most severe in the Kentucky portion of the region, where density declined 32 percent over this period.

The metro area has 139 municipalities and 13 counties. Over 800,000 people, 42 percent of the total, live outside incorporated units. Cincinnati is the largest jurisdiction in the region, with 331,285 residents in 2000; its population declined by about 9 percent (33,000 residents) in the 1990s, even as the metropolitan area grew by 9 percent (160,000 residents). The four next most populous areas are unincorporated counties: Hamilton, with nearly 290,000 residents in 2000; Clermont and Butler counties, with over 100,000 each; and Warren, with 80,000. Apart from Cincinnati, only two cities—Hamilton and Middletown, both north of Cincinnati in Butler County—have over 50,000 residents. None of the cities in Indiana have more than 5,000 residents, but six of the Kentucky cities have between 10,000 and 50,000 residents. The average city in the Ohio part of the region has about 10,300 residents, that in Kentucky 5,500, and in Indiana just 2,300. About seven percent of the land in the CMSA is publicly owned with roughly equal shares in state, local, and county hands.

Ohio counties share responsibility with townships for development regulation in unincorporated areas. There are 66 townships in the five Ohio counties of the Cincinnati metro area. The counties

¹ Myron Orfield and Thomas Luce, "Cincinnati Metropatterns: A Regional Agenda for Community and Stability in Cincinnati" (Minneapolis: Metropolitan Area Research Corporation, 2001).



can adopt plans and zoning; they also regulate and approve all subdivisions. Townships are also free to adopt their own zoning resolutions that are either more permissive or more restrictive than the county's, or to reject zoning altogether. Zoning is not subordinate to comprehensive plans in any of the three states, yet such plans are mandatory in Indiana and Kentucky but not in Ohio.

Given the large share of the population living outside city and village limits, it should come as no surprise that many townships are both large and rapidly growing. Three townships have over 50,000 residents, and 14 others have over 10,000. Two townships in Butler County—Liberty and Union—each added over 10,000 residents in the 1990s, as did Deerfield Township in Warren County. The only other jurisdiction that added as many residents was the city of Mason.

Regulatory Environment

We received 19 responses from cities in Ohio, 10 from cities in Kentucky, and one from an Indiana city. Unfortunately, Cincinnati was not among our respondents.² Seventeen townships in Ohio responded, as did four counties each in Ohio and Kentucky and one in Indiana.

The survey results suggest that 92 percent of the Ohio municipalities, 88 percent of those in Kentucky, and all those in Indiana have zoning. Low-density-only zoning is quite common in the Ohio cities, with 54 percent maintaining maximum residential densities below 8 dwellings per acre. A third would not allow our hypothetical apartment development under any condition. Neither Indiana nor Kentucky has municipalities as strict, with only 30 percent and 12 percent of municipalities respectively employing low-density-only zoning. No Indiana municipality and only 14 percent in Kentucky bar the hypothetical apartment development. Ohio's cities are also more sparing at the upper end of the density scale. Only 13 percent have a zoning ordinance whose maximum residential density exceeds 15 dwellings per acre, compared with about 20 percent of the cities in Indiana and half those in Kentucky. But since the small share of cities allowing higher-density development is assumed to include Cincinnati, we estimate that about 60 percent of city residents in the Ohio part of the metro area live in such cities, with a similar share in Kentucky. About 40 percent of the land area in the region's Ohio cities is in higher-density municipalities, with over a quarter in low-density-only cities. In short, exclusionary zoning is widespread in the cities in this region, mainly in its Ohio counties.

Given the layered responsibility for zoning in unincorporated areas in Ohio, it is difficult to determine based on a survey the extent to which rural areas are zoned and how densely they allow development to occur. Two of the counties—Brown and Clermont—do not have zoning but all the townships that responded to our survey do. In the other three counties only one township rejects zoning. We estimate that fewer than five townships, and perhaps as few as two, have neither county nor township zoning. In other townships, zoning is unusually accommodating to growth as may be evident from the high population figures in unincorporated areas. We estimate that only about a quarter of the unincorporated land is in townships where county or township zoning would prohibit development at fewer than 8 dwellings per acre. About 30 percent of the land and 23 percent of the

² The city of Cincinnati did overhaul its zoning code in 2004. See: Gregory Korte, "Council Votes Today on a Sweeping New Zoning Code" *Cincinnati Enquirer*, January 14, 2004; p. 3C.



population in the Ohio townships are in jurisdictions whose zoning ordinances allow more than 15 dwellings per acre.

Zoning administration in unincorporated areas of the Kentucky and Indiana portions of metropolitan Cincinnati is less complex, with counties in control in both cases.³ All the counties have zoning, but here again the attitude toward growth in unincorporated areas tends to vary. Kentucky's Boone and Kenton Counties and Dearborn County, Indiana (which are close-in) all of which have zones in which development could attain at least 30 dwellings per acre by right. Further out in Ohio County, Indiana, on the other hand, the maximum density is less than four units per acre.

Other tools to manage and control growth are not common in metropolitan Cincinnati. Only a few cities reported having impact fees, and two reported an APFO. Most of these cities and villages are fast growing municipalities in the northern two counties of the region. The counties that surround these cities have urban containment measures of some sort (Warren County's is an urban service boundary that is "merely a 'guideline,'" according to the County Planning Commission's executive director.) Counties and townships are not permitted by Ohio law to adopt impact fees or APFOs. Two or three municipalities on the Ohio side also report a containment program—including Greenhills, one of the three original greenbelt communities founded by the Resettlement Administration in the 1930s.⁴ The three Kentucky counties closest to Cincinnati also have urban containment and one of these has an APFO. In Kenton County most of the cities also reported the presence of an urban containment program of some kind.

Only about 10 percent of the cities and villages in the metro area have an incentive based affordable housing program. One of the counties in Kentucky also reported having such a program, but they were not reported by any other unincorporated governing unit. There are no inclusionary or density bonus programs.

³ We did not find information on whether Pendleton County, a rural Kentucky county at the southern edge of the region, has zoning.

⁴ See: Barry M. Horstman, "More than 50 Years Later, Greenhills is Still Green," *Cincinnati Post*, October 11, 2000.



Cleveland-Akron, OH CMSA

Regulatory Order/Family: Traditional/Middle America

Summary

Cleveland resembles nearby metropolitan areas in the Northeast—Buffalo, Rochester, and Pittsburgh—more than it resembles those in Ohio. Its growth rate has been negligible in recent years, with rapid decentralization. This is in part a result of slow population growth itself, since slow growth depresses competition and thus prices for land, and of the region's economic transformation, which has resulted in reductions in intensity and even abandonment of many industrial facilities that cannot be economically converted to other uses. But it also owes something to strong development control especially in the region's unincorporated townships. The townships and counties are not empowered to adopt innovative regulations to manage or control growth, but by the same token, their zoning ordinances usually preclude high-density development. Between 15 and 20 percent of municipalities would bar our hypothetical apartment development. This regulatory environment contributes to a region that is sprawling and persistently segregated by both race and class.¹

Governance Framework and Growth Trends

With nearly 3 million residents, the Cleveland-Akron CMSA is the largest metropolitan area in Ohio and the 16th largest in the United States—just larger than San Diego and smaller than Minneapolis-St. Paul. But population growth has been slow, just 3 percent in the 1990s. The 86,000 new residents in the 1990s only barely exceeded a 79,000-person decline in the 1980s.

Metropolitan Cleveland includes 149 cities and villages in eight counties. The counties share planning responsibilities with 113 townships, adding up to a total of 270 jurisdictions. About 85 percent of residents live in municipalities—a higher share than either Cincinnati or Columbus—and incorporated areas cover 1,150 of the region's 3,600 square miles. But it is a “thinning” region in which the settled areas are losing residents while unincorporated areas boom. Between 1982 and 1997, a period in which population fell and then recovered for no net increase, the region urbanized about 180,000 acres of land. Neither the Columbus nor Cincinnati metropolitan areas urbanized as much land as Cleveland, even though both grew by at least 100,000 residents. About 9 percent of the CMSA's land area is publicly owned.

Regulatory Environment

We received responses to our survey from 51 cities and villages, 14 townships, and four counties. Based on these results and those from Columbus and Cincinnati, we estimate that about half of the municipalities with 17 percent of the municipal population have low-density-only zoning. Our hypothetical apartment development would be banned in 30 percent of the cities and villages. These

¹ Todd Swanstrom and others, “Pulling Apart: Economic Segregation among Suburbs and Central Cities in Major Metropolitan Areas,” (Brookings, 2004). Available at http://www.brookings.edu/metro/pubs/20041018_econseggregation.htm.



small jurisdictions account for 9 percent of the region's municipal population and 17 percent of the incorporated land area, about 225,000 residents and 200 square miles in all.

In unincorporated areas, none of the four respondent counties has its own zoning, leaving that to township governments. An Internet search suggested that at least three and possibly all four of the non-respondent counties also lack zoning, again leaving decisions on whether or not to zone to constituent townships. A variety of sources suggest that zoning in unincorporated areas is more restrictive than it is in either of the other two large Ohio metro areas.²

An estimated 75 percent of townships have zoning with density ceilings below four dwellings per acre, and another 17 percent have density caps of four to seven dwellings per acre. Eight of the 10 townships who answered our question about the hypothetical apartment development would bar it entirely, suggesting that a total of 2,200 square miles (including incorporated and unincorporated areas) in a region of 4,800 square miles are in jurisdictions banning apartments. These results contrast sharply with metropolitan Cincinnati and Columbus, where high-density development is permitted by many more townships and is more prevalent, and where at least half of the respondents to this question would allow the hypothetical apartment development. Only about five townships of the 108 lack zoning entirely.

In all, then, metropolitan Cleveland is much more extensively covered by exclusionary zoning than either Cincinnati or Columbus. Its cities and villages are neither more nor less exclusionary than those in the other two large Ohio metro areas, but its unincorporated townships bar apartment development much more commonly. This low-density-only zoning probably bears some of the responsibility for rapid land development even with slow population growth in metropolitan Cleveland.³

Other growth management tools are rare in metropolitan Cleveland with infrastructure based measures being the most common. Impact fees are present in about a third of the cities, representing about 22 percent of the incorporated population. APFOs exist in 17 percent of the cities, with 12 percent of the population. One city, Hudson, has a building permit cap. An estimated 10 percent of the cities have an incentive based affordable housing program; two or three of these may have a density bonus or inclusionary housing program, but they represent only a very small share of the metropolitan area's population or land area. None of the counties or townships reported any of the other land use tools, with one exception: Ashtabula County has "significant areas regulations" that are not impact fees per se but that do require developer contributions for certain public facilities.

² The Internet and county surveys suggested that townships' responses to our survey were rendered inaccurate by our survey's wording; we asked whether townships had zoning ordinances, but Ohio statutes call zoning "resolutions," not "ordinances," in townships. Hence although several of the township clerks answered "no" when asked whether they had zoning ordinances, subsequent research revealed the presence of zoning resolutions.

³ In addition, more than a dozen municipalities in metropolitan Cleveland have provisions that mandate referenda for all zoning changes. It is argued that these provisions are designed to exclude affordable housing from certain jurisdictions. Stuart Meck, "Exclusion by Zoning Referendum," speech to the Cleveland City Club, October 2, 2002.



Columbus, OH MSA

Regulatory Order/Family: Traditional/Middle America

Summary

With a city of over 700,000 residents at its core and a suite of smaller cities around it, the Columbus metropolitan area has a framework that allows and accommodates growth without the dominance of exclusionary zoning. Neither, however, does growth management appear to be a strong priority in the region, partly because the state legislature has not given the counties and townships the authority to adopt several important land use tools. The cities in the region, especially Columbus, have annexed aggressively, providing urban services and maintaining moderate density at the suburban fringe. But large lot single family subdivisions are becoming more common in the rural townships. In no rural areas do counties or townships report a formal containment policy, nor does containment appear to be a strong priority for most of the municipalities. This is a recipe for decentralized growth that is moderated principally by municipalities that accommodate growth through zoning and infrastructure provision.

Governance Framework and Growth Trends

The Columbus MSA has about 1.5 million residents living in six counties and 75 cities. It is the fastest growing region in Ohio with a growth rate of 15 percent in the 1990s. The city of Columbus accounts for over 700,000 residents, and is unusual among Ohio cities for its ability to continue annexing outlying territory. Another two dozen cities and villages, seven of which have a population between 20,000 and 40,000 residents, share Franklin County with Columbus (most of these cities are pockets surrounded by Columbus.) Franklin County also has about 90,000 residents outside municipal boundaries. The urban core county of the metro area is separated by agriculture, forests, and scattered low-density residential development from the small to medium-sized county seats of the five counties that surround it. A much higher share of the Columbus metro area's population lives in municipalities than they do in the Cincinnati metropolitan area (79 percent, compared with 56 percent). The six counties in metropolitan Columbus have 102 townships among them, only six of which have over 10,000 residents and none of which have more than 20,000. Sixty two have fewer than 25,000 residents.

Sprawl has arguably been less severe in metropolitan Columbus in the last two decades than elsewhere in the state. As developed acreage grew between 1982 and 1997 by about 100,000 (31 percent) and population grew by 240,000 (19 percent), density dropped from 3.8 to 3.4 persons per urbanized acre, about 9 percent. Even so, density in Columbus remains lower than that in either of the other two metro areas, both of which are anchored by higher-density central cities. About 7 percent of the land in metro Columbus was publicly owned in 1992.

Regulatory Environment

There is an evident hierarchy in zoning in the Columbus region with the highest densities attainable mainly in the urban core. Columbus and Bexley (an incorporated "island" within Columbus) both allow density to attain levels over 30 dwellings per acre, but no other jurisdictions in the region



permit such high density in their zoning ordinances. Our results suggest that about 55 percent of the municipalities maintain low-density-only zoning ordinances, with 34 percent barring our hypothetical apartment development altogether. These cities and villages are mostly small, accounting for only 8 percent (low-density-only) and 5 percent (no apartments) of the metropolitan area's municipal population, 95,000 and 65,000 residents, respectively. Most people live in the 10 percent of cities where densities may attain at least 15 dwellings per acre; these account for over 800,000 residents.

In unincorporated areas, an estimated 94 percent of the land area is covered by either county or township zoning. Low-density-only zoning is in force in approximately 45 percent of the townships, with all but about five other townships (5 percent) allowing densities between 8 and 14 units per acre. Our hypothetical apartment development would be allowed at least by special permit, if not as of right, in an estimated 60 percent of unincorporated jurisdictions covering a little over half the unincorporated land area.

Three of the six counties responded to our survey; two, Franklin and Delaware (north of Columbus), have zoning which is commonly supplemented or superseded by stricter township zoning resolutions. Although Licking County (east of Columbus) does not have zoning, all but four or five of its two dozen townships have adopted zoning resolutions with the holdouts lying at the extreme eastern edge of the region. None of the other three counties responded to our survey but partial information for all three was available on-line. The least populous of the three, Madison, has countywide zoning that has been accepted by at least 10 of its 12 townships. According to county web sites, one township in Pickaway County and two in Fairfield have not passed zoning resolutions but all the others have.

Planning is not mandatory in Ohio and when it exists does not take precedence over the zoning ordinance. An estimated 75 percent of jurisdictions have comprehensive plans but most of the larger cities, including Columbus, have a plan. Therefore, 94 percent of the incorporated land area is covered by municipalities with plans. County planning commissions adopt plans for the unincorporated areas and two of the three counties that responded to the survey have plans. One of the three counties that did not respond had evidence on its web site of a land use plan. Fourteen of the 18 townships that responded also said they had comprehensive plans.

Other tools are uncommon in almost any format in metropolitan Columbus. The city of Columbus does not impose impact fees, an APFO, or a containment policy. Impact fees do exist in some cities and villages, adopted by an estimated 37 percent of jurisdictions representing just 20 percent of the population. Most of these are suburbs of Columbus and the county seats. An estimated 18 percent of cities have an APFO, and 14 percent have a containment measure of some kind. None has a permit cap. In unincorporated areas, none of these land use tools are present.

An estimated 10 percent of the municipalities, including Columbus, have incentive based affordable housing programs. A small handful of townships may also have affordable housing programs, based on positive responses from two of the 18 townships that responded to the survey. However, these jurisdictions employ measures other than density bonuses and inclusionary zoning to make new housing affordable: mainly fee waivers and permit streamlining.



Dallas-Fort Worth, TX CMSA

Regulatory Order/Family: Wild Wild Texas/Dallas-San Antonio

Summary

Metropolitan Dallas is dominated by fairly permissive land use regulations, wielded by a fairly large number of large and medium-sized cities. Most cities zone, but their zoning is generally not exclusionary. Counties, whose unincorporated area accommodates just 8 percent of the population but 70 percent of the land, do not have the power to zone. The cities make wide use of impact fees and APFOs to assure that development pays its own way, but only a few—perhaps 10 percent—use programs to contain growth. Affordable housing incentives are available in about a quarter of the municipalities. This combination of regulations, combined with comparatively rapid population growth, has helped keep Dallas's density from slipping while most of the 50 largest metro areas have been losing density.

Governance Framework and Growth Trends

With 5.2 million residents, the Dallas-Fort Worth CMSA was the ninth largest in the United States in 2000, just behind Detroit and ahead of Houston. It grew by about 30 percent in the 1990s, adding about as many people as Atlanta (nearly 1.2 million). About 4.8 million of the residents, 92 percent of the total, lived in 210 incorporated municipalities in 2000. The balance, 430,000 people, lived in unincorporated portions of 12 counties. Fifteen cities and two counties (in unincorporated areas) had populations over 50,000 in 2000, accounting together for 3.6 million residents and 2,800 square miles of land. Another 40 cities and 8 counties had between 10,000 and 50,000 residents. About 5 percent of the land is publicly owned, broken evenly among the state, municipalities, and the federal government.

The Dallas metropolitan area's development was surprisingly consistent with historic patterns in the 1980s and 1990s. Its density increased only slightly to 3.3 persons per urbanized acre between 1982 and 1997. And although its density rank went from 39th to 33rd among largest metros, it still remains very low for such a large metro area.

Regulatory Environment

We received responses to our survey from 34 (16 percent) of the 210 municipalities in metropolitan Dallas, accounting for 2.6 million residents and about 1,300 square miles of land area (50 percent of the metro population and 15 percent of the land area). Like the other Texas metro areas, only the municipalities in metropolitan Dallas-Fort Worth may regulate development with more than rudimentary subdivision controls. While the counties account for only 8 percent of the residents, they include over 70 percent of the land area. Cities have planning and zoning power within an extraterritorial jurisdiction (ETJ) whose size varies based on city population.¹

¹ In this case, extraterritorial jurisdiction (ETJ), or perimeter zoning, refers to the legal ability of a municipality to exercise its authority to impose its land use ordinances a certain distance beyond its borders into unincorporated areas.



All the respondents have zoning, but based on results from the rest of the state we estimate that about 5 percent of municipalities do not have zoning. Two respondents had low-density-only zoning, implying that about 7 percent of all municipalities restrict density to fewer than 8 dwellings per acre. Perhaps one or two very small municipalities have zoning that would completely prohibit our prototype apartment development. Most of the municipalities have much more accommodating zoning, with 72 percent allowing densities to exceed 15 dwellings per acre. These cities account for 84 percent of the municipal population.

Almost all the municipalities in metropolitan Dallas have a comprehensive plan. As in other Texas metro areas, infrastructure-related growth management measures are quite common; about 72 percent of jurisdictions impose fees, and 36 percent have an APFO. These jurisdictions are large, with 91 percent and 45 percent of the municipal population, respectively. A surprising 11 percent of municipalities, with 13 percent of the municipal population, claim an urban containment mechanism of some kind. About 22 percent of the cities (36 percent of the municipal population) have an incentive based affordable housing program, but these tend not to be density-bonus programs.



Denver-Boulder-Greeley, CO CMSA

Regulatory Order/Family: Reform/Growth Control

Summary

Metropolitan Denver has widespread local growth management and growth control. Urban containment programs are universal among the six extensive counties that make up the region, and high-density development is accommodated by almost all jurisdictions. Impact fees assure that growth defrays some of its own costs, and a few jurisdictions also use APFOs for added protection against some infrastructure over-capacity. The region also has the largest share of local governments—about 40 percent of all, accounting for 25 percent of the population—with building permit caps. Despite this, metropolitan Denver maintained its density at about 4 persons per acre between 1982 and 1997, probably thanks to a combination of topography and federal land ownership; reliance on centralized sewer and water, which encourage higher density, to accommodate growth; and permissive high density zoning in many (but not all) jurisdictions.

Governance Framework and Growth Trends

The Denver-Boulder-Greeley CMSA had 2.6 million people in 2000, up 31 percent (600,000 residents) in the 1990s. The two largest jurisdictions are the cities of Denver (550,000 residents) and Aurora (275,000 residents). Jefferson, Arapahoe, and Douglas Counties and the cities of Lakewood, Arvada, and Westminster all have between 100,000 and 200,000 residents. Four other cities (including Boulder) and one county have between 50,000 and 100,000 residents. Fourteen cities and the unincorporated portions of two other counties have populations between 10,000 and 50,000 residents, with 45 small cities (under 10,000) rounding out the jurisdictions with planning and regulatory authority.

According to the National Resources Inventory, the Denver CMSA's population and its developed land area grew at similar rates between 1982 and 1997, both around 34 percent. As a consequence its density held steady at 4.0 persons per urbanized acre, causing it to jump from 31st to 20th among U.S. metro areas, most of which lost density in the 1980s and 1990s. About 20 percent of the CMSA's land was in public ownership in 1992, with 12 percent in federal control, 5 percent in state, and the balance in county and municipal ownership. Public lands may have grown substantially since then, especially in Boulder County, where city and county governments have both aggressively purchased greenbelt areas. The topography of the region, with the steep slopes of the Front Range limiting westward expansion, naturally favors expansion toward the eastern plains, little of which is in public ownership.

Regulatory Environment

We received responses to our survey from 19 cities and 6 counties in the Denver CMSA, accounting for 91 percent of the population and 98 percent of the land area. Our estimates of regional land use practices do not include any estimates for small cities (under 10,000 residents), which add up to about 110,000 residents and 105 square miles of land area.



All the jurisdictions in metropolitan Denver use zoning. None of them has low-density-only zoning and none would bar our hypothetical apartment development. Two thirds of the counties and 85 percent of the cities have a zoning category accommodating development over 15 dwellings per acre. Together, these jurisdictions account for 90 percent of the population and 80 percent of the land area.

Metropolitan Denver also is entirely occupied by jurisdictions with comprehensive plans. Like other western metro areas, local government goes far beyond zoning and planning to embrace various growth management and growth control techniques. Three quarters of the cities report using a growth boundary of some kind, 52 percent use impact fees, and 10 percent use APFOs. The Denver MSA has also been a hot spot for controlled growth, with an estimated 42 percent of cities using permit caps. All six counties use a growth boundary of some kind, five use impact fees, four have APFOs, and one has a permit cap. Three quarters of the residents live in growth-bounded jurisdictions, 85 percent in jurisdictions with APFOs, and a quarter in permit-capped jurisdictions. Only about 40 percent of jurisdictions provide incentives of some kind for affordable housing, but these account for a little over half the metro area's population.



