Chapter 13

U.S. Population and Employment Trends and Sprawl Issues

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Introduction

This paper has two goals. First, we examine some of the major metropolitan trends in population and employment over the past thirty years. These trends show that, despite anecdotal talk about central city revivals, suburbanization and exurbanization continue to be the dominant story in U.S. settlement trends. Second, we make a few key observations about selected sprawl-related issues: smart growth, New Urbanism, and the growth of private communities.

U.S. Population and Employment Trends

Growth controls and efforts to influence the patterns of settlement and development continue to gain strength throughout the United States, but with little more than a marginal impact. A variety of data sources help to establish this point. The recently released 2000 Census of Population reports a ten-year national population growth of slightly more than 13 percent. Most of the large cities did not keep up with the national pace although most of their suburbs grew at least as fast, if not faster. Of the top 50 cities, only 13 significantly beat the national growth trend (only four in the top 20); predictably, all of these were in the Sunbelt states. None of this is really surprising because city-to-suburb and frostbelt-to-sunbelt migrations have been going on for decades. Both are explained by the lifestyle choices made by millions of households, facilitated by new technologies that are dramatically reducing communication costs, and to a lesser extent, transportation costs. Indeed, the information technology revolution has resulted in such a deep plummeting of communications costs that some commentators have challenged the view that there is a case for continued agglomeration and spatial concentration.

The details are a little too complex to reduce to one simple story. Table 13.1 compares some recent metropolitan area employment trends with concurrent population trends. These are not available (unfortunately) for exactly the same geographic units. With respect to population, we note that areas outside the

central cities usually grew the fastest. The same pattern is apparent for all of the size classes and geographical categories (see the bottom of Table 13.1). There were also a few exceptions: population growth in eight CBDs of the top-20 metropolitan areas outpaced both their surrounding central cities as well as the surrounding suburbs. Yet, CBD population growth accounted for a very small share of metropolitan area growth even in these eight places.

For seven of these eight metropolitan areas, suburban county employment growth was faster than core county job growth (San Diego is not counted because the Metropolitan Statistical Area [MSA] does not have a suburban county). Almost everywhere, suburban counties added jobs at a faster rate than their core counties. Downtown (CBD) job growth data are from County Business Patterns zip code files which limit us to a three-year period (1994-1997). Also, these CBD definitions vary from the ones used to measure ten-year population growth. Yet metropolitan area job growth (County Business Patterns definitions) for the 19 areas covered for the three-year period was 8.7 percent. Only seven CBDs grew faster.

To try to make sense of these patterns, we now focus on trends. We examine the 31-year series made available by the Regional Economic Information System (REIS) from the Bureau of Economic Analysis (BEA, U.S. Department of Commerce) for the 3132 counties of the U.S. that describe population and employment and income for seven major economic sectors for all counties over the years 1969-1999. The employment data cover both full-time and part-time jobs.

We used geographic divisions that would help us to study the evolution of agglomeration economies. People may choose to live and work in clusters for many reasons. They may enjoy social interaction with others and/or they may profit from economic interactions, e.g. in markets as buyers and as sellers. Economists and others have made much of agglomeration economies as a source of economic growth because ideas are spawned and developed as a result of interactions facilitated by proximity (geographic features that contribute to connectivity also favour the subsequent spread of ideas; Diamond, 1999). Economic development and urbanization have reinforced each other over the years. Yet the operational definition of proximity continues to change. Social coordination via markets (transactions) has been facilitated when distances are short; social coordination via the exchange of ideas is also improved. The latter has both economic and community consequences. But these may be costly because clustering, if too dense, can result in congestion. The benefits of dispersal are expanded by increased connectivity, i.e., cheaper modes of moving people, goods and (especially) ideas. The marginal costs of moving the latter are now close to zero. This is confirmed by our analysis that reveals substantial decentralization, much of it away from metropolitan areas in general and especially from their cores.

We divided the 831 metropolitan counties five ways: i. the core counties of the largest (i.e. > 3 million) metropolitan areas (MSAs or Consolidated MSAs); ii. their suburbs (noncore counties); iii. the core counties of middle-sized (1-3 million) metropolitan areas; iv. their suburbs; and v. those counties constituting the

Table 13.1 US metro growth performance in the 1990s (%)

	1990-2000 Pop Growth						1990-1999 Job Growth		1994-1997 Job Growth
METRO AREA(S)	Metro	Core Central City	All Other CC's > 100k Pop	Rest of Metro	Core CBD	CBD Share of Metro Growth	Private Jobs Metro	Private Jobs Noncore Counties	Core CBD***
New York--Northern New Jersey--Long Island, NY--NJ--CT--PA CMSA	8.40	9.4	0.8	7.20	**10.9**	1.02	8.0	**9.1**	7.4
Los Angeles--Riverside—Orange County, CA CMSA	12.70	6.0	13.9	**14.90**	5.7	0.11	7.4	**21.3**	-0.8
Chicago--Gary--Kenosha, IL—IN--WI CMSA	11.10	4.0	20.0	14.40	**30.0**	1.83	15.1	**32.7**	2.2
Washington--Baltimore, DC--MD--VA--WV CMSA	13.10	-5.7	-11.5	**18.60**	4.0*	0.12	15.7	**18.0**	6.0
San Francisco--Oakland--San Jose, CA CMSA	12.60	7.3	12.1	13.80	**32.3**	1.35	18.8	**21.1**	13.8
Philadelphia--Wilmington--Atlantic City, PA--NJ--DE--MD CMSA	5.00	-4.3	n.a.	**8.40**	4.9	1.24	9.2	**13.9**	-6.2
Boston--Worcester--Lawrence, MA--NH--ME--CT CMSA	6.70	2.6	3.8	**7.50**	4.7	1.00	13.3	**14.1**	10.1
Detroit--Ann Arbor--Flint, MI CMSA	5.20	-7.5	-4.5	**9.10**	2.1	0.28	14.8	**24.2**	-9.7
Dallas--Fort Worth, TX CMSA	29.30	18.0	22.5	**37.30**	28.2	0.28	33.6	**40.9**	-7.7
Houston--Galveston--Brazoria, TX CMSA	25.20	19.8	n.a.	**29.30**	7.6	0.06	27.4	**43.3**	1.6
Atlanta, GA MSA	38.90	5.7	n.a.	**44.00**	25.1	0.37	42.3	**51.0**	37.6
Miami--Fort Lauderdale, FL CMSA	21.40	1.1	2.0	25.20	**31.6**	0.70	21.5	**30.6**	-24.1
Seattle--Tacoma--Bremerton, WA CMSA	19.70	9.1	15.0	22.7	**54.4**	1.14	23.7	**27.8**	3.6
Phoenix--Mesa, AZ MSA	45.30	34.3	35.3	**68.8**	-9.1	-0.06	**52.2**	28.8	12.2

Minneapolis--St. Paul, MN--WI MSA	16.90	3.9	-12.2	**26.2**	-16.6	-1.40	24.1	**31.1**	9.4
Cleveland--Akron, OH CMSA	3.00	-5.4	-2.7	5.6	**32.2**	2.71	13.9	**22.4**	9.2
San Diego, CA MSA	12.60	10.1	22.9	13.9	**16.1**	0.78	22.4	n.a.	3.0
St. Louis, MO--IL MSA	4.50	-12.2	n.a.	**7.6**	-17.5	-1.44	**12.5**	11.3	2.9
Denver--Boulder--Greeley, CO CMSA	30.40	18.6	n.a.	34.0	**51.4**	0.24	40.7	**51.7**	10.1
Tampa--St. Petersburg--Clearwater, FL MSA	15.90	8.4	5.8	**19.6**	11.6	n.a.	**32.7**	26.1	n.a.
TOP 10 Metropolitan Areas	11.50	6.7	9.0	**13.7**	11.3	0.65	13.5	**17.8**	5.6
TOP 20 Metropolitan Areas	13.70	7.6	9.5	**16.5**	11.6**	0.52	17.1	**20.6**	8.7
TOP 50 Metropolitan Areas	14.70	9.0	9.9	**17.5**	n.a.	n.a.	18.4	**22.8**	n.a.
SUNBELT (30)	22.00	15.6	15.8	**25.6**	n.a.	n.a.	22.0	**31.7**	n.a.
FROSTBELT (20)	8.40	3.4	-2.0	**11.00%**	n.a.	n.a.	8.3	**17.3**	n.a.
FROSTBELT except New York	8.40	-0.6	-3.1	**11.80%**	n.a.	n.a.	14.7	**21.3**	n.a.

*Baltimore CBD growth = 5.1% ** no CBD data for Tampa-St. Petersburg ***Defined by zip codes

Sources: 1) MSA and cities population data from www.census.gov; 2) CBD population data from E.L. Birch (forthcoming) "Having a Longer View of Downtown" *Journal of the American Planning Association*; 3) REIS employment data from U.S. Department of Commerce, Bureau of Economic Analysis; 4) CBD employment data from *Zipcode County Business Patterns*.

small (less than 1-million) metropolitan areas. All data aggregations based on political boundaries are somewhat problematic. With this in mind, we often refer to noncore areas as "suburbs," although it is clear that there are also many areas in core counties that exhibit suburban characteristics.

The nonmetropolitan counties were divided into seven groups, using the United States Department of Agriculture's (USDA's) 1993 Urban Influence Codes. If counties are adjacent to metropolitan areas, there is a four-way partition: adjacent to larger metropolitan areas (defined for the nonmetropolitan analysis as larger than 1 million) or to small metropolitan areas, with or without a city of 10,000-plus people. If counties are *not* adjacent to a metropolitan county, there are three types: with a city of 10,000 or more, with a city of 2,500 to 9,999, or without an urban place greater than 2,500. The first four of these nonmetro counties may be considered as exurban while the last three may be defined as rural.[1]

Long-established trends in U.S. settlement and job distribution patterns are well known, and include the following:

i. The westward movement of population and employment, in more recent decades to the Sunbelt.
ii. Persistent rural-urban migration of jobs and people to the cities.
iii. Suburbanization (and, more recently, exurbanization) out of cities.