Detroit-Ann Arbor-Flint, MI CMSA

Regulatory Order/Family: Traditional/Middle America

Summary

Zoning and planning are nearly universal in metropolitan Detroit, but other measures to manage or control growth are quite uncommon. As in Cleveland, there are many townships that are growing while municipalities languish or lose residents. Most of these townships are zoned primarily for low-density residential development, yet two thirds would permit our hypothetical apartment development. Generally, Detroit appears to have a less restrictive regulatory environment for housing than many other large metro areas in the Great Lakes and Northeast.

Governance Framework and Growth Trends

With about 5.5 million residents, the Detroit-Ann Arbor-Flint CMSA was the nation's eighth most populous in 2000. About 3.6 million residents live in 153 incorporated cities and villages with 1.9 million in the 172 townships. County governments play some important functions in Michigan and in some areas they conduct planning and zoning in the absence of it at the township level.

Metropolitan Detroit is losing density rapidly. Like several other metro areas in the Midwest, it lost population (a 2.0 percent decline) in the 1980s and staged a modest comeback in the 1990s, growing by 5.2 percent. Between 1982 and 1997, developed land grew by 27 percent (287,000 acres), almost as much as the Chicago CMSA (296,000 acres). But while Chicago added almost 750,000 people, Detroit's population grew by only 104,000. About 6 percent of the land in the CMSA is publicly owned.

Regulatory Environment

We received responses from 39 of the 153 municipalities in the metro area and from 43 of the 172 townships. Our respondents did not include Detroit. We estimate that all the municipalities in metropolitan Detroit have zoning and that about 30 percent of them use it to restrict densities to fewer than 8 dwellings per acre. About 13 percent of the region's municipal population live in these cities and villages, and they account for 14 percent of its incorporated land area. Thirteen percent of the municipalities would exclude our hypothetical apartment development, but these account for only 2 percent of the population and 4 percent of the land area. Almost all (96 percent) of the townships have zoning with about 55 and 37 percent restricting densities to a maximum of 8 and 4 dwellings per acre, respectively. About 31 percent of the townships would bar our hypothetical apartment development.

In all, 43 percent of the jurisdictions—with 20 percent of the population and half the land area—have low-density-only zoning. About 23 percent of the jurisdictions, with 8 percent of the population but 28 percent of the land area, would bar our hypothetical apartment development. About 20 percent of the jurisdictions have zoning ordinances in which the maximum residential density exceeds 15 dwellings per acre. High-density zoning is naturally much more pronounced among municipalities (37 percent)



than in townships (5 percent). Hence exclusionary zoning is moderately strong in metropolitan Detroit, but there are also many municipalities and townships that allow apartment development.

At the upper end of the density scale, an estimated 37 percent of municipalities but only 9 percent of townships have a residential density category allowing development to exceed 15 dwellings per acre. Even so, 25 percent of the townships would allow our hypothetical apartment development as of right in some zone, as would 31 percent of the cities.

All the municipalities and 96 percent of the townships have comprehensive plans. Growth management has not taken hold in a serious way, however. Infrastructure-related measures are rare; only 9 percent of the municipalities and 15 percent of the townships have impact fees, and just five jurisdictions in the entire region have an APFO. Containment programs are slightly more common. An estimated 20 percent of the municipalities and 15 percent of the townships have an urban service boundary, greenbelt, or urban limit line. About 10 percent of municipalities and 6 percent of townships have incentive based affordable housing programs.



Grand Rapids-Muskegon-Holland, MI MSA

Regulatory Order/Family: Traditional/Middle America

Summary

Metropolitan Grand Rapids resembles parts of suburban Detroit in many ways. Zoning is everywhere and exclusionary zoning is present, but it does not dominate. But neither are most municipalities very accommodating to high density residential development, with only one or two cities allowing density to exceed 30 dwellings per acre. Moderately fast growth in the 1990s has concentrated mainly in the townships beyond city boundaries since 1990. These townships' discomfort may help explain the region's falling density, but the relatively fast growth has kept marginal densities higher than metropolitan Detroit or Cleveland and in the same neighborhood as Columbus and Indianapolis, both of which had levels of growth similar to those in Grand Rapids.

Governance Framework and Growth Trends

The Grand Rapids-Muskegon-Holland MSA had just over 1 million residents in 2000 living in 41 municipalities and 78 townships. It grew by a relatively rapid 16 percent in the 1990s, adding 150,000 residents while metropolitan Detroit grew by only 5.2 percent. The MSA's three counties extend along about 75 miles of Lake Michigan's eastern shoreline. The population of the city of Grand Rapids, 20 miles inland, was nearly 200,000 in 2000, by far the largest municipality in the metropolitan area and accounting for over one-third of the incorporated population. Nearly half of the residents live in townships. Grand Rapids converted about 94,000 acres of land to development between 1982 and 1997, a 35 percent increase while population grew 21 percent. As a consequence of development that outpaced population growth, the metropolitan area's density dropped from 3.2 to 2.9 persons per developed acre. About 9 percent of the land is publicly owned, mainly in the form of state and county parks.

Regulatory Environment

Twelve municipalities with about 70 percent of the municipal population responded to our survey, and 18 townships with about 21 percent of the township population responded. Based on these results as well as results from metropolitan Detroit, we estimate that all the municipalities have zoning. About a quarter of them limit residential densities to fewer than 8 dwellings per acre, but only 7 percent restrict densities as low as quarter acre lots. Only 11 percent of the municipalities, with only 2 percent of the residents, would bar our hypothetical apartment development entirely. But 59 percent of the townships have low-density-only zoning, and 42 percent have a limit of quarter acre lots or larger. Over one-third of the townships, with about a quarter of the unincorporated population, would exclude our hypothetical apartment development. Since almost half of the residents live in townships, about 27 percent of the jurisdictions with 14 percent of the MSA's residents and 34 percent of its land area are in jurisdictions barring the prototype apartment complex.

Only 14 percent of jurisdictions have residential zoning with a maximum density of over 15 dwellings per acre. Almost all of these are municipalities. Sixty percent of municipalities would allow such



intense development somewhere in their borders, compared with perhaps 2 percent of the townships. Another 35 percent of townships have a residential density category allowing development at between 8 and 15 dwellings per acre. We estimate that a small number of townships, perhaps four percent, have no zoning. The counties in the Grand Rapid MSA have the power to plan and zone but defer to the townships.

Comprehensive planning in metropolitan Grand Rapids runs parallel with zoning. All municipalities have plans—except a handful of townships that also lack zoning. Other tools to manage growth are sparsely used. Containment measures are most common of all, but even then in only about 12 percent of the townships and 12 percent of the municipalities. About 18 percent of the townships have impact fees. And estimated 10 percent of the municipalities and 4 percent of the townships have an affordable housing incentive measure of some kind.



Greensboro--Winston-Salem--High Point, NC MSA

Regulatory Order/Family: Traditional/Middle America

Summary

Metropolitan Greensboro has some of the elements necessary to create a region with better growth management. Few jurisdictions have exclusionary zoning ordinances; most accommodate high densities. Several cities and counties have an urban containment program. But infrastructure-related tools—impact fees and APFOs—are in place in only a few small cities.

Governance Framework and Growth Trends

With a population of 1.3 million, the Greensboro--Winston-Salem--High Point MSA was the 37th largest metro area in the United States in 2000, just ahead of Austin. It grew by 200,000 residents in the 1990s, a 19 percent increase. About 760,000 residents (61 percent of the total) live in 49 cities, with just over 490,000 living in unincorporated areas of 8 counties. Three of the cities and five of the (unincorporated) counties have more than 50,000 residents, and another 7 cities and 3 counties have between 10,000 and 50,000 residents. Only about 4 percent of the land is owned by government agencies.

Like the other North Carolina metro areas, metropolitan Greensboro sprawled fast between 1982 and 1997, increasing its urbanized land 45 percent (150,000 acres) at a time when its population grew only 23 percent. This dropped the overall density from 2.9 to 2.4 persons per urbanized acre. It is the third least dense of the 50 largest metro areas, ahead of only Charlotte and Raleigh.

Regulatory Environment

We received responses from 7 municipalities. Although this was only one-seventh (14 percent) of municipalities, they account for over 600,000 residents and 326 square miles of the 550 incorporated square miles. In addition, six of the eight counties responded, accounting for another 350,000 residents and 2,200 square miles of land. In all, our respondents account for 77 percent of the population and 65 percent of the land area.

Based on these responses and others from elsewhere in North Carolina, we estimate that all the cities and counties have zoning. About 11 percent of the cities restrict densities to fewer than 8 dwellings per acre; two or three of the counties have low-density-only zoning. Together, these jurisdictions account for only 16 percent of the metropolitan population and about a third of its land area. But no jurisdictions would bar our hypothetical apartment development entirely. About 63 percent of municipalities and three or four of the eight counties would allow densities to exceed 15 dwellings per acre. These jurisdictions account for 68 percent of the residents and 42 percent of the land area.

We estimate that about 12 percent of the municipalities and three of the eight counties (38 percent) in metropolitan Greensboro lack comprehensive plans. But other land use tools only exist in about



36 percent of the municipalities, accounting for 38 percent of the residents and 21 percent of the land area. Infrastructure-related measures are in place in quite a few jurisdictions, but they are mostly small. A third of the municipalities but no counties impose impact fees, and 16 percent of cities and one or two counties have APFOs. Only 2 percent of the land area is in jurisdictions with impact fees, and an estimated 18 percent is in those with APFOs. Affordable housing incentive programs, mostly in the form of density bonuses, are in place in about a quarter of the jurisdictions constituting about 20 to 25 percent of the region's population and land area.



Hartford, CT NECMA

Regulatory Order/Family: Traditional/Middle America

Summary

Metropolitan Hartford is an intensely exclusionary region, dominated by small and medium-sized towns that obstruct the construction of apartments and do little to encourage long term affordability. The region's population has grown slowly in recent years but still sprawls rapidly. Furthermore, it is among the most racially and ethnically segregated regions in the United States, especially for a medium-sized metropolitan area.

Governance Framework and Growth Trends

The Hartford NECMA (including the municipalities in Hartford and Tolland Counties) had 1.2 million residents in 2000, up just 2.2 percent from 1990. The metro area has 58 jurisdictions; Hartford remains the most populous at 121,600 in 2000. Four cities and towns (New Britain, West Hartford, Bristol, and Manchester) have populations between 50,000 and 100,000. Twenty-nine towns and one city had between 10,000 and 50,000 residents in 2000, and 22 towns and one borough had fewer than 10,000. Between 1982 and 1997, the Hartford NECMA urbanized an estimated 45,000 acres of land, a 17 percent increase during a time when its population grew only about 7 percent. It is a classic "thinning" metropolitan area, with scant population growth overall and rapid deconcentration from the urban core. Hartford city's population declined 13 percent between 1990 and 2000, and both New Britain and Bristol declined or stagnated in the 1990s. About 13 percent of the land in the metro area is publicly owned, with 8 percent of the public land in state government control and the balance in municipal ownership.

Regulatory Environment

We received responses from three incorporated units and 34 towns in the Hartford NECMA, representing about 64 percent of the jurisdictions, 79 percent of the population, and 65 percent of the land area. All the most populous jurisdictions responded to the survey.

Based on these responses, we estimate that all the jurisdictions in the NECMA have plans and 96 percent have zoning. Plans are required in Connecticut, but zoning takes priority over plans in the event of a conflict between the two. Low-density only zoning is rampant in Hartford, with 34 percent of jurisdictions allowing fewer than 4 dwellings per acre and another 27 percent allowing between 4 and 7 units per acre. Furthermore, 20 percent of jurisdictions report having *reduced* maximum permitted density by over 10 percent in the previous 10 years compared with only 4 having raised it by over 10 percent. Hartford has the highest share among the 50 most populous metro areas of jurisdictions whose zoning ordinances would entirely prohibit our hypothetical apartment development: 63 percent, with 62 percent of the metropolitan land area and 36 percent of its population. At the other end of the density scale, only 14 percent of jurisdictions would allow densities to exceed 15 dwellings per acre; these jurisdictions account for about one third of the



metro area's 2000 population, but they tend to be located in the stable and declining parts of the region.

Few jurisdictions in metropolitan Hartford manage or control growth with tools beyond zoning. Fewer than 10 percent use either APFOs or impact fees, and about 5 percent are estimated to have growth control mechanisms of some kind. Eight percent had moratoria in 2003, and none used permit caps.

Affordable housing programs are better developed than the other tools in metropolitan Hartford. Like Massachusetts, Connecticut has a system in which jurisdictions where fewer than 10 percent of the dwellings are affordable are subject to overrides when they deny applications for affordable housing development.¹ The jurisdictions in the region have responded to this threat in two ways. First, Hartford is widely recognized for its voluntary affordable housing fair share program, which developed in the early 1990s under the leadership of the Capitol Region Council of Governments.² Second, a sizeable minority of local governments have adopted regulatory programs to require or encourage affordable housing construction. About 30 percent have inclusionary zoning or offer affordable housing density bonuses, and 10 percent have dedicated funding for affordable housing. The most active jurisdictions, however, are also the more populous ones. The semi-rural and exurban communities maintain both very low density and little action on affordability.

¹ Robert D. Carroll, "Connecticut Retrenches: A Proposal to Save the Affordable Housing Appeals Procedure." *Yale Law Journal* 110(7) (2001): 1247– 86.

² Terry J. Tondro, "Fragments of Regionalism: State and Regional Planning in Connecticut at Century's End," *St. John's University Law Review* 73 (1999): 1123–1158.



Houston-Galveston-Brazoria, TX CMSA

Regulatory Order/Family: Wild Wild Texas/Houston

Summary

Two large jurisdictions—Houston and Harris County—set the tone for development in metropolitan Houston with their oft-cited lack of traditional zoning. People who wish to live in more regulated environments can choose among a number of small cities with exclusionary land use practices, but the vast majority of residents live in jurisdictions without zoning. Pay-to-grow provisions like impact fees and APFOs, however, illustrate how the region's land use is far from being completely unregulated. Our survey did not explore how conditions on subdivision approvals limit changes of use, though these approvals do play an important role in shaping land use in the region.¹

Governance Framework and Growth Trends

As the 10th largest metropolitan area in the U.S., the Houston-Galveston-Brazoria CMSA had nearly 4.7 million residents in 2000, an increase of over 930,000 (25 percent) from 1990. There are 116 cities and 8 counties with about two-thirds of the residents in municipalities and one-third in unincorporated county areas. Six of the cities have over 50,000 residents, totaling 2.3 million people, as do four counties with 1.5 million people. Together these 10 populous jurisdictions account for over 3.8 million residents and 4,700 of the area's 6,200 square miles. But there are also a host of small municipalities: 86 under 10,000 residents and 24 with between 10,000 and 50,000 people in 2000. Nine percent of the land is owned by government agencies, mostly by federal and state government.

The Houston MSA urbanized large amounts of land between 1982 and 1997—over 350,000 acres—but development and population both grew about 35 percent. As a consequence, like the other large Texas metros, Houston held its density and moved upward in the national density ranking, from the 40th to 36th densest. But metropolitan Houston still is the least dense among the 10 largest with 3.2 persons per acre in 1997, and could be considered dense only in comparison with Atlanta. Other fast growing sunbelt regions like Phoenix and San Diego are markedly more compact than Houston.

Regulatory Environment

Sixteen cities in the Houston area responded to our survey (14 percent). Since these included Houston, the total population covered is about 2.5 million (52 percent of the population) on 912 square miles (12 percent of the land). Counties were not surveyed because they have little regulatory power over land use in Texas.

Houston is renowned as a city without zoning. In truth, Houston is a *region* with very little zoning. Only an estimated 59 percent of its cities have zoning, and Texas statutes do not permit counties to

¹ Indeed, a recent article argues that although the city of Houston does not have zoning, it does regulate land use in a variety of ways including minimum lot sizes, parking requirements, and other directives that have a profound impact on land use patterns. See: Michael Lewyn, "How Overregulation Creates Sprawl (Even in a City without Zoning)," *Wayne Law Review* (50) (1191) (2005).



zone. Interestingly, over half the municipalities that do have zoning appear to use it to restrict density to fewer than 8 dwellings per acre, but only a few small cities would bar our hypothetical apartment development entirely. Almost 90 percent of the residents of metropolitan Houston live in unzoned cities, where density is limited only by arrangements other than zoning. Only 5 percent in low-density-only jurisdictions.

Comprehensive planning is also weak in metropolitan Houston. Less than two thirds of the municipalities have a comprehensive plan, and since these tend to be the smaller cities, only an estimated 27 percent of the municipal population lives in a jurisdiction with a plan.² Just about the only other device in place in more than a handful of jurisdictions is impact fees, which about a quarter of the municipalities have adopted—including Houston. Houston also has an APFO, though few if any other cities do, but this means that about three quarters of the municipal population lives in a jurisdiction with an APFO. Nearly three-quarters of the population live in jurisdictions with an incentive based affordable housing program.

² We did not survey counties and thus do not know whether counties have prepared comprehensive plans, but Texas law would give such plans no binding authority in any case.



Indianapolis, IN MSA

Regulatory Order/Family: Traditional/Middle America

Summary

Development regulations are mild in metropolitan Indianapolis. Most of the residents live either in the city of Indianapolis, which accounts for half the metro area's population and in a series of medium-sized cities. About 20 percent of the residents live in unincorporated areas. Although the entire area has planning and zoning, exclusionary zoning is moderate and no jurisdictions have zoning ordinances that would preclude development of our hypothetical apartment complex. At the same time, however, few other tools are present and formal urban containment programs are practically unknown.

Governance Framework and Growth Trends

The Indianapolis MSA had about 1.6 million residents in 2000, up 16 percent (225,000) from 1990. This growth rate was three times that of the region in the 1980s. The region has 67 cities with planning authority and 8 counties. A ninth county, Marion, merged its government with the city of Indianapolis along with 15 smaller cities (not included in the 67 cities mentioned previously) in 1970.¹ The city of Indianapolis added over 60,000 residents in the 1990s, reaching a total population of 863,000 (including the other 15 cities embedded within it). Other cities account for another 430,000 residents; twelve of these have populations over 10,000, the largest (Anderson) having about 60,000 residents. One-fifth of the metro area's population lives in unincorporated areas spread fairly evenly across the region. Five of the eight surrounding counties have between 40,000 and 60,000 residents each in their unincorporated areas. The metro area urbanized about 120,000 acres of land between 1982 and 1997—a 32 percent increase—as its population grew by 218,000, or 16 percent. Density dropped from 3.6 to 3.2 persons per urbanized acre as the counties surrounding Indianapolis grew rapidly. A modest 6 percent of the metro area's land is publicly owned.

Regulatory Environment

Indianapolis controls planning and development regulation for all the jurisdictions in Marion County.² Its zoning ordinance allows a full range of urban densities and has a series of plans for the township areas that formerly constituted Marion County. Among the other cities and incorporated towns, we estimate that perhaps 30 percent, with 10 percent of the municipal population and 12 percent of the municipal land, have low-density-only zoning, but none would preclude our hypothetical apartment development. A quarter have zoning ordinances with residential density ceilings above 15 dwellings per acre. Together, these larger cities account for 70 percent of the municipal population and 65 percent of the city land. Counties, too, are fairly permissive. Only one—Shelby County, the least populated with 23,000 residents in unincorporated areas—has a density ceiling below four dwellings

¹ C. James Owen and York Willbern, *Governing Metropolitan Indianapolis : the Politics of Unigov* (Berkeley: University of California Press, 1985.)

² Three municipalities retain their own boards of zoning appeals, but the zoning itself is adopted by Indianapolis.



per acre. Yet even in Shelby it would be possible to build our hypothetical apartment development with a special permit.

All the jurisdictions in metropolitan Indianapolis have comprehensive plans but the other land use tools are scarce. Indianapolis itself has none of them. Three jurisdictions north of Indianapolis—Noblesville and Carmel and the town of Fishers—have adopted development impact fees, as have the cities of Anderson and Franklin. Based on these results an estimated 25 percent of all municipalities in the region with between 15 and 20 percent of the municipal population have adopted impact fees. Anderson also has a type of urban containment device. None of the counties reported an infrastructure-related growth management program, but Shelby County reports that it has a building permit cap. Only seven percent of the population lives in jurisdictions with an incentive based affordable housing program.



Jacksonville, FL MSA

Regulatory Order/Family: Reform/Growth Management

Summary

Jacksonville shares important features of other Florida metropolitan areas thanks to the state's strong growth management laws. It is completely planned and zoned, and zoning is rarely if ever used to exclude high-density development from entire jurisdictions. Infrastructure regulations are also broadly applied—developers must pay to grow or else seek out a location where there is slack capacity. Observers have noted that concurrency can help rein in sprawl, but it can also promote it if a metropolitan area has substantial areas with excess infrastructure capacity.¹ Jacksonville probably provides some proof of this, as—despite fast growth and strong planning—its density dropped by 10 percent between 1982 and 1997.

Governance Framework and Growth Trends

Metropolitan Jacksonville had about 1.1 million residents in 2000, up 194,000 (21 percent) from 1990. The metro area is dominated by Jacksonville-Duval County, a unified government with 735,000 residents covering nearly 760 square miles. Clay and St. Johns Counties, both south of Jacksonville, are two other large two planning jurisdictions in the region, with 125,000 and 105,000 residents respectively living in their unincorporated areas. One other county and four cities had between 10,000 and 50,000 residents, and 10 other cities have fewer than 10,000 residents. This adds up to a jurisdictional matrix with very little fragmentation of general purpose government. Eleven percent of the land area is owned by government; with the state accounting for the largest share: 8 percent.

For a large, fast growing metro area with little jurisdictional fragmentation, Jacksonville sprawled considerably between 1982 and 1997. About 122,000 acres were developed, a gain of 52 percent, while population grew only 37 percent. Consequently, its density dropped almost 10 percent, from 3.2 to 2.9, in 15 years.

Regulatory Environment

Florida is one of a handful of states with a strong state growth management program. The state requires all counties and cities to prepare plans and implementing regulations. A state agency reviews local plans to assure that they are compliant with state law. Substantively, the law requires local governments to assure the adequacy of public facilities to accommodate planned growth. As a consequence of this “concurrency” requirement, Florida jurisdictions almost always adopt APFOs and/or impact fees.

¹ James C. Nicholas and Ruth L. Steiner, “Growth Management and Smart Growth in Florida.” *Wake Forest Law Review* 35,3 (Fall) (2000): 645–670.



Three cities, including Jacksonville itself, and three counties responded to our survey. Although the cities represent only 19 percent of all municipalities in the region, these six jurisdictions accounted for about 95 percent of the MSA's residents and 98 percent of its land area.

Using these results and estimates based on other cities in Florida, Jacksonville is a fully zoned, fully planned metro area. Zoning is not generally used to exclude high-density development entirely from jurisdictions. No jurisdiction had low-density-only zoning, and at most (based on estimates from other Florida metros) one small city might bar apartments entirely. Two thirds of the cities have residential zoning that allows development over 15 dwellings per acre, as does one of the three counties. These tend to be larger jurisdictions, accounting together for 85 percent of the residents and 52 percent of the land area.

All the cities and counties have an APFO. Three quarters of the cities and two of the counties have impact fees as well. Two of the three counties have a containment mechanism, as do two or three (15 percent) of the small cities. About 90 percent of the cities and all the counties offer density bonuses for affordable housing. In short, growth management is pervasive, focusing intensely on the adequacy of public services but less so on explicit urban containment policy.