However, the more detailed analysis made possible by the huge REIS data set (over one million observations on employment alone) suggests a more complex picture. Although only the highlights are discussed here, they are revealing. In the tables that follow, the highest growth rates in each period are marked in bold, while those that exceed the national rate for the period are shaded.

[1]Spatial economic analysis is usually constrained by data problems. The analysis in this paper is based on County-level data. The discussion would clearly benefit from data for smaller spatial units. But these are only available sporadically, for example, from the decennial Census and or from the quinquennial Economic Censuses. County Business Pattern data at the zip code level are available on an annual basis but only since 1994 (see Glaeser and Kahn, 2001, for a use of zip code data with similar results to those found in this research). The zip code files offer no sectoral detail and less coverage than the REIS data used in this paper (for example, nonfarm proprietors are absent from the CBP totals). Moreover, they suffer from numerous zip code redefinitions, making them much harder to use. Finally, the recent change in industrial classifications from SICs to the NAICS (North American Industrial Classification Scheme), and the difficulty of constructing correspondence tables, limit investigations (especially time series analysis) that require sectoral detail.

Table 13.2 U.S. county growth rates by area group, 1969-1999 (%)

Area Group	No. of Counties	Pop.	Private Emp.	Proprietor Emp.	Services	FIRE	Construc-tion	Retail	Whole-sale	Transp. &Public Utilities	Manu-facturing
Metro Areas > 3 mil											
Core	13	0.52	1.25	3.07	2.96	1.45	1.20	1.14	0.38	0.79	-1.44
Non-Core	154	1.18	2.58	3.44	4.4	3.33	2.80	2.42	3.09	2.09	-0.44
1 mil < Metro Areas < 3 mil											
Core	34	1.1	2.57	3.43	4.38	3.11	2.57	2.53	1.88	2.12	-0.43
Non-Core	175	**1.63**	**3.09**	**3.6**	**4.76**	**3.84**	**3.76**	**3.4**	**3.79**	**2.33**	0.59
Metro Areas < 1 mil	455	1.1	2.37	2.79	3.89	2.73	2.56	2.71	2.14	1.83	-0.01
Non-Metro Areas											
Adjacent to Large MA											
with a City > 10,000	62	1.04	2.16	2.15	3.44	2.32	2.84	2.48	2.91	1.57	0.52
without a City > 10,000	122	1.22	2.43	1.80	3.90	3.01	2.94	2.37	3.33	2.05	0.85
Adjacent to Small MA											
with a City >10,000	182	0.75	1.87	1.70	3.13	2.19	2.30	2.27	2.43	1.18	0.32
without a City > 10,000	621	0.89	2.08	1.28	3.04	2.3	2.80	2.05	2.63	1.81	0.78
Not Adjacent to a MA											
with a City >10,000	225	0.73	2.21	1.82	3.34	2.19	2.28	2.48	2.36	1.30	0.75
with a City of 2,500 - 9,999	560	0.58	2.03	1.24	3.03	2.27	2.21	1.99	2.66	1.47	0.95
without a City	529	0.27	1.92	0.65	2.85	1.98	2.22	1.22	3.17	1.92	**0.96**
U.S. Total	3,132	1.02	2.25	2.67	3.85	2.65	2.49	2.35	2.03	1.70	-0.19

* 1993 USDA Urban Influence Codes were used to determine which non-MSA group the various non-metro counties belong to; 1998 population data and 1998 MSA definitions were used to determine which counties are MSAs and which metro category each belongs to.

** *Source* : Calculated from "Regional Economic Information System 1969-1999", Bureau of Economic Analysis, US Department of Commerce, May 2001.

Table 13.2 shows that much of the thirty-year population and job growth took place in the suburbs of the mid-sized metropolitan areas. The pattern held for each major sector except manufacturing which is known to have been de-urbanizing for many years (Carlino, 1985)[2]. Manufacturing job growth was highest in the rural counties. As may be expected, wholesale employment grew along with manufacturing although it did not de-urbanize, growing beyond the national pace everywhere except the core counties of large and mid-sized metropolitan areas. All of the major sectors' growth rates in the core counties of the largest metropolitan areas lagged their national growth rates.

Population growth was faster than national growth in the suburbs of the largest metropolitan areas, in the core counties of the largest metropolitan areas, in the small metropolitan areas and in exurban counties adjacent to the larger metropolitan areas. It also lagged in the core counties of the largest metropolitan areas. There is clearly a pattern of continued dispersion.

The literature on the geography of U.S. population growth has reported various cycles of deconcentration and re-urbanization over the past 30 years. The 1970s were thought to be a time of deconcentration with nonmetropolitan growth rates surpassing metropolitan rates. This was reversed in the 1980s reported as a time of urban revival. Furthermore, many have pointed to recent years as a period of central city revitalization.

We found that there have been distinct cycles of employment growth in which, either the metro counties or the non-metro counties alternatively dominated (Figure 13.1). Applying our more detailed categorization of counties, Table 13.3 shows that the most recent period, 1995-99, continues the pattern of suburban-exurban dominance and the relative decline of the core counties of the largest metros. Table 13.4 shows that the same is true for private sector job growth. Suggestions that growth controls have made a difference in recent years are not substantiated

Another recent vintage data source, the 1997 Economic Census, includes employment by place-of-work data for smaller spatial units than counties. As already mentioned, however, changes in the industrial classification system make it difficult to make inter-temporal comparisons. Looking at the 1997 data, however, shows that the top-50 central cities accounted for only 26 percent of their metropolitan areas' manufacturing jobs. For wholesale trade, retail trade and services, the respective proportions were 32 percent, 26 percent and 34 percent. In contrast, Mieszkowski and Mills (1993) report that in the 1950s 70 percent of all metropolitan area jobs were in the central cities.

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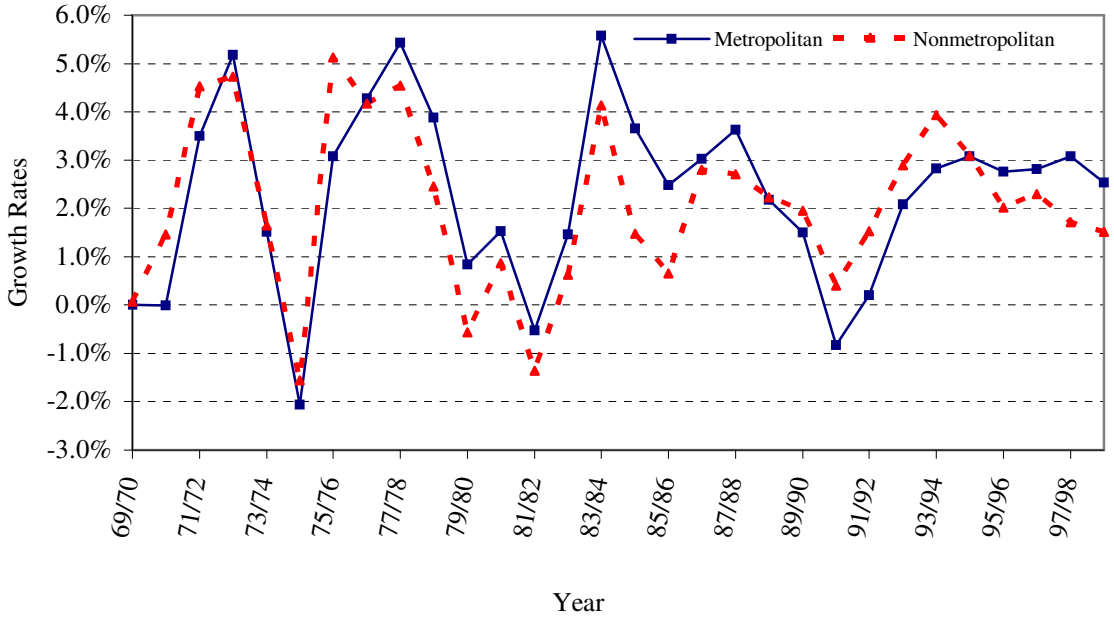
[2] In 1999, manufacturing led all sectors in the volume of ecommerce shipments (www.census.gov/estats).



* 1998 MSA definitions were used.

* * Source : Calculated from "Regional Economic Information System 1969-1999", Bureau of Economic Analysis, US Department of Commerce, May 2001.

Figure 13.1 U.S. private employment growth rates, metropolitan and nonmetropolitan counties, 1969-1999

Table 13.3 U.S. private employment growth rates, 1969-1999 (%)

Area Group	No. of Counties	'69-'99	'69-'76	'76-'88	'88-'95	'95-'99
Metro Areas > 3 mil						
Core	13	0.52	0.18	0.7	0.52	0.59
Non-Core	154	1.18	1.07	1.21	1.19	1.25
1 mil < Metro Areas < 3 mil						
Core	34	1.1	0.89	1.2	1.19	1.02
Non-Core	175	**1.63**	**1.84**	**1.49**	**1.67**	**1.63**
Metro Areas < 1 mil	455	1.1	1.47	1.01	1.1	0.73
Non-Metro Areas						
Adjacent to Large MA						
with a City > 10,000	62	1.04	1.17	0.92	1.18	0.97
without a City > 10,000	122	1.22	1.47	0.95	1.26	1.5
Adjacent to Small MA						
with a City >10,000	182	0.75	1.25	0.58	0.69	0.51
without a City > 10,000	621	0.89	1.27	0.66	0.89	0.91
Not Adjacent to a MA						
with a City >10,000	225	0.73	1.3	0.56	0.69	0.31
with a City of 2,500 - 9,999	560	0.58	1.23	0.3	0.54	0.38
without a City	529	0.27	0.74	-0.06	0.29	0.36
U.S. Total	31,322	0.73	1.3	0.56	0.69	0.31

* 1993 USDA Urban Influence Codes were used to determine which non-MSA group the various non-metro counties belong to; 1998 population data and 1998 MSA definitions were used to determine which counties are MSAs and which metro category each belongs to.