Kansas City, MO-KS MSA

Regulatory Order/Family: Traditional/Middle America

Summary

Kansas City is a metropolitan area with two large cities and a half-dozen large suburbs at its core, all of which accommodate dense development and most of which use infrastructure-related growth management measures. However, it also has a large number of small exclusionary enclaves. Moreover, the nature of growth regulation differs between Kansas and Missouri, with stronger planning and growth management in Kansas than in Missouri, where jurisdictions run the gamut from exclusionary to accommodating.

Together, the maps of zoning and growth management in metropolitan Kansas City suggest that the region has a moderate form of urban containment. The cities at the center allow dense development. They are surrounded by counties that have either a containment program of some kind (two Missouri counties) or very low density zoning (another Missouri county and two Kansas counties). Two counties in the northwest corner of the region—Leavenworth, KS, and Platte, MO—lack these containment measures, but Leavenworth imposes impact fees and allows densities to attain over 30 dwellings per acre.

Governance Framework and Growth Trends

The Kansas City MSA has 11 counties and 142 incorporated cities and villages. Four of the counties and 33 of the cities are on the Kansas side of the border, where 700,000 residents live; another million residents live on the Missouri side in 109 cities and villages and seven counties. About 90 percent of the residents in each state live in cities and villages, but the incorporated units on the Missouri side have less than half the population of those in Kansas on average (8,800 vs. nearly 20,000) and are half as large (6.7 square miles vs. 13.4 square miles). The Kansas City metropolitan area had low density in 1982—about 3.5 persons per urbanized acre—and lost density between then and 1997 as it urbanized nearly 125,000 acres of land, a 30 percent increase while its population grew only 16 percent. Density dropped much faster on the Missouri side (14 percent) than on the Kansas side (3 percent) of the metro area, so that now the Kansas side has a higher built density than the Missouri side. Kansas City, MO, grew modestly in the 1990s, while Kansas City, KS declined by a modest 2,000 residents. Only about 5 percent of the land in the metropolitan area is owned by the public sector, split roughly evenly among federal, state, and municipal governments.

Regulatory Environment

The jurisdictions in metropolitan Kansas City are quite accommodating to growth, especially those in Kansas. In this regard, it can be argued that Kansas City is where the West begins and the Midwest ends. We estimate that all 33 cities on the Kansas side have zoning, but exclusionary zoning is practically unknown and none impose a maximum density below eight dwellings per acre. About three quarters of the cities allow densities to exceed 15 dwellings per acre, and none would completely disallow our hypothetical apartment development. Only about one quarter of cities on the



Missouri side allow densities to exceed 15 dwellings per acre. These cities are home to nearly 700,000 residents and occupy over 475 square miles of land. But about half of the total number of cities and villages on the Missouri side (with close to 100,000 residents) prohibit residential density to exceed 8 dwellings per acre. Over 40 percent of cities would bar the hypothetical apartment development entirely but most of these are small jurisdictions accounting for only about 60,000 residents and about 71 square miles of land area. About 12 percent of small incorporated Missouri municipalities lack zoning entirely. A larger share, 40 percent, lack comprehensive plans.

All four Kansas counties have zoning: three of them restrict densities to fewer than four units per acre. Two of those three would allow our hypothetical apartment development subject to a use permit. None of the Kansas counties reported having an urban containment program of any kind or an adequate public facilities ordinance and only one imposed impact fees. By contrast, on the Missouri side two of the counties had urban containment of some kind, two had adequate public facilities ordinances, and one had impact fees. At least six of the seven counties have zoning, but the zoning tends not to be exclusionary, with none of the counties barring the hypothetical apartment development and only one maintaining a zoning ordinance capping density below eight dwellings per acre.

Comprehensive planning also differs across the state line. Whereas all the cities in Kansas have comprehensive plans, only 60 percent of the Missouri cities do (many of the smaller cities and villages lack plans.) Our estimates suggest that all 11 of the counties in the metro area have comprehensive plans.

To the extent that local governments manage growth in the Kansas City metro area, they do so with measures to match it with infrastructure impacts. About 35 percent of cities use impact fees and account for nearly 1.2 million residents and 388 square miles. Two populous counties also use impact fees: Leavenworth in Kansas and Clay in Missouri. An estimated 25 cities with over 800,000 residents have adequate public facilities ordinances, as does Clay County; none of the other counties reports having an APFO. Most of the municipalities with APFOs have them in addition or complement to impact fees rather than as an alternative. Among cities, both fees and APFOs are more common on the Kansas side of the border, perhaps a function of the larger populations and the strength of planning among Kansas municipalities. Two Missouri counties have a containment program. Finally, only about 15 cities on either side of the border appear to offer any kind of regulatory incentive in exchange for a guarantee of affordable housing, but none offers a density bonus or imposes inclusionary zoning.



Las Vegas, NV-AZ MSA

Regulatory Order/Family: Reform/Containment (Nevada portion)
Reform/Containment-Lite (Arizona portion)

Summary

Among the 50 largest metropolitan areas in the U.S., Las Vegas is the fastest growing, and also the fastest densifying. Its rank jumped from 41st to 10th densest between 1982 and 1997. With 90 percent of the land in public ownership, developers have economized on privately held land to accommodate a near-tripling of population between 1980 and 2000. They have been able to do so in part because of permissive municipal and county rules on high-density development. Additionally, the counties have generally favored urban containment even beyond that imposed by federal land ownership. "Pay as you grow" mechanisms, especially impact fees, have also encouraged more economical use of existing public facilities. A few small cities, straining under fast growth, have imposed permit caps, but these municipalities account for only about 2 percent of the metro area's population.

Governance Framework and Growth Trends

With an 83 percent increase in population during the 1990s (to 1.4 million residents), the Las Vegas MSA is the fastest-growing among the 50 largest. This growth has occurred mainly in the region's three large cities (the city of Las Vegas, with 480,000 residents; and Henderson and North Las Vegas, each of which has between 100,000 and 200,000 residents) and the unincorporated portions of two large counties (Clark, which surrounds Las Vegas and has 580,000 residents in unincorporated areas, and Mohave County, Arizona, with 55,000 residents in unincorporated areas). Apart from these large jurisdictions, there are 4 jurisdictions with 10,000 to 50,000 residents (4 cities and the unincorporated portion of Nye County) and 3 smaller cities.

Metropolitan Las Vegas urbanized only about 85,000 acres (50 percent increase) between 1982 and 1997 while adding over 750,000 residents (130 percent increase). This spiked the region's density ranking from 41st to 10th among the 50 largest metro areas, from 3.2 to 5.0 persons per urban acre. Topography, hyper-growth, extensive reliance on centralized infrastructure, and public land ownership have contributed to the MSA's rapid densification. It has several significant mountain ranges and relies on public sewer and water to accommodate most growth. Perhaps most importantly, less than 10 percent of the land was privately owned in 1992, with 86 percent in federal hands. Some of the federal land under the control of the Bureau of Land Management has been sold for development, but such sales are much more complex than a private transfer.

Regulatory Environment

All the jurisdictions in the Las Vegas metro area use zoning. None of them has low-density-only zoning and all would accommodate our hypothetical apartment development in at least some areas. Nine out of every ten residents lives in a municipality with a residential zone allowing at least 15 dwellings per acre. Strong federal land ownership makes it difficult to estimate the land area



coverage in various density categories, but three quarters of the incorporated land is in cities allowing at least 15 dwellings per acre, and all the counties allow development at such densities where land is privately owned. Hence federal land ownership appears to be the main constraint on density at the jurisdictional scale, aside from the availability of infrastructure.

Planning is also ubiquitous in metropolitan Las Vegas and growth management is widespread. Two of the three counties claim an urban containment program of some kind, two use APFOs, and one has impact fees. Just under half the cities use impact fees; only one or two have an APFO. A third of cities have a containment program of some kind, and a third have permit caps. None of the counties are estimated to have imposed moratoria. We estimate that only 19 percent of the metropolitan population lives in a municipality with an incentive-based affordable housing program.



Los Angeles-Riverside-Orange County, CA CMSA

Regulatory Order/Family: Reform/Growth Management

Summary

The Los Angeles CMSA has added by far the largest number of residents of any U.S. metropolitan area in the past 25 years: over 5 million people. These residents are coming to the most densely populated major metro area in the United States, one that is hemmed in by federal land and topography and in which a large number of populous jurisdictions regulate the development process. Very few jurisdictions ban high-density housing entirely, though they may be reluctant to zone land for it. Because California limits local property taxes, the vast majority of jurisdictions demand that development pay its own way through impact fees and charges. Many cities also use APFOs. The least populous county, Ventura, differs from the rest of the CMSA in its jurisdictions' extensive use of urban containment and building permit caps. Elsewhere in the CMSA, fewer than a third of the cities and none of the counties claims a formal urban containment program, and around 10 percent of the cities and none of the counties use permit caps.

Governance Framework and Growth Trends

The Los Angeles-Riverside-Orange County CMSA is the nation's second most populous, with 16.4 million people in 2000, up 13 percent (1.8 million residents) in the 1990s and 42 percent (4.9 million residents) between 1980 and 2000. To put this 20 year growth into perspective, it exceeds the total population in 2000 of all but nine U.S. metropolitan areas, including Houston, Atlanta, and Miami; it also exceeds the 2000 population of 29 states. And if the new residents between 1990 and 2000 alone lived in a metro area of their own, it would be the nation's 24th most populous. Within the CMSA, there are 4 PMSAs: Los Angeles, with 9.5 million residents; Riverside-San Bernardino, with 3.2 million; Orange, with 2.4 million; and Ventura, with 750,000. Los Angeles and Riverside-San Bernardino both grew by about 660,000 residents in the 1990s, meaning that Los Angeles County grew by 7 percent and the Riverside-San Bernardino PMSA about 26 percent. Orange County grew by 440,000 (18 percent), and Ventura by 85,000 (13 percent).

Los Angeles is a region dominated by extensive and populous jurisdictions. In all, it has 179 cities and 5 counties. The Los Angeles CMSA had 77 cities in 2000 with at least 50,000 residents; Los Angeles itself registered 3.7 million residents that year. Four other cities—Long Beach, Anaheim, Santa Ana, and Riverside—had between 250,000 and 500,000 residents, and 29 cities had between 100,000 and 200,000 residents. Another 43 cities had between 50,000 and 100,000 residents, 84 between 10,000 and 50,000, and just 18 under 10,000. Counties control land use in their unincorporated areas. Los Angeles County has just under 1 million residents living in unincorporated areas, Riverside and San Bernardino between 250,000 and 500,000 each, Orange about 170,000, and Ventura about 93,000.

The Los Angeles metropolitan area owes its reputation for growth more to the scale of land development than for its low density. Just over 400,000 acres of land were developed in the CMSA between 1982 and 1997, a seemingly massive number. But for every one of these new acres of



urban land, the region added 9.1 new residents, the most efficient consumption of land in the U.S. Only three other metro areas (Las Vegas, Phoenix, and Honolulu) urbanized land at over 8 new residents per new urban acre, and only five at between 7 and 8. The Los Angeles CMSA urbanized only two thirds of the land that Atlanta did and less than 80 percent of what the New York CMSA did. Had Los Angeles urbanized land at the rate that the Boston metro area did between 1982 and 1997, it would have urbanized 3 million new acres, nearly twice as much as had been urbanized in the metro area's entire history up to 1982.

Geography and federal land ownership clearly contribute to metropolitan Los Angeles' recent development density. The region is crossed by several steep mountain ranges running both east-west and north-south and bounded by the Pacific Ocean on the west. Furthermore, two thirds of the land is in public ownership, most of it federal land under the control of the Bureau of Land Management, National Forest Service, Department of Defense, and National Park Service. And a substantial amount of the undeveloped private land contains endangered species that require undisturbed habitat and brings developers to the bargaining table with federal agencies and local governments.¹

In addition, a very large share of the Los Angeles area's recent growth has been from international migration and from the children of immigrants. Both culture and resources lead immigrants to accept and live in high-density housing in the U.S. more readily than do native-born residents.

Regulatory Environment

We received responses to our survey from 91 cities and all five counties. The survey accounts for only 72 percent of the CMSA's population, but it takes in over half the cities and is therefore an excellent basis for estimates of non-respondents' land use framework.

The Los Angeles metro area is entirely zoned. Low-density-only zoning is extremely rare, practiced by perhaps 3 percent of jurisdictions, all of them very small cities accounting for a vanishing fraction of the regional population and land area. About 5 percent of the jurisdictions with 3 percent of the land area would bar our hypothetical apartment development. Consistent with the region's prevalent high density, nearly 90 percent of the jurisdictions have a residential density category that would allow development at over 15 dwellings per acre, and these account for 97 percent of the population. The cities and counties differ very little in the maximum density permitted by their zoning, although the counties tend to use low-density zoning much more broadly than cities do.

As required by California law, all the jurisdictions have general (comprehensive) plans save for a small handful that are in the process of completing them. Growth management measures are also widespread in the CMSA, especially those connected with infrastructure provision. Because Proposition 13 forced local governments to stop relying on property taxes for most infrastructure investment, over 85 percent of the cities and all the counties use development impact fees of some

¹ Jennifer Wolch and others, "Los Angeles; Region by Design," in *Sunbelt/Frostbelt: Public Policies and Market Forces in Metropolitan Development*, J.R. Pack, ed. (Washington: Brookings, 2005).



kind.² In addition, an estimated 40 percent of the cities use APFOs, but we did not receive responses from enough counties on the APFO question to generalize about their APFO adoption. Consistent with California laws requiring local governments to offer affordable-housing density bonuses, most of the cities and counties also report that they provide for a density bonus, and many report a series of other incentives and investment programs to encourage affordable housing.

Other land use measures vary by jurisdiction type and geography. Ventura County is strongly growth controlled; the county and most of the cities use growth boundaries, and 42 percent of the cities have permit caps. Over 90 percent of the residents live in contained jurisdictions, and 55 percent live in jurisdictions with permit caps. Outside Ventura County, however, the metro area has only modest levels of deliberate urban containment, with none of the counties and about 30 percent of the cities claiming a deliberate containment measure. Cities outside Ventura County also rarely use permit caps, with estimates ranging from 7 percent of cities in Los Angeles-Long Beach to 13 percent in Orange County. None of the counties has a permit cap.

² San Bernardino County reported not having impact fees, yet a review of its development code reveals that it does use impact fees for drainage, transportation, and recreational facilities that are calculated on the basis of area plans rather than countywide. See: County of San Bernardino, "Development Code: Division 11, Public Facilities Planning," (San Bernardino, 2006). Available at <http://www.co.san-bernardino.ca.us/landuseservices/devcode.htm>.



Louisville, KY-IN MSA

Regulatory Order/Family: Traditional/Middle America

Summary

In the Louisville metropolitan area, the consolidated center city (which merged with Jefferson County in 2002) accounts for nearly 70 percent of the residents and dominates land use discussions. Before the consolidation, the region sprawled rapidly with developed land increasing by over 60 percent on the Kentucky side of the Ohio River. Most of the development occurred in smaller cities and unincorporated portions the former Jefferson County. This will be an interesting metro area to watch, with vastly expanded capacity at the region's core to manage growth in the expansive consolidated city of Louisville.¹ It is conceivable that this expanded capacity will allow Louisville to soak up more of the region's growth in the next decade, and that planning will help mitigate the declining density. But the counties in both Indiana and Kentucky are still quite accommodating to moderate- to low-density residential development in unincorporated areas while techniques such as impact fees and urban containment are nearly absent.

Governance Framework and Growth Trends

The Louisville MSA had just over a million residents in 2000, up about 75,000 (8 percent) from 1990. It straddles the Ohio River, taking in six counties and 37 cities in Kentucky and Indiana. The number of jurisdictions dropped dramatically after the merger in 2002 of all the cities, including Louisville, in Jefferson County into one consolidated government with nearly 700,000 residents. No other jurisdiction exceeds a population of 40,000.

The developed land area of metro Louisville grew by 50 percent, from 21,250 acres in 1982 to 31,770 in 1997 while the population grew by an estimated 50,000, or 5 percent. As a consequence, density dropped from about 4.5 to 3.2 persons per urbanized acre. The Indiana side has lower densities at about 2.2 persons per acre in 1997, compared to 3.6 for the Kentucky side. About 9 percent of the land was publicly owned in 1992, with the state and federal governments controlling most of that land.

Regulatory Environment

The Kentucky side of the metropolitan area is dominated by the city of Louisville, which accounts for nearly 700,000 of the 800,000 Kentucky residents. None of the other 15 cities have even 10,000 residents, and 10 have fewer than 2,000.

We estimate based on results from the Cincinnati metropolitan area that all the jurisdictions in the Kentucky portion have comprehensive plans. The city of Louisville has a wide range of permitted residential zoning classifications. Based on results from the Cincinnati metropolitan area, we

¹ For more on the consolidation, see: "Beyond Merger: A Competitive Vision for the Regional City of Louisville," (Washington: Brookings, 2002). Available at <http://www.brookings.edu/es/urban/issues/abstract.htm>.



estimate that one or two of the smallest Kentucky cities in the region (which were not surveyed) probably did not have zoning. If the results from the Cincinnati metro area are a reasonable indication of zoning in the other 15 cities, only one or two would be likely to exclude our hypothetical apartment development entirely, and between seven and 10 would have a zone allowing at least 15 dwellings per acre. The two Kentucky counties (Oldham, to the north, and Bullitt, to the south), have zoning, according to our survey and web searches; Oldham County is more permissive, with zones that would hypothetically allow between 15 and 20 dwellings per acre when sewers are available.²

On the Indiana side of the metropolitan area, the picture is somewhat different. Based on state statutes and results from other Indiana metro areas, we estimate that all the cities and counties have plans and zoning. We would not estimate that any of the Indiana cities would exclude our hypothetical apartment development. The two Indiana counties that responded to our survey both allow fewer than 8 dwellings per acre, with lower permitted density in Floyd County, which is closer to downtown Louisville. We did not receive a response from Clark County, Indiana, but news accounts suggest that it is feeling growth pressure from a very simple zoning ordinance allowing minimum lot sizes of 9,600 square foot lots anywhere where sewers exist and of one acre elsewhere.³

Other growth-related land use tools are practically absent from the Louisville metro area. Only the city of New Albany, Indiana, just north of Louisville, indicated that it had any measures: it uses impact fees and has a containment program. Almost one-third of the metropolitan population lives in jurisdictions with an incentive based affordable housing program.

² Oldham did not respond to the survey, this information is from the county's on-line zoning ordinance. "Oldham County Comprehensive Zoning Ordinance," (LaGrange, KY, 2005). Available at <http://199.72.81.162/property/public-doc-pdfs/Zoning%20Regulations.pdf>.

³ Alex Davis, "Proposed Changes to Clark Zoning Codes Now in Limbo," *Louisville Courier-Journal*, on-line edition, December 14, 2004. Available at <http://www.courier-journal.com/localnews/2004/12/14in/B1-clark1214-7720.html>.



Memphis, TN-AR-MS MSA

Regulatory Order/Family: Reform/Containment

Summary

Based on limited responses to the survey, it appears that metropolitan Memphis has the makings of a new growth management system. There is little exclusionary zoning in the region; to the contrary, most of the cities and counties have zoning ordinances that are accommodating to higher-density development. In addition, a series of mechanisms in the Tennessee portion of the metropolitan area are setting the region up to match growth more closely with infrastructure capacity. The Tennessee cities have urban growth boundaries (UGBs) to help them plan more orderly annexation, and many of the cities also impose impact fees. But comprehensive planning is not universal. This system, especially the UGBs, was adopted after 1997, the last year for which sprawl measurements are available. It therefore remains to be seen whether incipient growth management can slow the sprawl that caused Memphis to slide from the 27th densest to the 40th among the 50 largest metropolitan areas between 1982 and 1997.

Governance Framework and Growth Trends

The Memphis MSA had about 1.1 million residents in 2000, up 13 percent (130,000 residents) from 1990. It takes in 43 cities and five counties in Tennessee, Arkansas, and Mississippi, with one county each in Arkansas and Mississippi and the other three in Tennessee. Only Memphis itself, with 650,000 residents in 2000, and Shelby County, with 118,000, had more than 50,000 residents in 2000. Three counties and 8 cities had between 10,000 and 50,000, and the remaining 34 cities and one county had fewer than 10,000 residents. Only 6 percent of the land in the MSA is owned by a public agency.

About 130,000 acres were urbanized in Memphis between 1982 and 1997, a 58 percent increase while the region's population grew by just 15 percent. As a consequence of this rapid development, density in the region dropped from a comparatively high 4.3 people per acre (27th most dense among the top 50 metros) to just 3.1 people per acre (40th most dense).

Regulatory Environment

We received responses to our survey from only six cities (14 percent of all municipalities), not including Memphis, and three counties (60 percent), which did not include Shelby County. Four of the cities were in Tennessee, with one in each of the other two states; all three counties were in Tennessee. Together, these jurisdictions account for 29 percent of the population and 51 percent of the land area. Our estimates, which are based on results from both Memphis and Nashville, must therefore be taken with some caution since they lack information from the region's two largest units of government. Furthermore, because we had very limited responses from small jurisdictions, we did not estimate the land use regulations for 32 municipalities and 2 counties, meaning that our metropolitan tallies do not account for about over 1100 square miles of land with nearly 100,000 residents in 2000.



The results suggest that Memphis is completely zoned, but that exclusionary zoning is rare. Perhaps 10 percent (four or five) of the municipalities and one or two of the counties have low-density-only zoning. The same set of counties, but only two or three cities, would not permit construction of our hypothetical apartment complex. The cities do not generally support high density either, however. Perhaps 10 percent have a residential density ceiling above 15 dwellings per acre. The balance of the counties (three or four) allow at least 15 dwellings per acre. Because larger cities tend to be more accommodating, about three quarters of residents live in jurisdictions in which residential density may exceed 15 dwellings per acre, and because counties also allow higher densities, two thirds of the land area is also in jurisdictions with higher-density zoning.

Tennessee law requires the development of urban growth boundaries as components of city annexation plans. As a consequence, all the Tennessee cities claimed to have a UGB, but only one of the three county respondents reported one. In addition, a majority (60 percent) of the Tennessee cities and one or two of the four counties are estimated to have impact fees, and 20 percent of cities have APFOs. An estimated 83 percent of the municipalities in the metro area have comprehensive plans; not all the Tennessee cities have adopted comprehensive plans, even though they all have UGBs of some kind. One or two cities in the region and one of the counties have an incentive based affordable housing program.



Miami-Fort Lauderdale, FL CMSA

Regulatory Order/Family: *Reform/Growth Management*

Summary

Miami is a prototypical growth management region in a growth management state. It has strong urban containment imposed by a combination of public land ownership, coastlines, and public policies. Its jurisdictions use a wide array of measures to assure infrastructure capacity, while generally accommodating high-density development. They also widely employ incentive measures to deliver affordable housing.

Governance Framework and Growth Trends

The Miami-Fort Lauderdale CMSA grew by 21 percent in the 1990s from 3.2 million to 3.9 million residents. The CMSA has 59 cities, 19 of which had over 50,000 residents in 2000 and 6 of which had over 100,000, with Miami (360,000 residents) and Hialeah (226,000) standing out as the largest municipalities. The unincorporated portion of Miami-Dade County, with over 1 million residents, is the most populous part of the metro area, and Fort Lauderdale's Broward County includes over 100,000 residents in its unincorporated areas.