** *Source* : Same as Table 13.2

Table 13.4 U.S. population growth rates, 1969-1999 (%)

Area Group	No. of Counties	'69-'99	'69-'76	'76-'88	'88-'95	'95-'99
Metro Areas > 3 mil						
Core	13	0.52	0.18	0.70	0.52	0.59
Non-Core	154	1.18	1.07	1.21	1.19	1.25
1 mil < Metro Areas < 3 mil						
Core	34	1.10	0.89	1.2	1.19	1.02
Non-Core	175	**1.63**	**1.84**	**1.49**	**1.67**	**1.63**
Metro Areas < 1 mil	455	1.10	1.47	1.01	1.1	0.73
Non-Metro Areas						
Adjacent to Large MA						
with a City > 10,000	62	1.04	1.17	0.92	1.18	0.97
without a City > 10,000	122	1.22	1.47	0.95	1.26	1.5
Adjacent to Small MA						
with a City >10,000	182	0.75	1.25	0.58	0.69	0.51
without a City > 10,000	621	0.89	1.27	0.66	0.89	0.91
Not Adjacent to a MA						
with a City >10,000	225	0.73	1.3	0.56	0.69	0.31
with a City of 2,500 - 9,999	560	0.58	1.23	0.3	0.54	0.38
without a City	529	0.27	0.74	-0.06	0.29	0.36
U.S. Total	3,132	1.02	1.12	0.98	1.04	0.93

* 1993 USDA Urban Influence Codes were used to determine which non-MSA group the various non-metro counties belong to; 1998 population data and 1998 MSA definitions were used to determine which counties are MSAs and which metro category each belongs to.

** *Source*: Same as Table 13.2

Selected Sprawl Issues

Overview

Urban sprawl has become a strongly pejorative term among urban analysts.[3] The term remains vague and lacks specificity. Academic critics presume market failures and want people to live at higher densities, but never say how high. A key problem is that private mobility is the near universal choice and, as always, settlement patterns respond to the dominant modes of transportation. Dispersed settlement patterns, in turn, increase the demand for personal transportation, and so forth.

If there are significant resulting externalities, these can be dealt with directly without contravening lifestyle choices. However, there is a widespread political aversion to the use of market mechanisms because rationing via the price mechanism challenges the natural impulse of many politicians to be seen as progressive redistributors. They, therefore, tend to avoid pricing at almost all costs.[4]

This description of household choice says nothing about the locational preferences of industry. Yet, the industry preference for high-density facilities has also been waning. Once tied to rail yards, seaports or other transhipment points, firms can now choose from a wider array of sites given the ubiquitous access made possible by the widespread use of trucks on the extensive highway network. Declining communications costs have reinforced these trends. The inter-firm agglomeration economies that were once available only within areas of close proximity to other firms are now available over a much larger spatial range. The various centrifugal pulls on firms and residences are complementary. Because of this, households do not have to accept wage reductions in order to live in the suburbs, as the standard urban economics model predicts. In any case, that model fails to explain much about contemporary metropolitan life; for example, recent movers have cited housing-related over work-related reasons for moving, by a ratio of better than 3:1 (51.6 percent over 16.2 percent), and only 3.5 percent reported moving in order to improve their commute.

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[3] DiLorenzo (1999) includes a partial list of some of the hyperbole, including "virus", "insane", "destructive", "nightmarish", "menace", "cancerous growth" and Christine Todd Whitman's "This time the enemy isn't the Soviets, but sprawl."

[4] The *New Yorker* (March 18, 2002) cited a recent presentation to a neighborhood group by a representative of the City's Department of Environmental Protection, project manager Rick Gunthorpe: "'There are many activities you can do personally to conserve water,' he said, and went on to explain that there are three major water-shortage designations: drought watch, drought warning and drought emergency. Currently, he said, we are in a drought warning, which means that, for example, when washing your car you must use a hose with a self-closing nozzle. 'What's a self-closing nozzle?' asked one of the attendees ... 'What's a self-closing nozzle? That's a good question,' Gunthorpe said."

We have argued elsewhere (Gordon and Richardson, 2000) that more than a quarter century of plans and policies to promote higher-density settlement and to "get people out of their cars" has borne little fruit. As the dispersion of jobs and people continues, settlement densities and transit ridership both continue to decline in the vast majority of places. As for transit, suffice it to say that between 1990 and 2000, transit boardings per capita fell in 33 of the 46 largest U.S. metro areas.[5] Nationally, transit's share of commuting trips remained about the same, 5.2 percent in 1990 and 5.3 percent in 2000 (it was 13 percent in 1960). Almost $400 billion in public subsidies since the mid-1960s have not made a difference.

Migration involves both "push" and "pull" forces. While it is well known that employers and employees have been attracted to places where rents, taxes and crime are lower, they have also been avoiding land use controls that severely diminish their property rights. Consider the three major migrations that characterize post-WW II America: i. Frostbelt-to-Sunbelt; ii. into suburban and exurban communities; and iii. into private communities. In the past 30 years, the Sunbelt states (roughly defined as the West and South census regions) have gained 70.5 million people (168.2 million in 2000, up from 97.6 million in 1970; 72 percent growth while the U.S. population grew by 27 percent); the suburbs have gained 60.2 million (135.8 million in 1999, up from 75.6 million in 1970; 80 percent growth) while private communities have gained 47 million residents (almost all of them added since 1970; Treese, 1999). There is, of course, substantial overlap in the three categories of migration, but the last is most striking. People have been moving to private communities where rules of property must pass a market test and to peripheral locations that usually lack long-established and well polished political machines. All this occurred while political participation, as measured by voter turnout in the United States, was falling (55 percent of the voting age population voted in the 1972 presidential election while only 49 percent did in 2000). In modern America, exit trumps voice.