Hemmed in on the east by the Atlantic Ocean and on the west by the Everglades, metro Miami is one of the least sprawling regions in the United States. It was second only to New York in 1982, with 7.9 people per urbanized acre, and second only to Los Angeles in 1997, with 7.7 people per urbanized acre. Only 40 percent of the land area is privately owned; 30 percent is owned by state government, 21 percent by federal agencies, and 7 percent is tribal trust land. Large shares of foreign-born and elderly residents also contribute to the region's relatively compact development pattern, since both of these populations tend to live at higher densities than native-born people and younger households.

Regulatory Environment

We received responses from 27 cities (44 percent) and Miami-Dade County, but not from Broward County. These responses account for 80 percent of the CMSA's population and 69 percent of its land area.

Based on these results, it appears that metropolitan Miami is a fully zoned and planned region, at least in areas not under federal or tribal control. It is also a region that, consistent with its development patterns, accommodates density. Only a few small cities practice low-density-only zoning, and over 75 percent—with 85 percent of the land area—allow development to exceed densities of 15 dwellings per acre. Only around 10 percent of the jurisdictions—all of them small municipalities—would bar our prototype apartment development. Two thirds would allow the development in at least some zones as of right.

Like all of Florida, Metro Miami operates under state growth management rules that require comprehensive planning and mandate concurrency between development and infrastructure.



Consequently, over 90 percent of the jurisdictions have an APFO and over 80 percent have impact fees of some kind. In addition, Miami-Dade County has a formal urban containment measure, as do an estimated 17 percent of the municipalities. Permit caps are not used in the CMSA, but about 5 percent of jurisdictions have imposed moratoria. Finally, about 35 percent of the jurisdictions with over 75 percent of the residents report using an incentive based affordable housing program of some kind.



Milwaukee-Racine, WI CMSA

Regulatory Order/Family: Traditional/Middle America

Summary

Metropolitan Milwaukee has a varying range of approaches to growth and development. In incorporated areas, development regulations are mostly fairly permissive regarding density, especially in the central core of Milwaukee County. Impact fees are common, especially in middle-sized suburban municipalities. A few jurisdictions—mostly smaller villages—control growth more strictly through a combination of low-density zoning, containment, and building permit caps. The metropolitan area has varying approaches to growth, ranging from a more urban and permissive environment in Racine County, to “pay as you grow” in Waukesha County, to controlled/contained development in Washington County, and rural resource protection in Ozaukee County to the north.

Governance Framework and Growth Trends

The Milwaukee-Racine CMSA had about 1.7 million residents in 2000, about 1.5 million of whom lived in 68 cities and villages for an average population per municipality of just over 21,000 residents. Nearly 600,000 residents lived in the city of Milwaukee, with Racine accounting for another 80,000. Only two other municipalities have over 50,000 residents. Another 225,000 residents, 13 percent of the total, lived in unincorporated areas, where 40 townships and 4 counties share authority for land use decision making. (Milwaukee County has no unincorporated areas.) Waukesha and Racine Counties, west and south of Milwaukee respectively, both have about 80,000 residents living in unincorporated areas.

There were about 85,000 acres urbanized in the Milwaukee metro area between 1982 and 1997, a 24 percent increase when the population grew just 5.5 percent. Density declined, consequently, from 4.37 to 3.73 persons per urban acre, almost 15 percent, and Milwaukee dropped from 23rd to 27th densest metro area in the U.S. The city of Milwaukee lost over 30,000 residents in the 1990s and is now about 150,000 residents below its 1960 peak of 740,000. About 10 percent of the land in the CMSA is publicly owned, with half the land in state ownership and the rest divided equally between county and municipal ownership.

Regulatory Environment

All the cities and villages in metropolitan Milwaukee have zoning. About 28 percent impose residential density limits below 8 dwellings per acre and 21 percent would bar our hypothetical apartment development. Jurisdictions with low-density-only zoning account for about 16 percent of the municipal population, and those that would disallow the apartment development contain only 10 percent of the municipal population (about 23,000 residents). A larger share of municipalities and a much larger share of the population—35 percent and 70 percent, respectively—live in jurisdictions allowing density to exceed 15 dwellings per acre. Most of these jurisdictions are concentrated around Milwaukee itself.



Counties and townships tend to have more restrictive zoning than cities, with the exception of Racine where densities can reach as 8 to 14 dwellings per acre. Ozaukee County has zoning only for shorelines—which all counties in the state are required to regulate—applicable 300 feet from a navigable stream and 1,000 feet from a lake.¹ All its townships impose additional zoning requirements that are stricter than the county's.

Planning was not mandatory in Wisconsin when our survey was completed. As a consequence, only about 83 percent of the municipalities had adopted comprehensive plans in 2003. The city of Milwaukee is preparing its comprehensive plan which is expected to be completed by 2010. In unincorporated areas, only two of the four counties had a plan, but we would estimate that about 70 percent of towns (township equivalents) had plans. Wisconsin jurisdictions are currently in the process of updating or creating new comprehensive plans, owing to the state's recent adoption of smart growth legislation.²

Other tools to manage growth are not uncommon in metropolitan Milwaukee but they appear like a patchwork with various combinations and a scattered pattern of adoption. Impact fees are most common, in place in about 55 percent of municipalities, containing 38 percent of the population. About 5 percent of municipalities use either a permit cap or an adequate public facilities ordinance. Washington County imposes both impact fees and a permit cap that limits new residential construction to 50 dwellings per year in unincorporated areas; among the other counties. Waukesha County has an APFO that applies to stormwater in unincorporated areas, incorporated municipalities where annexations occurred after 1982, all municipalities where a county trunk highway exists, all communities where onsite waste disposal is required and no sewer is available, and all municipalities for parks and greenways. Six municipalities report having a formal containment program, from which we infer that about 20 percent of all municipalities, accounting for 13 percent of the population, use containment.

¹ See: Barbara Frommell and Rebecca Vander Kelen, "Planning to Protect Lake Michigan: An Evaluation of Land Use Efforts (Chicago: Lake Michigan Federation, 2003).

² More information on comprehensive planning in the Milwaukee metropolitan area is available from the Southeast Wisconsin Regional Planning Commission, on the web at <http://www.sewrpc.org/smartgrowth>.



Minneapolis-St. Paul, MN-WI MSA

Regulatory Order/Family: Traditional/Middle America (Minnesota portion)
Traditional/Extreme Exclusion (Wisconsin portion).

Summary

The Twin Cities region is renowned for regional governance and growth management. City and county governments in seven of the 13 counties conduct their planning and zoning within the context of the governor-appointed Metropolitan Council's plan and policies for growth, development, and infrastructure provision. The best-known of these policies is the provision for orderly extension of sewer and water infrastructure within a 20-year metropolitan urban service area (MUSA), the outermost boundary of which is known as the MUSA line. A fairly large number of medium-sized cities inside the MUSA line accommodate high-density development. A dozen counties both under and beyond the Metropolitan Council's jurisdiction maintain lower densities and generally plan for the protection of rural resources. Regional containment has had limited success in the past because local policies failed to promote high enough density inside the MUSA line. Also, some counties and townships failed to restrict small-lot rural residential development on private infrastructure outside it. Regional policies also result in the adoption of incentive based affordable housing programs among a greater number of municipalities than elsewhere in the Midwest.

Governance Framework and Growth Trends

The 3 million residents of the Minneapolis-St. Paul MSA live in 195 municipalities and 13 counties, with 175 cities and villages and 11 counties in Minnesota and the balance of jurisdictions, with about 100,000 residents, in Wisconsin's Pierce and St. Croix Counties. Cities and villages account for 93 percent of the residents in the Minnesota portion but only 51 percent in the Wisconsin portion. Minnesota's incorporated jurisdictions are larger, averaging about 15,000 residents as compared with 2,000 in Wisconsin. Minneapolis and St. Paul together account for about 670,000 residents, but 9 other cities each have between 50,000 and 90,000 residents. In both states, some of the counties defer to townships for land use decision making in unincorporated areas, but this appears to be the exception rather than the rule. In all, there are 99 townships on the Minnesota side of the St. Croix River and 38 in Wisconsin.

Minneapolis-St. Paul is unusual for having a regional governing body, which covers seven of the Minnesota counties in the core metropolitan area. In 1967, the State Legislature created the Metropolitan Council to "coordinate the planning and development of the metropolitan area." The Council provides this coordination in two main formats. First, based on laws passed in 1974 and 1994, the Council plans and coordinates infrastructure and affordable housing in the metropolitan area. Second, under the terms of a 1976 statute, the Council reviews state mandated comprehensive plans of municipalities and counties for consistency. Only since 1995 have local



comprehensive plans trumped the local zoning ordinance, meaning that only in the past 10 years has local zoning been subordinate to regional review.¹

The Metropolitan Council has had very limited effect in recent years at either stopping sprawl or encouraging affordable housing in the Twin Cities metropolitan area.² But the 1976 planning legislation clearly has an important impact. By requiring county and municipal planning, it sets the stage for local growth management efforts that would distinguish the Twin Cities from other Midwest metropolitan areas even without regional coordination.

One of the key tools of the Metropolitan Council in setting regional policy is tying infrastructure capacity to land use planning. It does this through the Metropolitan Urban Services Area (MUSA) line, a boundary for the orderly extension of public sewer and water that is supposed to accommodate 20 years' development at moderate density. The MUSA line is amended frequently to allow growth and the Metropolitan Council has been criticized for past tendencies to assume that almost all new development would occur on greenfields as opposed to through redevelopment and infill. But a recent regional planning document, *Blueprint 2030*, substantially increases the goals for accommodating new growth along transit corridors in developed areas.³

Despite its metropolitan planning institutions, Minneapolis-St. Paul sprawled dramatically in the 1980s and 1990s, with a 54 percent increase in its urbanized land base between 1982 and 1997. Population grew only 25 percent during that period, meaning that density declined 19 percent, from 4.3 to 3.5 people per urban acre. Sprawl occurred despite population growth of about 15,000 residents each in Minneapolis and St. Paul. About 9 percent of the metro area's land is publicly owned, the largest share of which (4.3 percent of the total) is in state ownership.

Regulatory Environment

Practically the entire land area of Minneapolis-St. Paul is zoned by a municipality, county, or township. All the land in the Minnesota portion of the metropolitan area is zoned, and only 2 townships in the eastern portion of St. Croix County, Wisconsin are not. To the extent that other townships also have zoning, their zoning tends to be stricter—with lower permitted density—than that established by the county.

Municipalities and counties differ substantially in their permitted density. About 30 percent of the municipalities have maximum densities under 8 dwellings per acre. About 28 percent of the cities in the Minnesota portion of the metro area have low-density only zoning; they account for almost a fifth of the municipal land area but only 7 percent of the population. Most of these municipalities are at the edge of the 2020 MUSA line or beyond. Our hypothetical apartment development would not be

¹ For more information on the Met Council, see: Ted Mondale and William Fulton, "Managing Metropolitan Growth: Reflections on the Twin Cities Experience" (Washington: Brookings, 2003). Available at http://www.brookings.edu/es/urban/publications/200309_fulton.htm.

² Edward Goetz, Karen Chapple, and Barbara Lukerman, "Enabling Exclusion: The Retreat from Regional Fair Share Housing in the Implementation of the Minnesota Land Use Planning Act," *Journal of Planning Education and Research* (22) (2003): 213–225.

³ Metropolitan Council, "2030 Regional Development Framework" (Minneapolis, 2004). Available at <http://www.metrocouncil.org/planning/framework/documents.htm>.



permitted in about 13 percent of the Minnesota municipalities in any zone and 30 percent of those in Wisconsin. County governments tend to be more restrictive. In unincorporated portions of all the Minnesota counties and St. Croix County, development is restricted to fewer than four dwellings per acre. Some counties have much more restrictive zoning districts requiring 40-acre minimum lot sizes in many areas. About two thirds of the counties would not permit our hypothetical apartment development under any circumstances. As a consequence of the restrictions on high-density development in unincorporated areas, about 52 percent of the land area on the Minnesota side of the metro area and an estimated 38 percent of that on the Wisconsin side lies in jurisdictions that would not allow our hypothetical apartment development.

Jurisdictions inside the MUSA line generally accommodate denser development than those outside. In fact, 85 percent of residents in the municipalities on the Minnesota side (2.3 million residents in all) live in cities that allow development to exceed densities of 15 dwellings per acre. This accounts for 65 percent of the municipal land area; in all, about 18 percent of the metropolitan land area on the Minnesota side is in jurisdictions that would allow at least 15 dwellings per acre. The permissiveness toward apartments and higher density development may relate in part to the Metropolitan Council's fair share housing system, which has been on the books for three decades but has recently been poorly enforced.⁴ As development expands toward and beyond the current MUSA line more townships are likely to incorporate as cities.

Comprehensive plans are mandatory only inside the seven counties under the jurisdiction of the Metropolitan Council (for county and city governments alike), but we estimate that all the other counties have comprehensive plans as well. Our survey suggests that the smaller cities outside the jurisdiction of the Metropolitan Council often do not adopt comprehensive plans, however. As a consequence, we estimate that only 87 percent of the cities in the Minnesota portion of the metro area and 80 percent of those in Wisconsin have plans. But these 25 to 30 municipalities are small, with a total of about 70,000 residents and 125 square miles of a 3 million person, 6,000-square-mile metropolitan area.

Urban containment dominates land use in Minneapolis-St. Paul. The MUSA line shapes both urban development and local policy, with about half of municipalities and all the counties in the Minnesota portion of the metropolitan areas estimated to have a containment program of some kind. (Two of the four Minnesota counties outside the jurisdiction of the Metropolitan Council did not respond to the survey, but the two respondents did report a containment program of some sort (St. Croix County, Wisconsin, also reports a containment program.)) Impact fees are quite common among the cities; an estimated 65 percent of cities in both states with about the same share of the municipal population has impact fees, and a third of the Minnesota cities have adequate public facilities ordinances. Four of the five jurisdictions that reported APFOs in our survey also had impact fees. Perhaps because development at urban densities tends to be restricted to cities and areas within the MUSA line, the counties tend not to have other growth management measures; only one—Wright County, which lies outside the Metropolitan Council's jurisdiction—reported having impact fees, and none reported an APFO.

⁴ Goetz, Chapple, and Lukerman (2003).



Minneapolis-St. Paul also differs from other Midwestern metro areas in that its local governments frequently adopt affordable housing programs. About a quarter of municipalities in the Minnesota portion of the metro area have at least one incentive based program; about 15 percent of cities have inclusionary zoning or density bonus programs. A quarter also have some dedicated source of funds for affordable housing. A small minority of the Wisconsin municipalities may also have incentive based programs. The counties, however, do not have incentive based housing programs.



Nashville, TN MSA

Regulatory Order/Family: Reform/Containment

Summary

Metropolitan Nashville, like Memphis, has the makings of a new growth management system. The jurisdictions in the region widely report urban growth boundaries (UGBs) that help them plan more orderly annexation, and most counties have regulations to recover some of the capital costs associated with new infrastructure development. But exclusionary zoning lingers in some cities and counties, and high-density zoning does not appear as generally acceptable as it appears to be in Memphis. Furthermore, only a minority of cities use fees or APFOs to recover infrastructure costs. Since Tennessee's UGB requirement was adopted recently, it will take time to learn the impacts of this combination of loose urban containment, inconsistent accommodation of high density, and weak recovery of infrastructure costs will mean for sprawl.

Governance Framework and Growth Trends

About 1.2 million residents lived in the Nashville MSA in 2000, up 25 percent (250,000 residents) from 1990. The region has 45 cities, 7 counties, and the consolidated city/county of Nashville-Davidson, which accounts for almost 550,000 residents. The region has three other jurisdictions with over 50,000 residents—one city, Murfreesboro, and the unincorporated portions of two counties (Rutherford and Wilson). Another five counties and 11 cities have between 10,000 and 50,000 residents, and the balance of jurisdictions (33 cities) have fewer than 10,000 residents. Together, municipalities account for 77 percent of the population.

Like the other Tennessee and North Carolina metro areas in the survey, Nashville urbanized land much more rapidly than its population grew in the 1980s and 1990s. While population grew by about 31 percent between 1982 and 1997, urbanized land grew by a remarkable 87 percent—over 210,000 acres. That figure is greater than the land consumed in the Tampa metropolitan area, for example, even though Tampa grew by twice as many people as Nashville during this period. Consequently, Nashville's metropolitan density slid from 3.5 persons to 2.5 persons per urbanized acre, moving it from 37th to 47th densest metro area. Over 95 percent of the region's land area is privately owned.

Regulatory Environment

We received responses from nine cities and five counties in Nashville, which together accounted for 80 percent of the population and just over 70 percent of the land area. Because we had very limited responses from small jurisdictions, we did not estimate the land use regulations for 33 jurisdictions under 10,000 residents, meaning that our metropolitan tallies do not account for about 220 square miles of land with around 85,000 residents in 2000.

Based on our results and estimates from both Memphis and Nashville, the Nashville metro area is entirely zoned. Exclusionary zoning is not uncommon, but neither does it prevail; about 12 percent of



cities, with 5 percent of the population and 7 percent of the land area, use low-density-only zoning that would preclude construction of our prototype apartment development. Counties are somewhat more likely to have low-density-only zoning, with an estimated 2 or 3 of the 7 counties restricting development to fewer than 8 dwellings per acre and perhaps four of the 7 barring construction of the prototype apartment development in unincorporated areas. In all, about half the metropolitan land area accounting for 17 percent of its population is in jurisdictions that would bar the hypothetical apartment complex. But the majority of the metro area's population (61 percent) lives in jurisdictions whose zoning permits densities to exceed 15 dwellings per acre, with half its cities and one of its counties being this accommodating.

Tennessee law requires the development of UGBs as components of city annexation plans. All seven of the cities with plans also claimed to have a UGB, as did all five county respondents. Two cities reported having neither plans nor UGBs. In addition, 36 percent of the cities and four or five of the counties are estimated to have impact fees. Only about 15 percent of the cities and one or two counties have an APFO. About 20 percent of the cities and counties have incentive based affordable housing programs.



New Haven-Bridgeport-Stamford-Waterbury-Danbury, CT NECMA

Regulatory Order/Family: Traditional/Middle America

Summary

In Connecticut, metropolitan New Haven contrasts in several interesting ways with metropolitan Hartford. It has a larger number of populous jurisdictions and a well established regional railroad system around which several jurisdictions have encouraged new high-density, mixed-use centers. Fewer than half of jurisdictions use exclusionary zoning; about 30 percent allow densities to exceed 15 dwellings per acre. There is little growth management in the region, but many jurisdictions require or encourage affordable housing. Perhaps as a consequence of this combination of structural factors and policies, the New Haven NECMA has sprawled less than metropolitan Hartford, and two of its four cities over 100,000 residents are growing or holding their populations.

Governance Framework and Growth Trends

The New Haven-Bridgeport-Stamford-Waterbury-Danbury NECMA technically overlaps in part with the New York City CMSA, but standing alone it is the 26th largest metropolitan area in the U.S. With 1.7 million residents in 2000, its population grew between 4 and 5 percent in both the 1980s and 1990s, up about 75,000 in the 1990s alone. It has 52 jurisdictions, 12 of them over 50,000 and four (Bridgeport, New Haven, Stamford, and Waterbury) over 100,000. Twenty-nine jurisdictions had between 10,000 and 50,000 residents in 2000, and 11 had under 10,000. This makes the metro area slightly less fragmented than the neighboring Hartford NECMA.

New Haven also sprawled less rapidly than Hartford, with a 13 percent increase in developed land between 1982 and 1997 accompanying population growth just under 7 percent. It climbed from 20th to 15th densest metro area during that period. New Haven-Bridgeport's density reflects, in part, the leading role of Stamford as a growing secondary central business district (with mixed housing, office, and retail development) in the New York metropolitan area as well as the importance of fixed rail as a foundation for high-density transit-oriented development. Stamford's population grew from 108,000 to 117,000 in the 1990s and continues to grow even now. Even severely distressed Bridgeport lost fewer residents than Hartford in the 1990s (a decline of less than two percent), but New Haven lost nearly 7,000 residents in the 1990s. About 10 percent of the land in the metro area is publicly owned, with the state and local governments each in charge of about half of the public land.

Regulatory Environment

We received responses to our survey from 7 incorporated municipalities and 17 towns. Together, these jurisdictions account for 63 percent of the metro area's population, and 53 percent of its land area.

Based on these responses, we estimate that 97 percent of the jurisdictions have comprehensive plans and 98 percent have zoning. Exclusionary zoning is markedly less pronounced in metro New Haven than in Hartford, with an estimated 40 percent of jurisdictions limiting densities to below 8



dwellings per acre and 45 percent prohibiting our hypothetical development (compared with about 63 percent in Hartford). Thirty percent of the jurisdictions allow development to exceed 15 dwellings per acre, and these jurisdictions account for 55 percent of the region's population.

While the New Haven metro area differs from Hartford in its accommodation of density, it resembles Hartford in its lack of growth management measures. Only 12 percent of jurisdictions use impact fees and 11 percent are estimated to use urban containment. New Haven's jurisdictions are more supportive of affordable housing than those in Hartford, with nearly 50 percent estimated to have an incentive program of some kind (40 percent use inclusionary zoning or density bonuses), and 17 percent have dedicated funds for affordable housing. Predictably, the jurisdictions that support affordable housing tend to be the more populous ones.



New Orleans, LA MSA

Regulatory Order/Family: Reform/Containment-Lite

Summary

Zoning is ubiquitous in the slow growing New Orleans metropolitan area, yet it is usually fairly accommodating to development and only rarely excludes higher-density housing. But comprehensive planning is not so popular in the Crescent City's region. Even so, its municipalities and especially its parishes have embraced assorted growth management and growth control tools. When considered in the context of a region that is growing very slowly but rapidly spreading out, this regulatory environment is cause for concern, because it does not guarantee efficient land use and may in fact exacerbate sprawl. It suggests that Louisiana has some opportunities to restructure and coordinate local planning to allow metro New Orleans to develop more compactly.¹

Governance Framework and Growth Trends

With about 1.3 million residents in 2000, the New Orleans MSA stands out as the slowest-growing Southern region in the survey.² Its 4.1 percent growth rate makes it the sixth-slowest growing metropolitan area among the top 50, analogous to Rochester or New Haven. The residents live in 17 municipalities and 7 parishes (county equivalents), with just 49 percent living in incorporated areas. Two of the cities and three of the counties have more than 50,000 residents, with 11 cities counting fewer than 10,000 residents.

About 54,000 acres were urbanized in metro New Orleans between 1982 and 1997, a growth of 25 percent when the region's population grew by less than 2 percent (the region lost nearly 20,000 residents in the 1980s). But its density in 1982 was the 8th highest in the top 50, at 6.1 persons per urbanized acre, so that by 1997 the MSA still was the 11th densest even though its density had dropped just below 5 persons per urbanized acre. About 80 percent of the region's land is privately owned, 13 percent state-owned, and 6 percent federally owned.

Regulatory Environment

We received responses from 4 municipalities (24 percent) and 5 parishes (71 percent), accounting for 91 percent of the metro area's population and 83 percent of its land area. Based on these responses, we estimate that all the jurisdictions in metro New Orleans use zoning. While we estimate that 17 percent of cities maintain low-density-only zoning, none would exclude our

¹ This survey and analysis was conducted prior to the devastating events that impacted the Gulf Coast in August and September 2005. As a recent Brookings report illustrates in more detail, even before Katrina the New Orleans metropolitan area was growing slowly and struggling with low incomes and poverty. Conditions in that region today are, obviously, very different. See: Mark Muro and Rebecca Sohmer, "New Orleans After the Storm: Lessons from the Past, a Plan for the Future" (Washington: Brookings, 2005). Available at http://www.brookings.edu/metro/pubs/20051012_NewOrleans.htm.