Not only are there ambitious plans to reverse established settlement trends but there are also claims that the reversal has already begun.[6] As demonstrated above, the most recent data suggests that the claim of a reversal is dubious. We discuss later how minimal local government involvement in land markets might be achieved. At a time when the vitality of market-driven allocations is widely appreciated, more than at any time within memory, many States are moving closer to centralized land use planning and growth controls that severely limit private property rights.

The favoured lifestyle preferences in the United States are increasingly shared abroad. Suburbanization has become a dominant settlement trend not just

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[5] www.publicpurpose.com. Pucher (20020 reports a "renaissance" of public transit use in the late 1990s. However, his analysis measures the change from trough to peak, and is driven by the New York experience (obviously an outlier) that accounts for about one-half of the national increase in transit use between 1995 and 2000.

[6] This, of course, contradicts the alarms over declining densities.

in the United States, but also in Canada, Europe and Japan. Wendell Cox (www.puplicpurpose.com) reports that since the 1950s, Paris has suburbanized as much as Philadelphia and that similar transformations are underway in Stockholm, Toronto, Tokyo and other places. These are all cities that have the transportation systems and land use controls that are the dream of U.S. planners. Most people's preferences regarding residential lifestyles are clear and strong enough to overcome the various policies designed to overcome them, both here and abroad. These facts undermine the claim that U.S. development patterns are the response to pro-low density U.S. policies.

Smart Growth

"Smart growth" is the latest buzzword, and somewhat meaningless given that noone would support a strategy of "dumb growth." So, here we will go back to its origins: the "smart growth" legislation promoted by Governor Parris Glendenning in the State of Maryland. The Maryland legislation has six components: i. the designation of smart growth areas as priority areas for development, but with an underwhelming net density target of 3.5 units per acre; ii. the Rural Legacy Act, which makes provision for preserving agricultural land via transferable development rights and purchase of development rights mechanisms (Bae, 2000); iii. an unusual feature is the incentive to live near work, a $3,000 State tax credit without income limits; iv. a brownfields revitalization plan; v. a job creation program by the use of tax credits; and vi. most important of all, it represents a major shift from planning regulations (the typical growth management approach) to market incentives. This is perhaps the major difference between what has happened in Portland, Oregon, and in the State of Maryland.

The literature on "smart growth" is becoming too large to be reviewed here. Hence, we limit our discussion to some brief observations and a personal assessment of what smart growth means.

Smart growth appears to imply an updated mix of growth management techniques: top-down designation of desirable future development patterns (Staley, 2001, calls these "end-state visions"); urban growth boundaries; concurrency agreements (to ensure that infrastructure provision keeps pace with development); densification strategies to make cities more compact, such as an emphasis on infill projects; measures to restrain automobile use and promote transit and non-motorized travel modes; and citizen participation (see Holcombe and Staley, 2001; Cox and Utt, 2001; Shaw and Utt, 2000; and Burchell *et al*., 2000 for more extended discussions).

The last of these characteristics (citizen participation) is very important. Probably, this is the force most responsible for the spread of smart growth ideas throughout the country, facilitated by e-mail, listservs and other information technologies. From one perspective, this might seem desirable as a democratization of top-down planning. However, the rational ignorance model of political behaviour highlights a darker side: "citizen participation" often becomes a cloak for activist interest groups while most people sit on the sidelines, taking little

notice. The exception is when NIMBY opposition objects to more compact development, usually on traffic generation grounds. In such cases, a struggle can develop between neighbourhood NIMBYism and metropolitan-wide smart growth protagonists, with the outcome uncertain. These conflicts occasionally emerge, but in many cases (e.g. Portland, Oregon, Maryland) the vast majority of both residents and public officials appear supportive of smart growth ideas.

Another critical dimension of smart growth is its cooption of the developer community. It has encouraged developers to adopt more pro-environment stances. These may include a willingness to compromise on the scale of a project or an agreement to pay mitigation fees for environmental disruption or additional traffic. In some cases, it can be profitable for the developer because higher-density projects may yield significantly higher profits per unit. The "if you can't beat them, join them" philosophy can be a powerful inducement to cooperate.

Portland Metro's actions embody many elements of the smart growth strategy. On the other hand, although a few Southern California cities, especially in Ventura County, have passed smart growth ballot initiatives, most jurisdictions are relatively favourable to development. However, citizen participation (i.e. interest group) efforts have slowed down major projects such as the Playa Vista project in Marina Del Rey near the ocean and the Ahmanson Ranch project in the outer reaches of the San Fernando Valley to a snailpace, if not a standstill.

New Urbanism

Another important sprawl-related issue is New Urbanism, an approach to development patterns primarily advanced by architects, such as Peter Calthorpe and Andres Duany. The contents of a New Urbanist agenda vary somewhat, but a typical list of prescriptions might include the following:

i. promotion of mixed neighbourhoods in terms of use and populations;
ii. providing transportation alternatives to reduce automobile dependence;
iii. infill development rather than peripheral expansion;
iv. priority to public and open spaces and to community institutions to foster communitarianism;
v. affordable housing, facilitated by a jobs-housing balance strategy;
vi. farmland preservation;
vii. design principles to emphasize local cultural heritage, climate and ecology;
viii. neotraditional architectural and street layout principles (e.g. front porches, limited setbacks, alleys, accessory apartments, block metric streets with traffic calming elements); and
ix. regionalism and revenue sharing.

A cynical view of New Urbanism might regard it as pie-in-the-sky social engineering based on a false diagnosis of society's urban problems, an excessive faith in the ability to change the world, and the prescription of policies that are

difficult to implement. David Harvey has dismissed the approach as "spatial determinism," by which he means the application of physical planning solutions to social and economic problems.

Certainly, there are many question marks about the effectiveness of New Urbanism. Despite the proliferation of New Urbanist projects (some of them masquerading in the form of developments a little higher density than the conventional norm), the durability of capital means that, even in the long run, the impact on metropolitan America will be minimal; most of our built environment is already in place. Even new developments are going to deviate substantially from the New Urbanist mold, because surveys have repeatedly shown that more than 80 percent of households desire a single family home with a private yard (also, average dwelling sizes have increases while average household size has declined).

Farmland preservation objectives are often used as a rationale for the compact development favored by New Urbanists. However, this ignores the decline in agricultural land since the 1930s and the sharp rise in productivity (especially via a shift to more land-intensive crops). Also, agriculture remains the most polluting economic activity (i.e. $173 billion water pollution damages). Yet another aspect is the promotion of mixed land uses. Certainly, at the macro-spatial level, there has been little progress here. The concept of "self-containment" (implied by more jobs-housing balance) is a flawed strategy that could result in more commuting rather than less. It remains problematic how many jurisdictions will be willing to make sufficient changes in the zoning ordinances to facilitate mixed uses. However, at the micro-spatial scale, there have been some interesting examples, e.g. live-and-work row houses in Orenco Station and Fairfield Village, Portland, among other places.

The Congress for New Urbanism has always professed ambitious equity goals (e.g. residential mixing, affordable housing, narrowing of central city-suburban incomes), but little has been achieved in New Urbanist communities. On the contrary, New Urbanism house prices tend to be up to 25 percent higher than in other developments (Eppli and Tu, 1999). The in-fill developments in the central city that might attract a more modest income clientele tend to be small and rare. The more common type of development takes the form of high income, racially segregated communities on the metropolitan periphery. Similarly, the communitarianism arguments in favour of New Urbanism do not seem very strong, despite the claims of providing a better environment for children (not very many live in New Urbanist communities), opportunities for "aging in place" (but baby-boomers predominate), and a lower degree of automobile reliance (but automobile ownership rates and vehicle miles travelled are little different). Most trips remain external to the community, public transit projects have not been implemented, there could be more auto trips rather than less, and on-site shops are often beyond walking distance for many residents.

Several New Urbanist developments have received considerable attention: Laguna West, near Sacramento, California; Kentlands, Maryland; Seaside, Florida: and Celebration, Florida. Laguna West is a poor example: many large lots, cul-de-sacs, few traffic-calming measures, and a race-track arterial road cutting through

the community. In the centre of the development, there is a very large and barren park, often deserted. There are few jobs (primarily at an Apple facility) and the shopping centre is small, half-empty and even lacks a supermarket. The development is riddled with bus stops and shelters, but bus service is very infrequent and poorly patronized. There is little social interaction among households except within the individual cul-de-sacs the well attended concerts in the park. The population is high-income (45 percent above the regional average) with high automobile ownership rates. On the positive side (as in other New Urbanist developments, there is a variety of housing types (e.g. single family homes, duplexes and a senior citizen apartment com plex). Also, the dwellings often contain New Urbanist design elements, e.g. front porches and garages at the back. Kentlands, Maryland, is perhaps one of the more successful New Urbanist communities with extensive open space and landscaping that even attracts non-residents. However, this very attribute makes it very land-intensive with a gross residential density of less than 3 dwellings per acre. Seaside, Florida, one of the first New Urbanist communities (and the backdrop to the movie "The Truman Show"), is a very high-income development (prices for a modest unit in excess of $600,000), mainly of second homes. The most interesting of the New Urbanist communities, by far, is Celebration, Florida, a creation of the Disney Company. This development contains some signature "public" buildings designed by some of America's most well known architects, it remains privately owned, and the Disney Company continues to retain control rather than the Homeowners' Association. There are strict code controls, such as window treatments, house paint colours, and restrictions on landscape and yard contents (e.g. no children's slides or garden toys). Nevertheless, most of the residents seem to like the development, perhaps because the codes sustain property values. The major complaint is that the town centre businesses cater more for tourists than for residents.