² The U.S. Census recently found that the population of metropolitan New Orleans fell to under 750,000 in the months immediately after Hurricanes Katrina and Rita. Rick Lyman, "Reports Reveal Hurricanes' Impact on Human Landscape,," *New York Times*, June 7, 2006; page A1.



hypothetical apartment development. The parishes, by contrast, have more exclusionary zoning. An estimated 39 percent have low-density-only zoning and just over half would bar the hypothetical apartment complex. But this adds up to a small share of the metropolitan area's land area (28 percent) and population (3 percent). Nearly 90 percent of residents live in jurisdictions allowing development to exceed 15 dwellings per acre—these jurisdictions cover 83 percent of the MSA's land area.

Planning is not embraced broadly in metro New Orleans. Only half the cities and four of the seven parishes have comprehensive plans, leaving 40 percent of residents and 22 percent of the land area in jurisdictions without plans. These jurisdictions, however, also apparently embrace some strong land use tools even when they lack comprehensive plans. Just over half have an APFO, and about 37 percent use impact fees, with parishes ahead of the cities in using both tools. We estimate that just over half the population and over 90 percent of the land is in jurisdictions with APFOs, but smaller shares of residents (17 percent) and land (56 percent) are in jurisdictions with fees. Furthermore, urban containment programs also appear to be popular, adopted by jurisdictions—almost all the parishes and half the cities—accounting for 77 percent of the land area and 54 percent of the population. One or two of the parishes have an annual permit cap, and both cities and parishes have imposed moratoria.



New York-Northern New Jersey-Long Island, NY-NJ-CT-PA CMSA

Regulatory Order/Family: Traditional/High-Density (New York portion)
Traditional/Basic Exclusion (New Jersey portion)

Summary

Metropolitan New York is a vast and complex region with as wide a range of jurisdictions as any in the U.S.¹ Over a third of its 19 million residents live on about four-fifths of its land area in 637 jurisdictions with populations below 50,000 residents. Low densities are the rule in these jurisdictions, enforced by exclusionary zoning and perpetuated by limited infrastructure. At the other end of the urban continuum, over 10 million people live in just 13 jurisdictions (including New York City) whose population exceeds 100,000 residents.

Growth management is practiced to a very limited extent in the metropolitan area, with fewer than half the jurisdictions using impact fees and only a small handful in New Jersey using adequate public facilities ordinances. Immigration from abroad increased the population of New York City and its inner suburbs in the 1980s and 1990s, bringing them back toward and even above their previous peak after several decades of decline. While density has increased at the core, however, it has fallen rapidly in the suburban periphery, especially in the New Jersey suburbs. While many jurisdictions in metropolitan New York have regulatory programs to encourage housing affordability, the underlying antipathy toward density limits the impact of such programs in the suburbs because residential development is so generally constrained.

Governance Framework and Growth Trends

The New York CMSA is the largest in the United States and one of the world's largest metropolitan regions. The parts of the metropolitan area in New York, New Jersey, and Pennsylvania included 19.4 million residents in 2000 (the metropolitan portion in Connecticut is considered separately in this study.) New York City alone accounted for over 8 million residents, but even without New York City the metropolitan area would exceed the population of metropolitan Chicago. New York City is only one of 669 units of local government in the CMSA (excluding those in Connecticut). Six cities and seven towns in the CMSA had over 100,000 residents in 2000. Another 10 cities and 17 towns or townships had between 50,000 and 100,000 residents. There were 231 jurisdictions with between 10,000 and 50,000 residents, and 398 with fewer than 10,000 residents. Over 1.6 million people live in these smallest jurisdictions—as many as inhabit the entire metropolitan areas of Milwaukee or Orlando.

The urbanized land area in the New York CMSA grew 29 percent between 1982 and 1997, a net addition of nearly 540,000 acres, while its population grew by 9 percent. Because it urbanized so much more rapidly than population growth, the density fell from 9.3 to 7.9 persons per urban acre. About 19 percent of the metro area's land is publicly owned, with 8 percent in state and 3 to 4

¹ For more on the region's governance, see: Robert Yaro, "Growing and Governing Smart: A Case Study of the New York Region," in *Reflections on Regionalism*, B. Katz, ed. (Washington, Brookings, 2000.)



percent each in municipal, county, and federal ownership. The geographic pattern of public land does little to contain urban growth, however; it tends to be scattered in small holdings.

Because of the enormous complexity and size of the metro area, we report separately here on New York City itself, the Long Island suburbs (Nassau and Suffolk Counties), the northern suburbs (Westchester, Putnam, Rockland, and Orange Counties in New York), and the northern New Jersey and Pennsylvania suburbs.

New York City

New York city's population grew in both the 1980s and the 1990s, adding almost 1 million residents in those 20 years alone after having lost over 800,000 inhabitants in the 1970s. Because it added population without developing new land, the city's density rose between 1982 and 1997 from 41.0 to 44.0 persons per urbanized acre (according to urban land estimates from the National Resources Inventory). The increase in population of the 1990s is partially a consequence of improvements in address files, which boosted the decennial census count. But it is also a result of concerted efforts by the city to build new residential neighborhoods and to rebuild established ones to accommodate a population that surged—and continues to surge—on the strength of huge population increases from abroad. New York spent more of its own funds for below market rate housing construction in the 1980s and 1990s than the next 15 largest cities combined.²

Regulations foster and intensify dense development in New York City. The City has no comprehensive plan to coordinate its zoning code, which allows and encourages very high density residential development in Manhattan, Brooklyn, and the Bronx, with lower densities in much of Queens and Staten Island. Even so, these most suburban of New York's boroughs are packed with housing at densities exceeding those of the densest parts of many other U.S. central cities.

Aside from zoning, New York City does not have any of the other tools that we included on our survey, but it does offer a series of regulatory incentives for affordable housing in addition to its massive spending program for affordable housing. This is not to say, of course, that development is unregulated by anything except zoning in New York; the city requires major development to proceed through a uniform land use review process (ULURP) that involves substantial public comment, and it has its own "mini-NEPA," the City Environmental Quality Review (CEQR) ordinance.

New York has also fostered high-density development by investing in public infrastructure. Its transit system is, of course, well known. But New York City also stands out for its park system, with about 36,000 acres of parks on one-fifth of its land area.³

The Long Island Suburbs

² Alex Schwartz, "New York City and Subsidized Housing: Impacts and Lessons of the City's \$5 Billion Capital Budget Housing Plan." *Housing Policy Debate* 10(4) (1999): 839–877.

³ Peter Harnik, "The Excellent City Park System: What Makes It Great And How to Get There," (Washington: Trust for Public Land, 2003). Available at http://www.tpl.org/content_documents/excellent_city_parks.pdf.



Together, Nassau and Suffolk counties account for about 2.7 million residents in 2000, up about 150,000 (5.6 percent) from 1990. The largest jurisdictions on Long Island are hypertrophied towns (townships) that began as suburban outposts beyond New York City. In all, there are 13 towns in New York's Long Island suburbs. Seven towns had over 100,000 residents outside village boundaries in 2000.⁴ One additional town had nearly 100,000 residents and together, these eight large jurisdictions accounted for just over three quarters of the 2.75 million residents. The largest jurisdiction on Long Island, the town of Hempstead, has about 750,000 residents—more than Boston or Seattle. Between 1940 and 1960, Hempstead (including its villages) grew by a half-million residents, thanks in part to the growth of such developments as Levittown. In Suffolk County, the towns of Brookhaven and Islip had over 400,000 and 300,000 residents, respectively, in 2000. Long Island has no incorporated cities, but it has 97 incorporated villages (only one of which has over 50,000 residents). Eighty had fewer than 10,000 residents, and of the other 16, nine had between 10,000 and 20,000 residents.

Urbanized land on Long Island grew by about 24 percent between 1982 and 1997, while population grew by only about 4 percent. Even so, the two counties began with a high enough density (7.1 persons per urban acre, about the same level as San Diego) that the 1997 density level (6.1 persons per urban acre) would have placed Long Island among the 10 densest metro areas in the U.S.

We received responses from five villages and seven towns on Long Island. These responses account for only 5 percent of the villages but 54 percent of the towns; their residents make up 52 percent of Long Island's population. Zoning is omnipresent among the jurisdictions on Long Island. Long Island differs from many other parts of the Northeast in that the townships (towns) are less likely to impose exclusionary zoning than the incorporated units (villages). About 20 percent of the towns, with only 2 percent of the town population and 14 percent of the area outside village limits, have low-density only zoning. An estimated 23 percent of the towns would bar our hypothetical apartment development. About half of the villages have low-density-only zoning and an estimated 30 percent would bar our hypothetical apartment development. But neither are the towns especially accommodating to very high density zoning; only 37 percent of them allow development to exceed 15 dwellings per acre, and none has a category allowing over 30 dwellings per acre as of right. This compares with 54 percent of the villages, of which 21 percent allow development to exceed 30 dwellings per acre.

Long Island communities lack the tools and perhaps the incentives to deal with growth prospectively. Only 68 percent of villages and 84 percent of towns have a plan. About half the towns and 15 to 20 percent of the villages imposed substantial residential development moratoria in the early 2000s. Half the towns and 35 percent of the villages use development impact fees; an estimated 18 percent of villages have a containment mechanism of some kind, largely related to the extension of public utilities.

In all, this regulatory framework adds up to two different patterns. First, there are a few very populous towns closer to the metropolitan center that have mostly reached “buildout” of their postwar

⁴ Villages in New York have their own land use regulations and are considered separately here from the towns in which they are located. However, village residents vote in town elections and pay town taxes, and thus can theoretically exercise indirect influence on towns' regulations.



infrastructure and zoning. Within these towns, many villages serve as protected enclaves for single-family home owners. Second, there are a handful of less-developed towns closer to the tip of Long Island that currently face intense growth pressure and that have used low-density zoning and moratoria to slow growth, reduce density, and restrict ultimate development capacity.

New York's Northern Suburbs

The New York State suburbs north of New York City account for 1.9 million residents, up a bit more than 100,000 people (7.6 percent) from 1990. The jurisdictional matrix in the northern suburbs contrasts substantially with that on Long Island. Four cities in Westchester County have over 50,000 residents (Yonkers, New Rochelle, Mount Vernon, and White Plains) and provide centers for development, but the towns are much less populous—and less accommodating to high residential density—than the suburban towns on Long Island. Of the 65 towns, only one had over 50,000 residents in 2000 and none over 100,000. Thirty-two had fewer than 10,000 inhabitants, 18 between 10,000 and 20,000, and 14 between 20,000 and 50,000. There were also 59 incorporated villages and cities with fewer than 10,000 residents, 10 between 10,000 and 20,000, and 8 between 20,000 and 50,000. The five counties that constitute this suburban region have long been the least dense part of the New York City metro area, with 4.9 people per urbanized acre in 1982 and 4.4 in 1997. Urbanized land grew 24 percent between 1982 and 1997 while population grew just under 10 percent.

Based on responses from 10 cities and villages and 23 towns, we estimate that all the jurisdictions in the northern suburbs have zoning. The towns tend to be very restrictive toward high-density development; two thirds have low-density-only zoning ordinances, and 56 percent would bar our hypothetical apartment development. Only four percent of the towns have a residential zone allowing density to exceed 15 dwellings per acre. The incorporated units are somewhat less exclusionary than the towns; just over 40 percent of the incorporated units limit density to fewer than 8 dwellings per acre, and 29 percent would not permit the prototype apartment development. Nearly 60 percent of the villages and cities, with 80 percent of the municipal population, have a residential zone allowing at least 15 dwellings per acre. Among the incorporated units, villages are much less accommodating to density than cities.

As on Long Island, the northern New York suburbs do not have a full slate of land use tools at their disposal. An estimated 30 percent of the municipalities lack comprehensive plans. Nearly all the towns (96 percent) have plans, but this has evidently not enabled them completely to anticipate growth, since 30 percent of the towns had imposed major residential development moratoria in the early 2000s, as had 16 percent of the incorporated units. Development impact fees are in place in over half the towns and about two-fifths of the incorporated units. There are no APFOs in New York State. About one in five of the incorporated units report some kind of boundary to growth, but this may simply reflect the difficulty of annexation in New York State; just 7 percent of towns reported a containment program.

About a third of the jurisdictions in the northern suburbs have a regulatory affordable housing program. Two-fifths of the incorporated jurisdictions, mainly the larger ones, have at least one



program, but fewer than a quarter of the towns have a program. Only a small handful of jurisdictions devote their own funds to affordable housing, however.

Northern New Jersey and Northeastern Pennsylvania

The final subregion of the New York metropolitan region includes 14 counties in New Jersey and one in Pennsylvania. With 6.7 million residents in 2000, this part of the metro area grew 9.8 percent (600,000 residents) in the 1990s, more rapidly than any other subregion or New York City itself. Its 410 jurisdictions include New Jersey's four largest cities; Newark and Jersey City each had between 250,000 and 300,000 residents in 2000, and Paterson and Elizabeth had between 100,000 and 150,000. Twenty-one municipalities have between 50,000 and 100,000 residents, 72 between 20,000 and 50,000, 89 between 10,000 and 20,000. A staggering 224 municipalities have fewer than 10,000 residents; these smallest municipalities accounted for nearly one million residents in 2000, over 200,000 more people than lived in the four largest cities combined.

As the New York CMSA stretched out toward and beyond the Delaware River, the density of the New Jersey-Pennsylvania portion of the metro area has dropped substantially. Between 1982 and 1997, population in this part of the region grew by just over ten percent, but its urbanized land base shot up by 38 percent. As a consequence, its density dropped from 6.1 persons per urban acre to 4.8 persons per urban acre. Density has fallen in spite of the return of population to the largest cities, which grew by a cumulative 3.8 percent in the 1990s after losing 5.3 percent of their population in the 1980s.

We received responses from 35 boroughs and cities and from 39 townships in the New Jersey-Pennsylvania suburbs. This was among the lower response rates in our survey, we received 12 responses from jurisdictions under 10,000 residents out of 27 sampled, and 62 of the 187 jurisdictions of 10,000 or more residents. We therefore feel that the survey results are reliable indicators of the overall status of regulation in the New Jersey suburbs.

Exclusionary zoning is pervasive in the New Jersey suburbs of New York. Over 60 percent of the municipalities restrict densities to fewer than 8 dwellings per acre, and 35 percent hold densities below 4 units per acre. Fully 62 percent would bar our hypothetical apartment development, despite over 30 years of jurisprudence under *Mount Laurel* and the passage of the 1985 Fair Housing Act that require local governments to plan to accommodate affordable housing.⁵ This is the highest level of exclusion of any of New York's four sub-regions, though the share of the land area (55 percent) and population (36 percent) within jurisdictions barring apartments is about equal to that in the northern New York suburbs. Only 15 percent of the jurisdictions have a residential zone exceeding 15 dwellings per acre, much lower than in the northern New York suburbs.⁶

Almost all New Jersey communities have comprehensive plans, thanks in large part to the state's growth management system. But beyond plans, other tools are uncommon in the New Jersey

⁵ Ellen Lovejoy, "Mount Laurel Scorecard: Evaluation of New Jersey's Fair Share Housing System," *Planning* 58 (1992): 10.

⁶ In New Jersey there is essentially no difference between cities, boroughs, and townships in the level of exclusion or permissiveness toward density.



suburbs of New York and tend to be limited to infrastructure management devices. New Jersey allows adequate public facility ordinances, but they are still uncommon, in place in about 20 percent of jurisdictions. About a quarter of the jurisdictions—mainly cities and larger towns—use impact fees, substantially less than in the New York suburbs. Only four or five percent of jurisdictions had substantial residential development moratoria in the early 2000s, a much lower level than in the New York suburbs. A small handful of communities report having urban containment tools, and none has a building permit cap.

In the affordable housing arena, the Mount Laurel cases and the Fair Housing Act have made a noticeable difference in the regulatory environment of New Jersey's suburbs compared with those in Long Island and north of New York City. Nearly half the New Jersey jurisdictions in the New York CMSA have an affordable housing regulatory or incentive program.



Norfolk-Virginia Beach-Newport News, VA-NC MSA

Regulatory Order/Family: Traditional/Middle America

Summary

Metropolitan Norfolk-Virginia Beach-Newport News comprises 17 mainly large jurisdictions that all have adopted comprehensive plans and zoning. Their zoning is typically not exclusionary at the jurisdictional scale, almost always accommodating some multi-family development. Many of the region's jurisdictions have also imposed urban containment programs and policies. But it has sprawled all the same, with urbanization occurring twice as fast as population growth in the 1980s and 1990s. The survey suggests that this low-density development, especially as it enters rural areas, has not been accompanied by sufficient infrastructure to keep up with it. The result, absent widespread adoption of impact fees or adequate public facilities ordinances, has commonly been the imposition of development moratoria by counties. It may also be that infrastructure deficits have driven some of the region's growth as builders seek locations with fewer constraints.

Governance Framework and Growth Trends

The Norfolk-Virginia Beach-Newport News MSA had a population in 2000 of 1.6 million, up 125,000 residents (9 percent) from 1990. The region's jurisdictional framework differs from that of many other southern regions. It has only 17 jurisdictions, including 11 cities and 5 counties in Virginia and one mostly rural county in North Carolina. Three of the cities—Virginia Beach, Chesapeake, and Suffolk—span over 200 square miles each. Virginia Beach is in fact the most populous city in the MSA, with 425,000 residents in 2000, compared with second-place Norfolk's 234,000. Five other cities and one of the counties have over 50,000 residents. Only three jurisdictions (two cities and a county) have fewer than 10,000 residents. The dominance of large, populous cities and counties means that jurisdictions with over 50,000 residents account for 90 percent of the MSA's population and 55 percent of its land area.

While jurisdictionally fragmented MSAs tend to have more sprawl than those with fewer jurisdictions, Norfolk-Virginia Beach is a partial exception to this rule. Its population grew 23 percent between 1982 and 1997, but it urbanized land over twice as fast (52 percent growth). Its density consequently slipped from 4.7 to 3.9 persons per urbanized acre, a 20 percent drop that moved Norfolk from the 19th to the 24th most dense of the 50 top MSAs. The drop in density may have been steeper were it not for the containment of the metropolitan area by the Atlantic Ocean, Chesapeake Bay, the James River, and the Great Dismal Swamp National Wildlife Refuge. The federal government owns 12 percent of the land area including 10 separate military installations. State and local governments own another four percent.

Regulatory Environment

We received responses from six cities and five counties, 65 percent of the jurisdictions in the region. They account for 82 percent of the metropolitan area's population and 93 percent of its land area.



We did not develop estimates for the 2 municipalities whose population was under 10,000; they account for only 7,200 people and about 10 square miles of land area.

All the jurisdictions with at least 10,000 residents in the metro area have zoning. Low-density-only zoning throughout an entire jurisdiction is quite rare, present only in coastal Currituck County, North Carolina, which also would bar our hypothetical apartment development. Over 80 percent of the cities allow densities to exceed 15 dwellings per acre, with half of these allowing densities over 30 units per acre. Only 19 percent of the counties allow such high density, and none has a residential density category allowing densities above 30 units per acre.

All the jurisdictions in metropolitan Norfolk also have comprehensive plans. About half the jurisdictions—45 percent of the cities, 55 percent of the counties—claim an urban containment program of some kind. But only one jurisdiction claimed to have an infrastructure-related growth management tool: Currituck County, which has an APFO. Given that Virginia does not provide the localities the ability to do so, none of them employ the other land use tools covered by this survey,



Oklahoma City, OK MSA

Regulatory Order/Family: Traditional/Middle America

Summary

Oklahoma, like Texas, vests most power over development in its cities and not in its counties. Cities in the Oklahoma City MSA universally plan and zone, generally accommodating higher density development and widely imposing impact fees, APFOs, and even urban containment programs to manage growth. Counties, by contrast, often do not adopt plans at all, and some counties decline to zone. A blind spot in our survey is the large number of unsurveyed jurisdictions under 10,000 residents, who account for less than 10 percent of the metropolitan area's 2000 population but are bound to have important impacts on future growth in the MSA. They have expanded aggressively to control outlying land with "spaghetti" annexations along highways; hence their development policies will shape the edge of the metropolitan area, but our survey does not reveal much about what those policies are now. If they embrace infrastructure-managing measures as their populations increase, then the MSA would be likely to develop more compactly, but recent history suggests that density decline rather than compactness lies ahead for Oklahoma City.

Governance Framework and Growth Trends

The Oklahoma City MSA had just over one million residents in 2000, 13 percent and 125,000 residents more than in 1990. There are 70 cities and 6 counties in the MSA, but 58 cities and one county have fewer than 10,000 people. Only four cities had over 50,000 residents in 2000, with Oklahoma City itself accounting for 506,000 residents. None of the counties had more than 25,000 residents in their unincorporated areas. Evidently, even the smallest rural settlements usually become incorporated rather than occurring under the domain of county government.

The Oklahoma City metro area lost substantial density in the 1980s and 1990s. Its developed land base grew by 42 percent while its population grew just 19 percent between 1982 and 1997, causing density to slip from 3.2 to 2.7 persons per urbanized acre. This moved Oklahoma City from the ninth to the eighth least dense metro area in the top 50. Only five percent of the MSA's land is publicly owned, with about half that figure owned by cities and only one percent by the federal government.

Regulatory Environment

We received responses from 11 cities and three counties in the Oklahoma City MSA; we did not survey jurisdictions with fewer than 10,000 residents. Our respondents account for 85 percent of the MSA's population and half its land area. The results we report below are based on estimates of only jurisdictions over 10,000 residents, meaning that they leave out the 58 jurisdictions accounting for just over 100,000 residents and 500 square miles of land area.

Based on these results, Oklahoma City's municipalities of over 10,000 residents all have zoning. Only a few small cities, accounting for less than 5 percent of the population and land area, have low-density-only zoning or would exclude our hypothetical apartment development. Over 90 percent of



the land area, and about 90 percent of the population, is in jurisdictions that would accommodate densities exceeding 15 dwellings per acre. In short, city zoning ordinances do not appear to pose a substantial development constraint, at least at the level of entire jurisdictions. Counties differ substantially from cities in their zoning practices. An estimated two of the six constrain density to fewer than eight units per acre, though none would bar apartments under all circumstances. One or two of the less populous counties have no zoning at all.

Planning is ubiquitous among cities in the Oklahoma City MSA. Infrastructure-based growth management and urban containment are fairly common among the cities over 10,000 residents; an estimated 60 percent have impact fees, 40 percent have APFOs, and 38 percent have an urban containment program of some kind. Seventeen percent have incentive based affordable housing programs. Again, the counties contrast sharply with the cities; only half have a comprehensive plan, and none uses impact fees, APFOs, or growth boundaries.



Orlando, FL MSA

Regulatory Order/Family: Reform/Growth Management

Summary

Orlando shares important features of all Florida metropolitan areas thanks to the state's strong growth management laws. It is universally planned and zoned, and zoning is rarely if ever used to exclude high-density development from entire jurisdictions. Growth management is universal as well via controls on infrastructure access; developers must pay to grow or else seek out a location where there is slack capacity. Observers have noted that concurrency can help rein in sprawl, but it can also promote sprawl if a metropolitan area has substantial areas with slack infrastructure capacity.¹ This is especially true in a region like Orlando that lacks politically imposed growth boundaries or firmer topographic boundaries growth. Despite fast growth and strong planning, Orlando's density dropped by 12 percent between 1982 and 1997.