To sum up, it is unlikely that the proliferation of New Urbanist communities is going to make much difference in terms of overall population absorption. Certainly, it is difficult to envisage their relevance to the amelioration of central city problems. Another, very different issue, is that the New Urbanist discussion has contributed little to the broader analysis about the dissipation of agglomeration economies as a result of the impacts of the information technology revolution. A major reason for this is that New Urbanism ignores economic development issues because of a naïve belief that social problems are remediable by architectural and design prescriptions.

Private Communities and the Exit Option

Property owners demand property rules. In real estate, spontaneously developed property rules in the U.S., usually in the form or restrictive covenants, pre-date municipal public zoning codes by many years. Private zoning is now making a major comeback because the public rules of property in the era of environmentalism have increasingly diminished property and development rights by extending standing to a large number of "stakeholders". The rise of

environmental controls and the revival of private zoning have both developed in parallel fashion since the early 1970s.

In the past 25 years, more than 40 million Americans have moved into private communities. These are places are guided by rules of governance (Covenants, Conditions and Restrictions; CC &Rs) that are similar to neighbourhood zoning. In parallel to these Common Interest Developments (CIDs), there has been a rapid expansion of large shopping centres and industrial parks that also include the private delivery and maintenance of public goods and services. These developments are more a response to policy failures than to market failures. Neighbourhood quality is a collective good that zoning boards rather than neighbourhood stakeholders have typically transacted with developers. Not surprisingly, alternative forms of governance have become much more attractive.

There is, of course, also a "voice" response as an alternative to the "exit" reaction. Realizing that neighbourhood rights are being transacted between zoning boards and developers, residents in established neighbourhoods have felt left out and have often taken the position that "no deal is the best deal". The NIMBY (Not In My Back Yard) reaction is now widespread. Combined with the migration to private communities, it is symptomatic of the loss of property rights that many owners perceive.

Foldvary (1995) has noted that developers supply "public" goods in response to their capitalization in land values and rents. Hence, these are "territorial" goods. It is a market supply response that helps to explain the CID phenomenon. Finally, this development has been a benefit to financially-constrained local governments.

All these views reflect a Hayekian evolution of market institutions, a decentralized response to the problems of managing neighbourhoods and communities. It is ironic that this is happening at a time of widespread advocacy for enhanced top-down land use planning in the name of "smart" growth, growth management, statewide land use planning, etc. The regulators typically claim to mitigate the effects of "uncontrolled" and "unplanned" growth. However, CID planning is bottom-up rather than top-down. Hostility to property rights largely emanates from the environmental movement that too often ignores a common reaction; people often decamp from places where the price system, property rights and the quality of public services are suppressed. In the United States, more and more are choosing exit over voice, moving into private communities and away from the influence of the regulators. However, in spite of the fact that many of these private communities are sprouting up in the suburbs, they are often built at a higher density than the conventional subdivision so they should not be regarded as a pro-sprawl mode of development.

Conclusions

Institutions matter to human welfare and they are endogenous. This insight, most associated with the writings of Hayek, is hard to test because our empirical tools work best when we can agree on what is exogenous. This paper presents no

convincing test results. Rather, we document settlement trends that are consistent with the story. The return to private rules of land use is a market-driven institutional change.

The same can be said of the accompanying move to the suburbs and exurbs. Rauch (1994) and Olson (1982) suggested that newer governments are less likely to be encumbered by the claims of special interests and, therefore, less likely to engage in predatory activity. Moves to the suburbs, then, can be associated with more than the impulses usually cited (the search for cleaner air, lower taxes, more space, less crime, better schools, etc.). Suburbs also contain the newer cities, the ones with governments less likely to be prompted to extend standing to large numbers of "stakeholders" at the expense of property owners.

Tiebout (1956) discovered a market for local public goods by pointing out that people "vote with their feet", making choices between the offerings of various local governments, and evaluating their voice and exit options and strategies. Noting that the enjoyment of preferred public goods is capitalized in the value of land, that their ambit is usually limited over some well defined geography and that there would be more of a supply-side response by private owners than by public officials, Foldvary (1995) suggested the existence and the importance of "territorial goods." This not only undermined the traditional market failure discussion of public goods; it turned it upside-down. Rather than markets failing, demand and supply in combination facilitate exit and choice. The CID phenomenon bears all this out.

It also highlights how policy failures (predatory conventional governments) prompt an ameliorating institutional change. The developers of private communities do more than supply public goods, they also establish and market the rules for their governance. Consumers purchase the entire package, suggesting that the rules have to pass a market test (Boudreaux and Holcombe, 2002).

Even these transactions take place within some system of public sector rules. Olson (2000) described them as *market-augmenting*. These are much more likely to be found in suburban or exurban jurisdictions. Competition and exit reinforce each other.

If markets determine the highest and best use of land and if market-compatible institutions emerge that best manage it (including common properties, roads and other infrastructure facilities), what is left for local government to do? Holcombe (2001) and Pennington (2002) have suggested that land markets be freed; all that would be left for top-down planners is the planning of major infrastructure trunk line systems. We are not at this point yet. But without reform the exit option becomes increasingly attractive.

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