Governance Framework and Growth Trends

With a growth rate of 34 percent in the 1990s, Orlando is among the faster growing metro areas in the U.S. Its population grew by 420,000 residents in both the 1980s and the 1990s, reaching 1.6 million by 2000. With nearly 600,000 residents in 2000, Orlando is the only city with over 50,000 residents in the region; the metro area's four counties (Lake, Orange, Osceola, and Seminole) all have between 100,000 and 200,000 residents in unincorporated areas. Aside from these five major players, there are 17 medium-sized cities (10,000-50,000 residents) and 18 smaller ones, accounting together for about a quarter of the metropolitan area's population and less than 10 percent of its land base.

Metropolitan Orlando's population grew 71 percent between 1982 and 1997 while its developed land base expanded by 94 percent. As a consequence, its already modest density level of 3.7 persons per urbanized acre dropped further to 3.3 persons per acre. But since many other large metro areas also lost density in the 1980s and 1990s, it retained its rank as 34th most dense. Twelve percent of the region's land area is publicly owned, with the state and federal governments in control of 6 and 4 percent of land respectively.

Regulatory Environment

We received responses to our survey from 11 cities and all four of the counties in the MSA, accounting for 86 percent of the population and 96 percent of the land area. All the cities and counties have zoning ordinances. Only a few small municipalities and one of the counties has low-density-only zoning; these municipalities would bar our prototype apartment development, but the county would not. Close to two thirds of jurisdictions, accounting for 71 percent of the land area and

¹ James C. Nicholas and Ruth L. Steiner, "Growth Management and Smart Growth in Florida." *Wake Forest Law Review* 35,3 (Fall) (2000): 645-670.



82 percent of the population, have a residential zoning designation allowing development above 15 dwellings per acre.

Like all of Florida, the Orlando metropolitan area operates under state growth management rules that require comprehensive planning and mandate concurrency between development and infrastructure. Consequently, over 90 percent of the jurisdictions have an APFO and over 90 percent have impact fees of some kind. Urban containment is not as common as infrastructure-control growth management, however; only one county and one city reported using a growth boundary of some kind. Permit caps are not used, but a few jurisdictions have imposed moratoria (less than 10 percent of the total). Finally, about 38 percent of the jurisdictions with over 75 percent of the residents are estimated to use an incentive based affordable housing program of some kind.



Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD CMSA

Regulatory Order/Family: Traditional/Middle America (Pennsylvania portion)
Traditional/Basic Exclusion (New Jersey portion)

Summary

There are at least four separate regulatory patterns within metropolitan Philadelphia. The city of Philadelphia itself, as one might expect, has a regulatory structure that resembles those of other large cities, accommodating to growth and density and designed to encourage the construction of affordable housing. Its Pennsylvania suburbs resemble those of the Midwest more than those of the Northeast; they have more modest levels of planning and growth management, some exclusionary zoning but not as much as the rest of the Northeast, and practically no intervention for affordability. The New Jersey suburbs, by contrast, generally prohibit high-density development and most would bar our hypothetical apartment complex, but many—pursuant to the state’s Fair Housing Act—have inclusionary housing. The Delaware-Maryland fringe, finally, uses a stronger containment approach, with higher density housing permitted in settled areas and county comprehensive planning that features urban containment. Patterns of population growth and sprawl in the region break out along lines that one would predict, with the fastest sprawl in New Jersey, the slowest in the Delaware-Maryland fringe, and moderate but still substantial growth of urban land in the Pennsylvania suburbs.

Governance Framework and Growth Trends

The Philadelphia-Wilmington-Atlantic City CMSA ranks as the fourth-largest metropolitan area in the United States, but like New York it is jurisdictionally quite complex, straddling portions of four states: Pennsylvania, New Jersey, Delaware, and Maryland. There are 432 jurisdictions in the metropolitan area, 13 of them with over 50,000 residents, 121 with between 10,000 and 50,000, and 298 under 10,000. The smallest jurisdictions include boroughs and villages that tend to grow slowly because they are (or consider themselves) “built out” as well as low-density townships that may be growing more rapidly but do so at low densities because their zoning ordinances mandate large lot sizes and because they lack urban infrastructure to accommodate density. The more populous and denser jurisdictions include cities that have experienced distress, decline, and transformation (Philadelphia, Camden, Atlantic City), inner ring townships (Upper Darby, Lower Merion, and Bensalem, PA); growing cities (Vineland, NJ; Wilmington, DE); and faster growing suburban townships (Gloucester and Mount Laurel, NJ) and counties (New Castle, Delaware.)

The Philadelphia metro area is sprawling fast.¹ Between 1982 and 1997, there were over 330,000 acres of land urbanized in the region, a 35 percent increase during a period of very modest population growth (7.1 percent). Density dropped from 6.1 to 4.8 persons per urban acre over this period as the core cities have hollowed out and growth has extended into exurban and rural areas. The city of Philadelphia reached its population peak of over 2 million residents in 1950 and has

¹ Brookings Institution Metropolitan Policy Program, “Back to Prosperity, A Competitive Agenda for Renewing Pennsylvania: A Profile of the Philadelphia Area,” (Washington, 2003). Available at <http://www.brookings.edu/metro/publications/pa.htm>



declined continually since, losing about 170,000 residents between 1980 and 2000 alone, when its population dropped to just above 1.5 million.

About 17 percent of the region's land was owned by government in 1992, with about 10 percent of the land in state parks and preserves and the remainder split evenly between county, municipal, and federal ownership.

Recognizing the political complexity of the region, we report separately here on the Pennsylvania, New Jersey, and Delaware-Maryland portions of the Philadelphia CMSA.

Philadelphia and its Pennsylvania suburbs

The bulk of the population of metropolitan Philadelphia—3.8 million residents in 2000—lives in 238 jurisdictions in Pennsylvania, with 1.5 million in Philadelphia itself. Aside from Philadelphia, the only jurisdictions with more than 50,000 residents are five inner suburban townships. Of the other jurisdictions, 210 have populations under 20,000 and 162 below 10,000. The smallest jurisdictions are evenly split between boroughs and townships. About 128,000 acres of land were urbanized in the Pennsylvania parts of metropolitan Philadelphia between 1982 and 1997, a 24 percent increase when the population grew only 3 percent. Density dropped in this part of the region from 7.0 to 5.8 persons per urban acre.

We received responses from 42 of the 76 jurisdictions with over 10,000 residents and another 13 of the 30 smaller jurisdictions we sampled. Based on these results, approximately 92 percent of the jurisdictions have zoning; 52 percent have low-density-only zoning (26 percent of the population, half the land area), and 31 percent would not allow our hypothetical apartment development (14 percent of the population, 26 percent of the land area). About 20 percent of the jurisdictions (with 56 percent of the population but only 17 percent of the land) have a residential density category allowing over 15 dwellings per acre.

There is little growth management in the Pennsylvania parts of metropolitan Philadelphia. Only 82 percent of the jurisdictions have a comprehensive plan. About a third of the jurisdictions—mainly small and medium-sized ones—have impact fees, and 15 percent use APFOs. An estimated five percent have a containment mechanism of some kind, and a few (1 percent each) may use building permit caps or moratoria. Only an estimated 3 percent of jurisdictions—including the city of Philadelphia itself and a very small number of smaller suburbs—use regulatory incentives to promote housing affordability, among the lowest rates among the top U.S. metro areas and especially low for a comparatively expensive housing market.

Southern New Jersey

The New Jersey component of the Philadelphia CMSA includes 1,750,000 residents, living in 169 jurisdictions. About a half-million residents live immediately across the Delaware River from Philadelphia in Camden County, where three of the four jurisdictions with over 50,000 residents are situated. The city of Camden, with just under 80,000 residents, is the most populous jurisdiction in the New Jersey portion of the Philadelphia CMSA; two suburban townships, Cherry Hill and



Gloucester, have between 60,000 and 70,000 residents each. The other jurisdiction with over 50,000 residents, the city of Vineland, anchors its own Primary MSA. Atlantic City, with about 40,000 residents, is the central city of yet another PMSA. Urbanized land in the New Jersey suburbs of Philadelphia expanded by more than 50 percent between 1982 and 1997 while its population grew 12 percent, dropping the density from just over 5.0 persons to 3.6 persons per urban acre (a 27 percent decline).

We received responses from 21 of the 53 jurisdictions over 10,000 residents and 10 of the 19 smaller jurisdictions we sampled. Based on this sample, it appears that exclusionary zoning is more intense on the New Jersey than on the Pennsylvania side of the Delaware, with three quarters of jurisdictions using low-density-only zoning and as many barring our hypothetical apartment development.

Comprehensive planning is much more common in New Jersey than in Pennsylvania—all the jurisdictions reported having a comprehensive plan—but other growth tools are weak, with about a quarter of jurisdictions using impact fees and a fifth using APFOs. As a consequence of New Jersey's Fair Housing Act, 43 percent of the jurisdictions have incentive based affordable housing programs, with townships and cities more likely and boroughs less likely to offer regulatory incentives for affordability.

Northeastern Maryland and Delaware

The Wilmington PMSA, which straddles the Delaware-Maryland border, had 586,000 residents in 2000, up 14 percent (72,000 residents) in the 1990s and 28 percent between 1980 and 1990. Its largest jurisdiction is New Castle County, Delaware, where over 375,000 people lived in unincorporated areas in 2000; Cecil County, Maryland had about 63,000 residents in its unincorporated areas. Two Delaware cities, Wilmington and Newark, had over 10,000 residents in 2000, and the town of Elkton (MD) had about 11,000. Another 18 cities, towns, and villages had fewer than 10,000 residents in 2000.

Sprawl has been less severe in this part of the Philadelphia metropolitan area than in the New Jersey and Pennsylvania suburbs. About 38,000 acres were urbanized between 1982 and 1997, a 37 percent increase when the population grew about 20 percent. Population density fell from 4.5 to 4.0 persons per urban acre, mainly because of fairly rapid low-density development in suburban and exurban portions of Cecil County.

Delaware and Maryland, like New Jersey, have state legislation that makes local land use planning and regulation more common and enhances its quality. Both Delaware and Maryland have strong counties that control land use in their unincorporated areas. Counties and municipalities in Delaware, and counties in Maryland, are required to adopt comprehensive plans and update them periodically; zoning ordinances, where they exist, must conform to the plan.

Five jurisdictions in the Wilmington PMSA—New Castle County (DE), Cecil County (MD), the cities of Newark and Wilmington (DE), and the town of Elkton (MD)—have at least 10,000 residents; all but Elkton responded to our survey. Another 18 municipalities have fewer than 10,000 residents. We



sampled one of the smallest Delaware jurisdictions, the Town of Arden, which we later learned was unrepresentative of the small municipalities because its planning and zoning are managed by New Castle County. Two of the other small municipalities in New Castle County also are covered by the county's planning and zoning, but the other 8 municipalities all have comprehensive plans. We do not have information about their land use regulations or housing programs, however, nor do we have data on any municipalities in Cecil County. Hence we report here on only the two counties and the two Delaware cities.

State growth management in Delaware and Maryland translates into active urban containment, encouragement of density in developed areas, and infrastructure management at the local level in larger municipalities. All the jurisdictions that responded to the survey have comprehensive plans and zoning. The cities' zoning ordinances have residential zones exceeding 30 dwellings per acre. New Castle County's maximum density allows between 8 and 15 units per acre; Cecil's allows between 15 and 30 per acre. All four jurisdictions would allow our hypothetical apartment development. New Castle County has an urban service boundary, adopted in 1997, and Cecil County has an urban growth boundary, adopted in 2000. Wilmington has an urban limit line. The county and the city of Newark use impact fees. None of the jurisdictions has imposed a development moratorium in recent years, nor does any use a permit cap. New Castle County offers a residential density bonus for affordable housing; the two cities both have other regulatory programs to encourage housing affordability.



Phoenix-Mesa, AZ MSA

Regulatory Order/Family: Reform/Growth Management

Summary

The Phoenix MSA accommodated a doubling of its population between 1980 and 2000 with a dramatic increase in density, making it the 6th densest. By 2003, regulation in the MSA reflected both rapid growth and density increase, with zoning ordinances that are permissive about density and apartment development and universal imposition of impact fees to recoup some of the costs of growth. APFOs are also common. Urban containment, however, is still fairly uncommon and reported by only about a quarter of the cities and Maricopa County, the more populous of the two counties in the MSA. But over two-thirds of the land area is publicly owned, contributing to a form of non-deliberate containment that is reinforced by reliance on centrally provided infrastructure.¹ Despite the fast growth and undisputed burdens on infrastructure, none of the jurisdictions has imposed a moratorium or building permit cap.

Governance Framework and Growth Trends

The Phoenix-Mesa MSA's population of 3.3 million in 2000 was over twice its population in 1980. Its 40 percent growth rate in the 1980s (640,000 new residents) was eclipsed by its addition of over 1 million new residents in the 1990s, a growth rate of 45 percent. The city of Phoenix accounts for 1.3 million of the region's residents; the cities of Mesa (400,000), Glendale (220,000), and Scottsdale (200,000) also have a large share of the metropolitan population. Unincorporated parts of Maricopa County accounted for over 210,000 residents. Four other cities—Chandler, Tempe, Gilbert, and Peoria—had between 100,000 and 200,000 residents, and the other county in the MSA, Pinal, had about 80,000 people in its unincorporated areas. There are another 26 cities in the MSA, nine of which had between 10,000 and 50,000 residents, with the balance (17) having fewer than 10,000. Arizona's permissive laws on annexation and incorporation have allowed cities to expand their boundaries far into undeveloped territory, giving the Phoenix metro area one of the larger shares of population in incorporated areas in the west (91 percent).

This rapid growth has been accommodated at densities far exceeding Phoenix's traditional modest levels. In 1982, the MSA had about 4.8 persons per acre of urban land, 18th highest among the top 50. Between 1982 and 1987, its population grew 71 percent as its urbanized land base grew by 42 percent (150,000 new urban acres). As a consequence, the MSA's density rose by practically a full person per acre of land, to just under 5.8 persons per acre, and its rank among the top 50 metro areas rose to 6th most dense. The density increase owes much to Phoenix's fast growth, which has allowed developers to achieve economies of scale; to the need for expensive centralized infrastructure, especially for water supply but also for sewers; and to the region's topography and public lands. In 1992, only 27 percent of the land was in private hands, with 42 percent held by the federal government and 19 percent by the state. State lands are mostly trust lands that are managed

¹ Arizona State University, "Phoenix: Dealing with Fast Growth," in *Sunbelt/Frostbelt: Public Policies and Market Forces in Metropolitan Development*, J.R. Pack, ed. (Washington: Brookings, 2005).



as real estate assets to provide revenues for public education and therefore do not impose the same restrictions to private-sector development that federal lands do.

Regulatory Environment

We received responses from 11 cities and both counties, accounting for 82 percent of the MSA's population and 95 percent of its land area. Our estimates do not include any estimates for the 17 small cities, which account together for about 275 square miles (the total land area in the MSA is nearly 14,000 square miles) and 65,000 residents.

All the jurisdictions in the Phoenix MSA use zoning. None of them has low-density-only zoning, but about 12 percent of the cities would not allow our prototype apartment development. These cities account for only about 1 percent of the population and less than 1 percent of the land area, meaning that they are very modest exclusionary enclaves within a very permissive region. Over 70 percent of the jurisdictions have a residential density category allowing at least 15 dwellings per acre, and these jurisdictions account for 94 percent of the MSA's population.

All the jurisdictions also report having comprehensive plans. Infrastructure to accommodate growth is clearly the biggest issue in development regulation. Virtually all the cities and both counties use impact fees, and an estimated one-third of cities and both counties have an APFO. Deliberate containment is less common, with Maricopa County (but not Pinal) and about a quarter of the cities with half the municipal population reporting such a program. None of the jurisdictions uses a permit cap, nor has any jurisdiction imposed a development moratorium in recent years. Two thirds of the cities and Maricopa County have incentive based affordable housing programs as well, with most of these incentive programs including density bonuses.



Pittsburgh, PA MSA

Regulatory Order/Family: Traditional/Middle America

Summary

Dominated by very small townships and boroughs, metropolitan Pittsburgh lacks the substantial local government institutions, and its rapid population decline has limited the incentives for strong growth management.¹ Consequently, it has both a high prevalence of low-density-only zoning and a few jurisdictions without zoning at all; a quarter of the jurisdictions lack comprehensive plans. The region's fragmented and weak land use planning institutions did not stop, and likely contributed to, rapid sprawl in the 1980s and 1990s as the region lost over 8 percent of its population.

Governance Framework and Growth Trends

The Pittsburgh MSA is a curiosity among the 50 largest metropolitan areas. Its population declined by 175,000 residents (6.9 percent) in the 1980s and another 35,000 (1.5 percent) in the 1990s, but it still had over 2.3 million residents in 2000, making it the 23rd largest metro area in the U.S., in the same range as Tampa and Portland. Pittsburgh also has an extraordinarily large number of local governments—414 in all—only one of which, Pittsburgh itself, had over 50,000 residents in 2000. Another 32 townships and 20 cities and boroughs in the region had between 10,000 and 50,000, and a staggering 361 townships and boroughs had fewer than 10,000 residents. Despite metro Pittsburgh's steady population decline in the 1980s and 1990s, it still managed to urbanize over 200,000 acres of land between 1982 and 1997, a 39 percent increase when its population declined 6.6 percent. Its density dropped from 4.8 to 3.3 persons per urbanized acre, as a consequence.

Regulatory Environment

We received responses from 29 of the 54 jurisdictions with over 10,000 residents, but not from the city of Pittsburgh itself. We also received responses from 26 of the 50 jurisdictions under 10,000 that we sampled. This response includes a reasonable range of jurisdictions by size and type, but it still accounts for only 17 percent of the land area and 29 percent of the population, and therefore must be taken as indicative rather than definitive of the Pittsburgh metro area's regulatory structure.

Based on the responses, we estimate that about 89 percent of the jurisdictions have zoning, and that about 55 percent of all jurisdictions—less populous townships, mainly, with an estimated 37 percent of the metro area's population but 55 percent of its land area—have low-density-only zoning. About 30 percent of the jurisdictions would prohibit our prototype apartment development, but these tend to be even less populous jurisdictions, containing only 18 percent of the region's residents and about a quarter of its land area. Only 17 percent of the jurisdictions, with a third of the population and 7 percent of the land area, have a residential zoning category allowing densities to exceed 15 dwellings per acre.

¹ Brookings Institution Metropolitan Policy Program, "Back to Prosperity, A Competitive Agenda for Renewing Pennsylvania: A Profile of the Pittsburgh Area," (Washington, 2003). Available at <http://www.brookings.edu/metro/publications/pa.htm>



Planning is weaker in metropolitan Pittsburgh than in many other regions, with only about three quarters of jurisdictions estimated to have a plan. Growth management and affordable housing programs are scarce, with impact fees being the only common tool (used in an estimated 23 percent of jurisdictions); APFOs, containment tools, and regulatory affordable housing incentives are present in fewer than 5 percent of jurisdictions. None of the jurisdictions reported permit caps or moratoria.



Portland-Salem, OR-WA CMSA

Regulatory Order/Family: Reform/Containment

Summary

The Portland CMSA is a strong growth management region in which state laws passed by Oregon and Washington require cities and counties to plan, regulate development, and impose urban growth boundaries. In the three counties that constitute Portland Metro—the regionally elected governing body—additional rules require cities to accommodate high-density development. Even outside these counties, cities are quite accommodating to density, exclusionary zoning is practically unknown, and growth control via permit cap or moratorium is very rare.

Even with this strong growth management framework, however, density did not increase between 1982 and 1997 in the Portland metro area to the same extent it did in the less deliberately managed Las Vegas and Phoenix. This can be explained in part by factors beyond the reach of local land use regulation: Portland has less federal land, relies more on septic systems and wells, and grew less rapidly than either of the desert metros. Partly, too, it owes to the initial looseness of Portland's growth boundary, which began to seriously contain development only in the early 1990s. In addition, Clark County's (WA) boundary was not set in place until the early 1990s. More serious density increases may await in the next decade, pending the resolution of Oregon's recently passed Measure 37, which requires that local governments compensate property owners for any reduction in land value that can be attributed to their regulations.

Governance Framework and Growth Trends

The Portland-Salem CMSA had about 2.3 million residents in 2000, up 26 percent (470,000) in the 1990s and 43 percent (680,000) between 1980 and 2000. It is the only large multi-state metro area in the West. Clark County, in the Washington portion, grew 45 percent in the 1990s, nearly twice as fast as the rest of the CMSA. Of the remainder, 350,000 people lived in the two counties of the Salem PMSA (Marion and Polk) and 1.5 million in five counties that constitute the Oregon portion of the Portland PMSA. Portland is the most populous jurisdiction, with 530,000 residents. Vancouver (WA) and Salem are the only other cities in the MSA with more than 100,000 people, with 166,000 and 144,000 residents in 2000, respectively. Three other cities have over 50,000 residents. Three counties (Washington, Clackamas, and Clark) have over 100,000 residents in unincorporated areas; Marion has about 80,000. In all, about a quarter of the population lived outside city limits in 2000.

Between 1982 and 1997, the Portland CMSA had population growth of about 31 percent, while its developed land base grew by an estimated 40 percent (142,000 acres). As a consequence, its density declined from 4.6 to 4.3 persons per urban acre; since this decline was not as stark as those of many other large metros, its rank crept up from 21st to 18th most dense. The Oregon side of the boundary accounts for about 105,000 of the new urban acres, with the balance (36,000) urbanized in fast growing Clark County. About 69 percent of the land in the CMSA is privately owned, with the federal government owning about a quarter and state and local governments the balance of the public land.



Regulatory Environment

We received responses from all 8 counties and 18 cities, which together accounted for 75 percent of the population and 97 percent of the land area.

Both Oregon and Washington are growth management states; the state growth management laws apply to all the jurisdictions in the Portland CMSA.¹ Both states require local governments to adopt comprehensive plans and to ensure that their development regulations are consistent with those plans. Both states also require the imposition of urban growth boundaries. In Oregon, local jurisdictions impose the boundaries except in the three central counties of the Portland PMSA (Multnomah, Washington, and Clackamas), where the boundary is set by the regional body: Metro.² Local plans and development regulations in Oregon are reviewed by the State Department of Land Conservation to ensure consistency with the growth management law. In Washington, counties are responsible for designating urban growth areas, which generally happens in consultation with the cities. There is no central review of plans in Washington but rather a system by which appeals to plans and development decisions may be taken to growth management hearing boards for expedited (and precedent setting) review. Washington also differs from Oregon and mimics Florida in its requirement that local governments assure the concurrency of development with infrastructure capacity.

All the jurisdictions in metropolitan Portland have zoning. Only one or two of the cities, on the Washington side, have low-density-only zoning, and none would bar our hypothetical apartment development. Almost all the Oregon cities and two thirds of the Washington cities allow development at densities over 15 dwellings per acre. Three of the seven Oregon counties would bar the hypothetical apartment development in their unincorporated areas, presumably because those areas have been designated in their comprehensive plans primarily for forest and agricultural protection. The other counties all allow higher-density residential development in at least some unincorporated areas.

As expected, the jurisdictions we surveyed all had comprehensive plans and are subject to an UGB (except those fully contained within the Portland UGB). Jurisdictions in the region also generally require development to fund infrastructure. All the cities in Oregon and all but one in Washington use impact fees and an estimated 62 percent of Oregon cities and 70 percent of Washington cities use APFOs. Three of the Oregon counties and Clark County use impact fees, and we estimate that three or four Oregon counties also have APFOs. About a quarter of the cities in Clark County have had moratoria, but moratoria are rare on the Oregon side (only McMinnville reported one). Growth control via permit caps is also quite uncommon and was reported by only one city—Dallas—in Polk County, Oregon.

¹ Washington does not impose growth management mandates on less populous, slow growing counties. See: John DeGrove, *Planning Policy and Politics: Smart Growth and the States* (Cambridge: Lincoln Land Institute, 2005).

² Cities outside the Portland Metro region are directed to work collaboratively with their counties in setting their UGBs; county plans are also required to denote the locations of UGBs.



Affordable housing incentives are also fairly common with 65 percent of the cities and half the counties offering incentives of some kind for affordable housing. Inclusionary zoning is not permitted in Oregon but many jurisdictions use density bonuses.



Raleigh-Durham-Chapel Hill, NC MSA

Regulatory Order/Family: Traditional/Middle America

Summary

A low response rate hinders firm conclusions about the state of growth management in the Raleigh MSA. Based on responses from throughout North Carolina, however, all the jurisdictions have zoning, which tends to accommodate high-density development and seldom could be qualified as exclusionary throughout an entire jurisdiction. But a significant minority of cities and counties lack comprehensive plans. And only a minority of jurisdictions in the Raleigh MSA, with 40 percent or less of the population and land area, use such growth management measures as impact fees, APFOs, and urban containment to regulate the timing and location of development. In short, this high-sprawl region does not regulate growth consistently, but rather has a patchwork of local approaches reflecting varying local attitudes toward development.

Governance Framework and Growth Trends

The Raleigh-Durham-Chapel Hill MSA had about 1.2 million residents in 2000, up 39 percent (330,000 residents) in the 1990s. The region has three cities (Raleigh, Durham, and Cary) and two counties (Wake, where Raleigh is located; and Johnston) over 50,000 residents. There are 25 small municipalities (under 10,000 residents) and 6 cities and 4 counties with between 10,000 and 50,000 residents. About 35 percent of the region's population lives in unincorporated areas; incorporated municipalities account for 11 percent of the land area.

Like other metro areas in the mid-South, the Raleigh MSA was already very low-density in 1982—2.7 persons per urban acre—and became even more so in the ensuing 15 years. While its population grew 55 percent between 1982 and 1997, its developed land area grew 82 percent, dropping its density to 2.3 persons per urban acre, a level of density lower than all the other large metros areas except Charlotte. About 9 percent of the land is owned by state, federal, or local governments.

Regulatory Environment

We received markedly lower response rates from metropolitan Raleigh than would be preferable, with only 3 cities and 4 counties represented by the survey. While these jurisdictions account for 67 percent of the metropolitan area's land, they only contain about 17 percent of its population. Hence we present estimates for metro Raleigh—based on responses from both the Raleigh-area respondents and other cities in North Carolina—are very tentative.

We estimate that all the cities in the MSA have zoning. If the municipalities' regulatory framework resembles the average of municipal respondents of similar sizes in North Carolina, a small number (less than 20 percent) restrict density to fewer than 8 dwellings per acre and an even smaller number (perhaps one or two, with a very small share of the metro area population and land area) would exclude our hypothetical apartment development. The majority of municipalities have a



residential density category allowing over 15 dwellings per acre. We have more specific information about the six counties in the MSA. Two or three counties have low-density-only zoning, and one would bar our hypothetical apartment entirely. One county, at the other extreme, accommodates residential development at greater than 15 dwellings per acre. We estimate that about 15 percent of the population and 40 percent of the land area is in jurisdictions with low-density-only zoning, but only 5 percent of the residents and 20 percent of the land area is in jurisdictions that would prohibit the hypothetical apartment development.

Comprehensive planning is not broadly utilized in the Raleigh MSA, with perhaps 15 percent of the municipalities and one or two of the counties lacking a comprehensive plan. For both cities and counties, about 40 percent adopt impact fees; counties tend more often than cities to adopt APFOs (40 percent vs. 20 percent). Urban containment programs are also fairly common among both cities (40 percent) and counties (30 percent). We estimate that most jurisdictions using infrastructure measures are small, with impact fees in place in jurisdictions accounting for about 25 percent of the population and 35 percent of land area. Jurisdictions with urban containment account for 45 percent of the population and 30 percent of the land area.



Richmond-Petersburg, VA MSA

Regulatory Order/Family: Traditional/Middle America

Summary

Like its counterparts in the mid-South, metropolitan Richmond is growing fast at low densities. Permissive high-density zoning is fairly widespread and outright exclusionary zoning rare, and all the jurisdictions have comprehensive plans. But impact fees are uncommon, especially in the counties that account for the majority of the MSA's land and population, and only one county has adopted any kind of urban containment. Absent more concerted efforts to concentrate growth with a combination of market-based measures like fees and APFOs and planning guidance from deliberate urban containment systems, the region is likely to continue sprawling, especially in light of the near absence of publicly owned land in the region.

Governance Framework and Growth Trends

With just under 1 million residents, Richmond is the least populous among the top 50 metro areas we surveyed. It grew 15 percent in the 1990s, adding 130,000 residents. The MSA has only six cities and nine counties. Richmond, with nearly 200,000 residents, is the only city with over 50,000 residents. The two most populous jurisdictions in the MSA, however, are Henrico and Dinwiddie Counties, each of which has around 260,000 residents in unincorporated areas. Only three jurisdictions have fewer than 10,000 residents.

Like the other MSAs in the mid-South, Richmond sprawled fast in the 1980s and 1990s, adding 60 percent to its urbanized land base between 1982 and 1997 as its population grew by just 22 percent. Its density dropped 23 percent (from 3.3 to 2.6 persons per urbanized acre) leading it to fall from 38th to 46th most dense among the 50 largest metro areas. About 96 percent of the land in the MSA is privately owned, with the very modest remainder divided between state and federal governments.

Regulatory Environment

We received responses to our survey from seven jurisdictions: the city of Richmond and six counties, which together account for 86 percent of the population and 66 percent of land area. We used responses from other Virginia MSAs to develop estimates of the probability of land use regulations for all the other jurisdictions except the two municipalities under 10,000, which are not included in the tallies below. They account for only 7,000 residents and 8 square miles.

Based on these results, we estimate that all the jurisdictions have zoning. The municipalities do not use low-density-only zoning, and none would bar our hypothetical apartment development. Two or three of the nine counties use low-density-only zoning, and three would bar the hypothetical apartment development. Those that would exclude the apartments are rural rather than the large urban counties; they account for 11 percent of the population and a third of land area. Most of the cities allow development to exceed 15 dwellings per acre, but none has a density category above 30 units per acre. Only one or two of the counties allow densities above 15 dwellings per acre, but



these are fairly urbanized counties. Hence about 60 percent of residents live in jurisdictions allowing densities to exceed 15 dwellings per acre in their highest-density residential zones, but these jurisdictions account for just one-fifth of the MSA's land area.

We estimate that all jurisdictions have comprehensive plans, as required by state law. But the other tools are rarely used, only one county reports imposing impact fees. Nearly half the cities report an incentive measure for affordable housing, but only a few of these cities award density bonuses as their incentive.



Rochester, NY MSA

Regulatory Order/Family: Traditional/Middle America

Summary

With slow growth and moderate rates of sprawl in the 1980s and 1990s, metropolitan Rochester has not innovated much in land use regulation. Exclusionary and low-density zoning are common, high-density zoning much less so. Comprehensive planning is weak and growth management rare. Affordable housing programs are very uncommon.

Governance Framework and Growth Trends

The Rochester MSA had about 1.1 million residents in 2000, up just 3.4 percent in the 1990s (35,000 new residents) and only 6.6 percent (fewer than 70,000) between 1980 and 2000. The region has 142 units of local government, including 51 cities and villages and 91 towns; 3 of the jurisdictions have more than 50,000 residents, 13 between 10,000 and 50,000, and 126 under 10,000. The smallest jurisdictions include 79 rural towns and 47 small villages. The city of Rochester's population fell by about 12,000 in the 1990s, to about 220,000. Despite its slow growth rate, the Rochester MSA urbanized 43,000 acres of land between 1982 and 1997, a 17.5 percent increase when the population grew just under 5 percent. Thus, density dropped from 4.2 to 3.8 persons per urbanized acre. Only about 5 percent of the land in the metro area is owned by government, with most of the government land in state or local ownership.

Regulatory Environment

We received responses from 10 of the 16 jurisdictions (62 percent) with over 10,000 residents we surveyed in Rochester and from 35 of the 50 smaller jurisdictions we sampled (70 percent). The respondents included the city of Rochester, and account for 32 percent of all the jurisdictions in the region, 54 percent of the population, and 34 percent of the land area. One of the towns coincides with an American Indian reservation; we did not send a survey to that jurisdiction and the results we report here omit that jurisdiction.

An estimated 96 percent of jurisdictions in the Rochester MSA have zoning; 62 percent have low-density-only zoning, accounting for 38 percent of the residents and 68 percent of the land area. Our prototype apartment project would be prohibited in only 25 percent of the jurisdictions, however; these jurisdictions account for only 11 percent of the population and 30 percent of the land. Only 19 percent of jurisdictions allow density to exceed 15 dwellings per acre, but these include over 35 percent of the metro area's residents and 15 percent of its land.

Comprehensive planning is not mandatory in New York; only 78 percent of the municipalities, including Rochester itself, have plans. Growth management measures are rare and mainly limited to infrastructure-related controls; an estimated 23 percent of jurisdictions with 38 percent of the population impose impact fees, and 15 percent of the jurisdictions with 18 percent of the population use APFOs. Six percent of jurisdictions report having a containment tool, 2 percent a permit cap,



and 1 percent a major moratorium in the early 2000s. Only 7 percent of the jurisdictions use regulatory mechanisms to encourage or require affordable housing.



Sacramento-Yolo, CA CMSA

Regulatory Order/Family: Reform/Growth Management

Summary

Like many western metropolitan areas, Sacramento is a strong growth management region with widespread urban containment programs coupled with zoning codes that accommodate and even encourage high-density development. County level containment programs are especially important in light of extensive population growth in unincorporated areas which places pressure on high-value agricultural land. The combination of containment, high density zoning, expensive agricultural land, and a substantial share of federal land have helped the Sacramento region to accommodate its significant growth in the 1980s and 1990s at densities higher than its historical average. By 1997 it was the ninth most densely developed of the 50 largest metro areas.

Governance Framework and Growth Trends

The Sacramento-Yolo CMSA had about 1.8 million people in 2000, up 21 percent (315,000) in the 1990s and 63 percent between 1980 and 2000. It is composed of two PMSAs: Sacramento, with about 1.6 million residents and Yolo, with about 170,000. There are 17 cities in the CMSA, the largest of which by far is Sacramento (410,000 residents); no other cities had over 100,000 residents in 2000, though four had between 50,000 and 100,000. Seven had between 10,000 and 50,000 residents, and five had fewer than 10,000. The most populous jurisdiction is Sacramento County, with 660,000 residents living in unincorporated areas. El Dorado and Placer County, the other two counties in the Sacramento PMSA, have 125,000 and 100,000 residents respectively in their unincorporated areas. Yolo County has only about 21,000 residents in unincorporated areas. In all, only half the CMSA's population lives inside city limits.

Like the other large California metro areas, Sacramento's population growth ran close to its growth in urbanized land between 1982 and 1997: 45 percent and 42 percent, respectively. As a consequence, its density rose from 4.9 to just under 5.1 persons per urban acre during that period, nudging it from the 13th to 9th densest metropolitan area. About 70 percent of the CMSA's land area is privately owned. Almost all the public land is in federal ownership, much of it in national forests in the Sierra Nevada foothills east of Sacramento.

Regulatory Environment

We received responses to our survey from 3 counties (all except Yolo County) and 9 cities, which together accounted for 94 percent of the population and 75 percent of the land area.

All the jurisdictions in the CMSA have zoning. Perhaps one or two cities have low-density-only zoning, but none would bar our hypothetical apartment development entirely. Nearly 90 percent of the cities and at least the three respondent counties allow density to exceed 15 dwellings per acre.



All the jurisdictions also have general plans, as required by state law. As in other California metros, Sacramento's local governments also use a wide range of other tools to manage growth. About 90 percent of the cities and all the counties use development impact fees to recover some development costs, and about a third of cities and counties use APFOs. Twelve percent of the cities have a permit cap. Two of the three respondent counties have urban containment measures of some kind; Sacramento's containment program has been in place for over 20 years. Yolo County's adopted policies also channel most new residential development into cities rather than accommodating growth in rural areas.

Affordable housing incentive programs are also widespread, thanks mostly to California's laws on housing planning. Most of the jurisdictions indicated that they offer a density bonus, and even where a local government has no ordinance providing for one, state law requires that they offer one.



Salt Lake City-Ogden, UT MSA

Regulatory Order/Family: Traditional/High Density

Summary

The Salt Lake metro area differs from several of the other Western metropolitan areas in its approach to land use regulation. While its jurisdictions are accommodating to high-density development, at least in their zoning ordinances, they make much less use of urban containment, APFOs, and permit caps, nor do they broadly adopt affordable housing programs. They do, however, make widespread use of development impact fees. Salt Lake County, whose unincorporated areas house more residents than does Salt Lake City, does not have a clear and unified approach to growth management, decentralizing its planning policies to a series of township plans that generally accommodate growth but do not contain it. When combined with moderately fast growth and geographically constrained land (dominated by the Great Salt Lake and the Wasatch Mountains), these regulations have kept densities from falling very much in recent years, but neither have they been strong enough to allow the region to hold or maintain its density like the Las Vegas or Phoenix metropolitan areas.

Governance Framework and Growth Trends

The Salt Lake City-Ogden MSA, with 3 counties and 44 cities, had about 1.3 million residents in 2000, up 24 percent (261,000) in the 1990s and 47 percent between 1980 and 2000. Seven cities exceeded 50,000 residents in 2000; Salt Lake City itself had 180,000, and one other city (West Valley) had 109,000. Of the other cities, 16 had between 10,000 and 50,000 residents in 2000 and 21 had fewer than 10,000. The unincorporated portion of Salt Lake County accounts for about 210,000 residents; Weber County and Davis County have fewer than 20,000 people living in unincorporated areas.

The Salt Lake metro area sprawled moderately between 1982 and 1997, increasing its urban land area by 47 percent (83,000 new developed acres) while its population grew 33 percent. Its density at the beginning of the period, 5.3 persons per urban acre, made it the 11th densest of the top 50 largest metro areas; but its relatively swift land consumption caused its density to drop to 4.8 persons per acre by 1997, still 12th highest (between New Orleans and Philadelphia). About 68 percent of the land is privately owned, with 24 percent owned by the federal and 6 percent by the state government. State lands include trust lands that are subject to sale and development for revenue to benefit public education. The settlement pattern of the metro area is also shaped by the Great Salt Lake and the Wasatch Front, which form natural boundaries to growth toward the northwest and east.

Regulatory Environment

We received responses from 19 cities and Salt Lake County in the Salt Lake City MSA. (We did not survey Davis County, which had fewer than 5,000 residents in 2000.) Together, these account for 85 percent of the population but only 49 percent of the land area. Discussion of the county level



regulatory environment is therefore necessarily limited to Salt Lake County. Our metro area summary below does not include estimates for the 21 jurisdictions with fewer than 10,000 residents. Together, these account for 95,000 residents and 113 square miles of the metro area's 1,600 square miles.

All the cities have zoning. None have low-density-only zoning or would bar our hypothetical apartment development. Sixty percent of the cities with nearly 80 percent of the municipal population have a residential zone that allows development to exceed 15 dwellings per acre. Salt Lake County also has a residential zone that allows at least 30 dwellings per acre.

All the cities have comprehensive plans and many also use a series of measures to manage growth. Nearly 90 percent use impact fees, but only an estimated one or two use an APFO. Thirty percent report having an urban containment program of some kind. About a quarter have an affordable housing incentive program. Salt Lake County, the region's most populous jurisdiction, uses impact fees; otherwise, Salt Lake County indicated that it does not have the other tools. Although its respondent also indicated that it lacks a comprehensive plan, there are several mentions of a County General Plan on the county's web site, which shows that several of the county's six townships also have general plans. We lack information about either of the other two counties.



San Antonio, TX MSA

Regulatory Order/Family: Wild Wild Texas/Dallas-San Antonio

Summary

Like the other Texas metro areas, the San Antonio MSA's density is holding steady while they drop almost everywhere else in the South. This maintenance of density is partly a consequence of its jurisdictional framework, in which the central city (San Antonio) has annexed aggressively and captured most of the new development, bringing not only city services but also city zoning along with it. Furthermore, the larger cities all use impact fees, which associate strongly with denser development patterns. Government-imposed urban containment is practically unknown in the region (as elsewhere in Texas), but this combination of city-centered growth and impact fees may amount to a market-based containment program.

Governance Framework and Growth Trends

Metropolitan San Antonio had 1.6 million residents in 2000, up 20 percent (270,000 residents) in the 1990s. About 1.3 million of these residents live in 44 cities, with the balance living in unincorporated areas of four counties. The city of San Antonio has over 1.1 million residents; its county, Bexar, has about 150,000 residents in unincorporated areas. Five cities and the other three counties (Comal, Guadalupe, and Wilson) have between 10,000 and 50,000 residents, and the balance of the cities (32) have fewer than 10,000 residents.

Like the other Texas metro areas, San Antonio's land consumption (36 percent) ran only slightly ahead of its population growth rate (33 percent) between 1982 and 1997, meaning that it maintained its density of just over 4 persons per urbanized acre over the period. Because most of the other top 50 metros lost density faster, San Antonio's rank among these regions leapt from 29th to 19th densest. Only about 6 percent of the land area is publicly owned, with a substantial share of the federal land in military bases.

Regulatory Environment

We received responses to our survey from San Antonio and three other cities; we did not survey the counties, because like other Texas counties they lack most powers to regulate development in unincorporated areas. The four respondents account for 75 percent of the population but only 14 percent of land area.

Based on these results and others from the non-Houston MSAs in Texas, we estimate that all the cities in the MSA have zoning. City zoning tends to accommodate high-density development, with 75 percent of the cities allowing development to exceed 15 dwellings per acre and only a few small cities restricting density to fewer than 8 dwellings per acre. None of the cities would bar our hypothetical apartment development. The counties have no zoning, meaning that density is limited only by the availability of sewers and water supply; generally, lots over one acre are required for each house on a septic systems and well.



All the cities have comprehensive plans. To the extent that cities manage growth, they do so with infrastructure measures; about three quarters of cities—and virtually all the cities with over 10,000 residents—are estimated to use impact fees, and a third (mostly the medium-sized cities) have APFOs. A few very small cities are estimated to have a containment system of some kind. Perhaps a quarter of the cities, including San Antonio itself, have incentive programs for affordable housing, but these incentives do not include density bonuses.



San Diego, CA MSA

Regulatory Order/Family: Reform/Growth Management

Summary

San Diego is a growth management region, with strong local requirements for new development to pay its own way through impact fees and APFOS. It also has a series of conditions (topography, public land ownership, habitat for endangered species) and policies that limit outward expansion. Local governments accommodate high-density development; only one or two municipalities currently have building permit caps, though some APFOs may serve as covert controls on the pace of growth. It is also a remarkably non-fragmented region, with just 18 units of local government for its 2.8 million residents. Together, these forces—along with rapid growth and a sizeable immigrant population—helped San Diego retain a density above 7 persons per urban acre throughout the 1980s and 1990s and its rank as the fifth most densely populated of the 50 largest metro areas.

Governance Framework and Growth Trends

The San Diego MSA had 2.8 million residents in 2000, up 13 percent (316,000) from 1990 and 51 percent from 1980. San Diego, the largest city, had 1.2 million residents in 2000; three other cities—Chula Vista, Oceanside, and Escondido—had between 100,000 and 200,000 residents, and nine had between 50,000 and 100,000. The MSA also has seven smaller cities, only one of which had fewer than 10,000 residents in 2000. San Diego County, the MSA's sole county, had nearly 450,000 residents living in unincorporated areas in 2000. Its nearly 150,000 persons per jurisdiction average makes San Diego the least jurisdictionally fragmented among the 50 largest metro areas.

Metropolitan San Diego has lost little density in the last two decades; its urban land base grew 40 percent between 1982 and 1997 while its population grew 37 percent. The region started that period with the fifth-highest metropolitan density at 7.2 persons per urban acre, and its 7.0 persons per urban acre left it in fifth place by 1997. Confined by the Pacific Ocean on the west, the Mexican border on the south, and extensive federal and state lands on the east, the San Diego metro area is seriously constrained. About a quarter of the land is federally owned, a quarter state owned, and another seven percent owned by county and local governments, leaving just 43 percent of the land in private hands. Most development has occurred along the Pacific Ocean. That urbanized coastal strip is prevented from "joining" greater Los Angeles because the U.S. Marine Corps' Camp Pendleton blocks northward expansion. Restrictions on the conversion of habitat for endangered and threatened species has created further incentives for high-density development.

Regulatory Environment

We received responses from 11 cities and San Diego County, which together accounted for 85 percent of the population and 97 percent of the land area. It is a completely zoned, high-density-accommodating MSA, with only one or two jurisdictions (small cities) barring development above 15 dwellings per acre and none excluding our hypothetical apartment complex.



The San Diego MSA is also a growth management region. Thanks to California's Proposition 13, infrastructure control is widespread through impact fees (estimated to be in place in at least 90 percent of cities as well San Diego) and APFOs (in 35 percent of cities and San Diego County). The county and about 35 percent of cities claim an urban containment program of some kind. Building permit caps are much less common than in other California metros, with six percent of cities reporting them. All the cities and the county have incentive programs for affordable housing.



San Francisco-Oakland-San Jose, CA CMSA

Regulatory Order/Family: Reform/Growth Control

Summary

The San Francisco Bay Area is a region contained by geography and policy. Its natural features lend themselves to compact development. Public land ownership contributes less to containment in the Bay Area than in other western metro areas. Instead, public policy guides development, with state imposed limits on development near the coast and at the margins of San Francisco Bay and widespread use of municipal and county level urban growth boundaries. The region has grown compactly in part, too, because most jurisdictions (both the cities and the counties, in unincorporated areas) allow high-density development, at least according to their zoning ordinances. Impact fees are nearly universal, especially in the developing parts of the metro area. Building permit caps appear to have dwindled in popularity but still are in place in approximately 10 percent of cities and two of the nine counties.

Governance Framework and Growth Trends

With just over 7 million residents in 2000, the San Francisco-Oakland-San Jose CMSA is the fifth largest metro area. It grew 13 percent (790,000) in the 1990s and 31 percent (1.7 million) between 1980 and 2000. The CMSA has six PMSAs: Oakland (2.4 million residents in 2000), San Francisco (1.7 million), San Jose (1.7 million), Santa Cruz (255,000), Santa Rosa (460,000), and Vallejo-Fairfield-Napa (520,000). The CMSA has nine counties, 104 cities, and one combined city and county (San Francisco). San Jose, with about 900,000 residents counted in the 2000 census, is the CMSA's largest city; San Francisco had about 775,000, and Oakland 400,000. The fast growing city of Fremont, between Oakland and San Francisco, has just over 200,000 residents. Eight other cities had over 100,000 residents and 22 between 50,000 and 100,000. The metro area has 48 medium-sized cities and 23 small cities. Seven of the nine counties have over 50,000 residents in their unincorporated areas, with the two largest—Contra Costa and Sonoma—having about 150,000 each. Alameda and Santa Cruz each have 135,000 residents, and Santa Clara has about 100,000.

San Francisco is a compact metro area, with about 910,000 acres of developed land in 1997: less than two thirds the amount of developed land occupied in the Atlanta MSA. Developed land grew about 25 percent between 1982 and 1997 while population grew 22 percent, nudging the metro area's density from 7.6 to 7.5 persons per urban acre. Even with this decline, however, the metro area retained its ranking as the fourth most densely developed. With several coastal mountain ranges and the shorelines of the Pacific Ocean and San Francisco Bay, the Bay Area's geography leads to natural containment. Only 17 percent of the land area was owned by governments in 1992, but much of the land is restricted by voter imposed limitations on coastal development.

Regulatory Environment

We received responses to our survey from 60 cities and six counties, representing about 70 percent of the metropolitan area's population and land area. The largest non-respondent was the city of San



Jose. We used the responses as well as those in Sacramento to generate estimates of land use regulations for non-respondents.

Like the rest of California, the Bay Area is entirely zoned. Only an estimated three percent of jurisdictions have low-density-only zoning; perhaps four percent would not permit our hypothetical apartment development, but none of these exclusionary enclaves accounts for even one percent of the metropolitan population or land area. Over 90 percent of the jurisdictions have zoning ordinances allowing development over 15 dwellings per acre; these account for 97 percent of the metropolitan area's population.

Planning is mandatory in California, so all the respondents have a general plan. Growth management and growth control have a long history in the Bay Area in jurisdictions like Marin County, Petaluma, Livermore, and Santa Cruz County. About 90 percent of both cities and counties are estimated to have impact fees, and about a third use APFOs. Urban containment is widespread, with growth boundaries and urban service areas in place in two thirds of counties and 40 percent of cities. Permit caps are less popular than they used to be, with an estimated 10 percent of cities employing them at present; two of the nine counties also have permit caps. Consistent with state mandates for density bonuses and housing planning, about 90 percent of cities reported and 75 percent of counties reported having incentive programs to foster affordable housing development.



Seattle-Tacoma-Bremerton, WA CMSA

Regulatory Order/Family: Reform/Containment

Summary

As the largest metro area in Washington, Seattle exemplifies strong growth management. It is contained by both geography and policies, with urban growth boundaries universally in place in jurisdictions that rarely bar high-density development entirely within their boundaries. These jurisdictions predominantly use impact fees to provide adequate infrastructure, consistent with the concurrency provisions of the state growth management law; only a minority use APFOs. Since growth management was not passed until 1990, its impacts on metropolitan growth cannot yet be clearly gauged since the Natural Resources Inventory data are available only to 1997. By those statistics, however, Seattle lost about 10 percent of its density between 1982 and 1997, falling to a level almost the same as metropolitan Portland's (which began the period at a lower density than Seattle's) by 1997.

Governance Framework and Growth Trends

The six-county Seattle-Tacoma-Bremerton CMSA had 3.6 million residents in 2000, up 19 percent (580,000) from 1990 and 48 percent (1.1 million) from 1980. There are four PMSAs in the metro area: Seattle (2.4 million), Tacoma (700,000), Bremerton (230,000), and Olympia (210,000). Of the 92 cities in the CMSA, Seattle is the most populous, with 560,000 residents in 2000; Tacoma (193,000) and Bellevue (110,000) are the only other cities with populations over 100,000. Six other cities have populations over 50,000, 32 between 10,000 and 50,000, and 51 under 10,000. King, Pierce, and Snohomish counties all have over 250,000 residents in unincorporated areas, and Kitsap and Thurston have over 100,000 each. Only Island County—surrounded by Puget Sound—has fewer than 50,000 residents in unincorporated areas.

Metropolitan Seattle urbanized 265,000 acres of land between 1982 and 1997, a 50 percent increase at a time when its population grew 34 percent. Its density declined from 4.8 to 4.3 persons per urban acre, a faster density drop than Portland's that placed the two Northwest metros at practically the same net density in 1997. Seattle was the 17th densest metro area in the U.S. in both 1982 and 1997. About 30 percent of the land area is federally owned, 7 percent is state owned, and 5 percent owned by counties and cities, leaving about 56 percent in private hands: less than 44 other metro areas.

Regulatory Environment

We received responses to our survey from 31 cities and five counties, which together accounted for 85 percent of the population and 94 percent of the land area. All the jurisdictions except one (Renton) with at least 50,000 residents responded.

Washington is a growth management state, with mandates for local planning and zoning in large and fast growing counties. All the counties in the Seattle CMSA are subject to the growth management



mandate. Counties are responsible for designating urban growth areas; generally, this happens in consultation with the cities. There is no central review of plans but rather a system by which appeals to plans and development decisions may be taken to growth management hearing boards for expedited (and precedent setting) review. Washington differs from Oregon and mimics Florida in its requirement that local governments assure the concurrency of development with infrastructure capacity.

Consistent with the growth management provisions, all of Seattle's jurisdictions use zoning and have comprehensive plans; urban containment and impact fees are practically omnipresent. An estimated 6 percent of cities have low-density-only zoning, but none would entirely bar our hypothetical apartment development. Almost all the cities report having growth boundaries, and 90 percent have impact fees; an estimated two thirds have adequate public facilities ordinances. About 40 percent use incentives to promote housing affordability. None has a building permit cap. None of the counties has low-density-only zoning or would bar the prototype apartment complex. All of them have urban growth boundaries and impact fees; only about 40 percent have APFOS. One or two of the counties have incentive programs for affordable housing.

The dominance of impact fees over APFOs may be a consequence of Washington's concurrency definition. Washington's growth management law allows up to six years between new development for housing or jobs and the delivery of adequate public facilities to accommodate growth. This lag accommodates infrastructure construction funded by impact fees, which are levied at the time building permits are issued but often cannot immediately fund new increments of infrastructure.



St. Louis, MO-IL MSA

Regulatory Order/Family: Traditional/Middle America

Summary

The St. Louis metropolitan area is very fragmented, with 239 incorporated units and 12 counties. Most municipal and county governments are quite accommodating to growth, with the exception of a minority of municipalities that practice exclusionary zoning. Growth management and urban containment are practically unknown in the region and affordable housing programs are not a priority—probably because the region's housing has historically been quite affordable.

Governance Framework and Growth Trends

About 2.6 million people live in the St. Louis MSA, with 2 million in 7 counties and 156 cities and villages on the Missouri side of the Mississippi River and 600,000 in 83 cities and villages and 5 counties on the Illinois side. The Illinois counties are divided into 67 townships, but for the most part the counties regulate land use, not the townships. On average, the Missouri cities and villages have just under 15,000 residents and 7 square miles, whereas those in Illinois average only 4,200 residents and 3 square miles. Several of the counties in Missouri are quite urbanized, with a total of 680,000 residents in unincorporated areas (one-third of all residents on the Missouri side) as compared with just under 150,000 outside the villages and cities on the Illinois side (one-quarter of the residents on the Illinois side).

The developed land base of metropolitan St. Louis increased 22 percent between 1982 and 1997 while the metropolitan population grew less than 6 percent. Consequently, density in the metro area dropped from 3.8 to 3.3 persons per urbanized acre. Another illustration of decentralization was rapid population decline in the cities of St. Louis, which lost 50,000 residents in the 1990s, and East St. Louis which lost about 10,000. About 6 percent of the land in the St. Louis metro area is publicly owned, mostly by the federal and state governments, creating no barriers to urban expansion.

Regulatory Environment

Many of the jurisdictions in the center of the region (including the city of St. Louis) either did not respond to our survey or were not surveyed because of their small populations, forcing us to rely on some inferences.

Almost all the cities and villages in metropolitan St. Louis have zoning, and it tends to be exclusionary with 44 percent of the Missouri cities and 62 percent of the Illinois cities limiting density to fewer than 8 dwellings per acre. These cities and villages tend to be smaller than average but they still contain 16 percent of the incorporated population in Missouri and a third of that in Illinois. About 40 percent of the Missouri cities and 30 percent of the Illinois cities would not allow our hypothetical apartment development. Only 28 percent of the Missouri cities accommodate density higher than 15 dwellings per acre, but these account for just over 60 percent of the city population



(about 830,000 residents). Densities are typically lower on the Illinois side, with 30 percent of the residents (130,000 or so) living in the handful of cities zoned for over 15 dwellings per acre.

All five of the counties we surveyed in Missouri have zoning. At least two of the five in Illinois have zoning; two counties did not respond to our survey and one definitely does not zone.¹ St. Louis County, with an unincorporated population of over 330,000 is the second most populous area local government in the region (after St. Louis city). For all intents and purposes, it manages land like a large suburb, allowing densities over 30 dwellings per acre. Only one county in each state—at the extreme west and east of the region—has very low density zoning and would bar our hypothetical apartment development. An estimated 60 and 90 percent of the cities in Missouri and Illinois, respectively, have comprehensive plans, as do 4 of 5 counties in Missouri and 2 of 3 in Illinois.

Other land use mechanisms are uncommon in metropolitan St. Louis and—like Kansas City—those that do exist are confined mainly to infrastructure measures. About a quarter of the Missouri cities and 60 percent of the Illinois cities have impact fees. APFOs are less common overall—between 15 and 20 percent of the Missouri cities, and fewer than 10 Illinois cities, have them—but these are the largest cities. Only St. Louis County reported having impact fees and based on county size alone, we expect another one or two non-responding counties to have fees or APFOs. No counties and only a few cities reported having a containment program of any kind, and only a handful of cities (and no counties) reported an incentive based affordable housing program.

¹ We decided not to survey two additional mostly rural counties, Lincoln and Crawford, which sit at the far edges of metropolitan St. Louis, after we obtained information that neither had residential land use regulations of the sort that pertained to this research.



Tampa-St. Petersburg-Clearwater, FL MSA

Regulatory Order/Family: Reform/Growth Management

Summary

Tampa shares important features of all Florida metropolitan areas thanks to the state's strong growth management laws. It is totally planned and zoned, and zoning is rarely if ever used to exclude high-density development from entire jurisdictions. Growth management is universal as well via controls on infrastructure access; developers must pay to grow or else seek out a location where there is slack capacity.¹ Metropolitan Tampa's counties also use growth boundaries to contain growth, which may have helped reduce sprawl somewhat more than was the case in Orlando in the 1980s and 1990s.

Governance Framework and Growth Trends

The Tampa-St. Petersburg-Clearwater MSA had 2.4 million residents in 2000, up 16 percent (330,000 residents) from 1990. The metro area has four cities over 50,000 residents—Tampa (300,000 residents), St. Petersburg (250,000), Clearwater (110,000), and Largo (70,000)—but its most populous jurisdiction is Hillsborough County with nearly 650,000 people living in unincorporated areas. Pasco and Pinellas Counties both had over 250,000 residents in their unincorporated areas in 2000, and the fourth county, Hernando, had about 125,000. Consequently, only 43 percent of the population in 2000 lived in municipalities. Aside from the large jurisdictions, there are 11 medium-sized and 20 small ones which together accounted for 13 percent of the population and 5 percent of the land area.

Tampa's urbanized land base grew nearly 50 percent between 1982 and 1997 while its population grew 35 percent. Its density dropped from 4.1 to 3.7 persons per urbanized acre, a slower-than-average decline that helped it climb from 30th to 26th densest MSA in the top 50. About 90 percent of the land area was privately owned in 1992, with most of the public land in the hands of state government.

Regulatory Environment

We received responses from eight cities and three counties, which accounted together for 77 percent of the metropolitan population and 68 percent of the land area. We developed estimates for the other jurisdictions based on responses from both Tampa and elsewhere in Florida.

Metropolitan Tampa is entirely zoned, but exclusionary zoning is very rare, with no jurisdictions estimated to have low-density-only zoning; one or two of the small cities might bar our hypothetical apartment development, but none of the respondents would. Three quarters of the cities and three of

¹ James C. Nicholas and Ruth L. Steiner, "Growth Management and Smart Growth in Florida." *Wake Forest Law Review* 35,3 (Fall) (2000): 645–670.



the four counties have a zoning category allowing at least 15 dwellings per acre. About 80 percent of the metro area's population and land area are in such jurisdictions.

Like all of Florida, Metro Tampa operates under state growth management rules that require comprehensive planning and mandate concurrency between development and infrastructure. Consequently, all the jurisdictions have plans, almost all have an APFO, and 88 percent have impact fees of some kind. Permit caps are not used in Florida, and only one or two jurisdictions have imposed moratoria. Finally, about one-third of the jurisdictions with 70 percent of the residents are estimated to use an incentive based affordable housing program of some kind.



Washington-Baltimore, DC-MD-VA-WV CMSA

Regulatory Order/Family: Traditional/Middle America (Virginia portion)
Reform/Containment-Lite (Maryland portion)¹

Summary

Relative to many others metropolitan areas—especially those in the south—the Washington-Baltimore CMSA can be considered a moderately strong growth management region. It has 18 populous counties and six large cities that—at least on the north side of the Potomac River—make widespread use of growth boundaries, impact fees, and APFOs to control the extent of development and to assure infrastructure adequacy. These local governments almost all allow high-density development in at least some locations. Maryland jurisdictions are responsible for most of these reforms partly because Maryland’s legal framework accommodates local growth management much more than Virginia’s. Growth has been most rapid, however, in Virginia and has extended into West Virginia as new employment centers have been established in the westernmost counties.

Governance Framework and Growth Trends

The Washington-Baltimore CMSA is the nation’s fourth largest, with over 7.6 million residents spread across three states—Maryland, Virginia, and West Virginia—and the District of Columbia. The CMSA’s population rose 13.1 percent in the 1990s after a 16 percent increase in the 1980s; overall, it added 1.8 million people between 1980 and 2000. Within the CMSA there were three PMSAs in 2000: Washington, with 4.9 million residents; Baltimore, with 2.6 million; and Hagerstown (MD), with 130,000. Recent growth has been strongly focused in the Washington, DC, PMSA, especially the Virginia cities and counties, which accounted in 1980 for just 22 percent of the CMSA’s population but captured 48 percent of the new residents between 1980 and 2000. The population of the District of Columbia itself declined from 638,000 to 572,000 between 1980 and 1990, and that of Baltimore dropped from 787,000 to 651,000. The most populous jurisdictions are three counties: Fairfax (VA), with over 900,000 residents; Baltimore (MD), with 750,000, and Montgomery (MD), with 740,000. Three other counties have populations exceeding 250,000, and one of these, Prince George’s (MD), is more populous than neighboring DC. Four other counties have over 100,000 residents in unincorporated areas. In all, 18 counties and 6 cities have over 50,000 residents, accounting together for 89 percent of the population and 75 percent of the land area. There are 100 small jurisdictions but they account for very little population and, in the Maryland municipalities at least, have little or no land use decision making power.

Statistics on density for metropolitan Washington are skewed downward by the absence of the District of Columbia and Arlington, VA from the National Resources Inventory. Yet even missing two of the most urbanized jurisdictions, the CMSA is among the nation’s densest. It urbanized nearly 490,000 acres of land between 1982 and 1997, a 45 percent increase when the population (again excluding DC and Arlington) grew 27 percent. But because development outpaced population growth, the CMSA’s density dropped 13 percent, and its rank dropped from 15th to 16th densest in

¹ Since the District of Columbia represents only one jurisdiction, it was not part of the cluster analysis and not assigned a regulatory order.



the nation. The Maryland counties are markedly denser than those in Virginia (4.7 vs. 4.0 persons per urban acre), but Maryland lost more density between 1982 and 1997 (12 percent vs. 6.5 percent), with much of the loss being attributable to population decline in Baltimore City. The two West Virginia counties are much less dense and lost density faster than the Maryland and Virginia counties did. An estimated 12 percent of the land (outside Washington, DC and Arlington) was owned by government in 1992, with about 4.5 percent federally owned and the balance split between county and state governments.

Regulatory Environment

We received responses from the District of Columbia, 11 Maryland counties, 8 Virginia counties, and one West Virginia county. Aside from the District, 18 cities responded to the survey, 9 of them in Maryland, 9 in Virginia, and 1 in West Virginia. These jurisdictions account for 92 percent of the population and 82 percent of the land area. Because we lacked information about planning practices in the smallest Virginia municipalities, we did not estimate land use practices for these 23 jurisdictions, which account for about 42,000 residents (2000) and 24 square miles of land area.

Almost all the jurisdictions in the CMSA have zoning; the only exception is one of the West Virginia counties. Exclusionary zoning is rare, exercised by only 3 percent of the jurisdictions accounting for 2 percent of the population and 4 percent of the land area. Only 4 percent of the jurisdictions would exclude our prototype apartment development; these tend to be thinly populated counties in Virginia and Maryland. Two thirds of the jurisdictions have a residential density category allowing density to exceed 15 dwellings per acre, with slightly higher shares in Maryland than in Virginia; these jurisdictions account for 84 percent of the population and 56 percent of the land area.

All the jurisdictions in all three states and the District of Columbia have comprehensive plans. Here, however, the states diverge. Despite recent changes, Maryland has one of the nation's most notable traditions of growth management. Maryland's Smart Growth Act requires county level plans that include "priority funding areas" (PFAs); the state reviews these plans and agrees to direct infrastructure expenditures only to PFAs designated either by state legislation or by approved county plans.² The other jurisdictions do not have a state growth management system in which the state reviews local plans.

Four of five Maryland counties have an urban containment program of some kind; presumably these systems often correspond with their PFA designations. All have APFOs, and about half impose impact fees.³ One in five Maryland counties uses a permit cap, and 45 percent have imposed a development moratorium in recent years. Maryland cities are somewhat less likely to impose growth management measures; half have containment, half have an APFO, and 20 percent impact fees. About 20 percent have imposed moratoria, and a small number (less than 5 percent) have a permit cap.

² James R. Cohen, "Maryland's 'Smart Growth': Using Incentives to Combat Sprawl," in *Urban Sprawl: Causes, Consequences & Policy Responses*, G. Squires, ed. (Washington: Urban Institute Press, 2002).

³ A recent study highlights the importance of explicitly connecting APFOs to overall state growth management policies. See: National Center for Smart Growth Research and Education, "Adequate Public Facilities Ordinances in Maryland" (College Park: University of Maryland, 2006).



Virginia's laws permit its local jurisdictions much less access to other land use tools, barring APFOs and permit caps and imposing stronger limits on moratoria and impact fees. An estimated 40 percent of the counties have urban containment programs of some kind, but only 16 percent have impact fees. Cities are more empowered, and more active; about 35 percent have a containment program, and three quarters impose impact fees. None reported moratoria.

Jurisdictions in Maryland and Virginia resemble one another somewhat more in their use of regulatory incentives to promote affordable housing; a third of the jurisdictions in Maryland and 40 percent of those in Virginia have some such program. Maryland's programs tend to follow the inclusionary zoning model, which Virginia does not allow, but in both places local jurisdictions use density bonuses (all the Maryland jurisdictions with programs, a little more than half the Virginia jurisdictions with programs).⁴

The jurisdictions in West Virginia report none of these land use tools.

⁴ Karen Destorel Brown, "Expanding Affordable Housing Through Inclusionary Zoning: Lessons From the Washington Metropolitan Area" (Washington: Brookings, 2001). Available at <http://www.brookings.edu/metro/publications/inclusionary.htm>.



West Palm Beach-Boca Raton, FL MSA

Regulatory Order/Family: Reform/Growth Management

Summary

The West Palm Beach MSA shares important features of all Florida metropolitan areas thanks to the state's strong growth management laws. It is totally planned and zoned, and zoning is rarely used to exclude high-density development from entire jurisdictions. Most new development occurs in unincorporated portions of Palm Beach County, where nearly half of residents currently live. Growth management is universal as well via controls on infrastructure access; developers must pay to grow or else seek out a location where there is slack capacity.¹ Palm Beach County also uses an urban service boundary coupled with a tiering system to contain growth. When combined with the natural containment imposed by the Atlantic Ocean and the Everglades and substantial state land ownership, these policies have helped increase density in the metro area as it nearly doubled in population between 1980 and 2000. Its density remains low, 31st out of the 50 largest metros; the prospects for continued improvements in compactness will depend in part upon the powerful County's willingness to discourage low density growth.

Governance Framework and Growth Trends

The West Palm Beach-Boca Raton MSA had 1.1 million residents in 2000, up 267,000 (31 percent) from 1990. In the two decades between 1980 and 2000, it almost doubled in population. Nearly half the population lives in unincorporated parts of the MSA's single county, Palm Beach; four cities (West Palm Beach, Boca Raton, Boynton Beach, and Delray Beach) have between 60,000 and 85,000 residents. Another 11 cities had between 10,000 and 50,000 residents in 2000.

Like the neighboring Miami metropolitan area to the south, the population of West Palm Beach grew faster than its developed land area between 1982 and 1997: 66 percent versus 45 percent. Its density was quite low at the beginning of the period, however, at just 2.9 persons per urbanized acre, ranking 45th among the 50 largest metropolitan areas. By 1997, it had climbed to 31st with 3.4 persons per urbanized acre. Like Miami, West Palm Beach is bounded on the west by the Everglades and on the east by the Pacific Ocean. Twenty percent of its land area is owned by the state of Florida and another 15 percent by the federal government. This containment by public lands and natural features undoubtedly encouraged the region's density to increase in the 1980s and 1990s, but public policy played a role as well.

Regulatory Environment

Palm Beach County and 10 of the 15 cities with over 10,000 residents responded to our survey; West Palm Beach, the largest city, did not respond. Even so, the respondents account for 81 percent of the population and 93 percent of the land area in the county.

¹ James C. Nicholas and Ruth L. Steiner, "Growth Management and Smart Growth in Florida." *Wake Forest Law Review* 35,3 (Fall) (2000): 645–670.



The West Palm Beach MSA is entirely zoned. One or two cities have low-density-only zoning; an estimated 10 percent of the cities would bar our hypothetical apartment development. About two thirds of the cities have a zoning category allowing at least 15 dwellings per acre, but the county's highest-density residential zone allows between 8 and 15 dwellings per acre. In all, then, zoning is slightly less permissive in West Palm Beach than in most of the other Florida metro areas, with a little more exclusionary zoning and a little less permissive zoning at the high-density end.

Like all of Florida, the West Palm Beach metro area operates under state growth management rules that require comprehensive planning and mandate concurrency between development and infrastructure. Consequently, all the jurisdictions have plans, almost all have an APFO, and 90 percent have impact fees of some kind. Since 1999, Palm Beach County has operated under a tiering program that establishes an urban service area boundary, within which there are urban and suburban tiers and outside of which there are four other tiers. Two of these, exurban and rural, allow large lot residential development; the other two, agricultural and glades, are intended to protect resource lands and environmentally sensitive lands mostly in the western part of the county.² Permit caps are not used in Florida, and only one or two jurisdictions have imposed moratoria. Finally, about 35 percent of the jurisdictions with three quarters of the residents are estimated to use an incentive based affordable housing program of some kind.

² See: Planning, Zoning and Building Department "Managed Growth Tier System Objectives & Policies," Palm Beach County, undated. Available at <http://www.pbcgov.com/pzb/planning/mgplanning/overview.htm>.