EXIT AND VOICE IN U.S. SETTLEMENT CHANGE

by Peter Gordon and Harry W. Richardson University of Southern California Los Angeles, CA 90089-0626 pgordon@usc.edu; hrichard@usc.edu

Presented at the 27th Annual Conference of The Association of Private Enterprise Education April 7-9, 2002 Cancun, Mexico

1. INTRODUCTION

Urban sprawl has become the slander of choice among critics of modern cities.¹ As with most taunts, there is little specificity and there exists no widely accepted definition of the term. Academic critics are usually content to presume various market failures while most other critics want people to live at higher densities but have no way of specifying how high. It would be simpler if they settled for the clearer label auto-oriented development. Private mobility is the near universal choice and, as always, settlement patterns respond to the dominant mode 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 the lifestyle choices of most of the population. There is, of course, the widespread political aversion to the use of market mechanisms in this way because rationing via price challenges politicians' impulse to be seen as progressive redistributors. They, therefore, avoid pricing at almost all costs.²

Our simple description of household choices says nothing about the locational preferences of industry. Yet, industry's preference for high-density facilities has also been waning. Once tied to rail yards, seaports or other crossroads, firms can now choose from a wider array of sites given the almost ubiquitous shipping access made possible by the widespread use of trucks on extensive highway networks.³ Declining communications and inventorying costs have accentuated 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 ambit. The various centrifugal pulls on firms and residences are complementary. In this way, households are less likely to 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 modern cities, including the fact that in recent years 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); only 3.5 percent reported moving in order to improve their commute.

The realities and various reflections on these realities have tended to drift apart. There is nothing on the horizon to change any of this. Critics of suburban development have resorted to doomsday scenarios and have advocated more forceful top-down planning to forestall the calamity. Shock value is presumed to accompany the finding that cities are adding more land than people, that "prime" farmland is being "lost", etc. The favored mantra is that "this cannot go on." All of this introduces an agenda of expanded controls. As a result, land is now one of the most heavily regulated markets in the U.S. We have nothing short of an industrial policy. Favored projects are supported and rewarded with public funds; less favored projects are heavily taxed or barred.

We have shown elsewhere (Gordon and Richardson, 2000) that the forebodings used to justify these interventions are implausible. In this paper, we show that after more than a quarter century of plans and policies to promote higher-density settlement and to "get people out of their cars", very few such things have happened. As the dispersion of jobs and people continues, settlement densities continue to fall in most places while transit use does likewise. Most of the rest of this paper is devoted to documenting the settlement trends. As for transit, suffice it to

¹DiLorenzo (1999) cites 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." *Sierra* (March/April 2002) and the Sierra Club website list "Ten Reasons Why Sprawl is Hazardous to Your Health".

²The *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."

³This network is easily linked to an expanding network of air routes.

say that between 1990 and 2000, transit boardings per capita fell in 33 of the 46 largest U.S. metro areas.⁴ Nationally, transit's share of commuting trips fell to 5.2 percent from 5.3 percent (it was 13 percent in 1960). Almost \$400 billion in public subsidies since the mid-1960s have not made a difference. The preference-driven virtuous cycle cited in the opening paragraph is, indeed, durable.

Any migration involves "push" as well as "pull" forces. While it is well known that employers and employees have been attracted to places where rents, taxes and crime are lower, we claim 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 the far-flung communities of the suburbs and exurbs; and iii) into private communities. In just 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 89 million in 1970; 53 percent growth) while private communities have gained 47 million residents (almost all of them added since 1970; almost the same amount as suburban population growth; Treese, 1999). There is, of course, substantial overlap in the three categories of migration but the most auspicious (and the least discussed) phenomenon is the latter with by far the steepest growth rate. People have been moving to private communities where rules of property must pass a market test and to far-flung places with fewer long-standing political machines. All of this occurred while political participation, as measured by voter turnout in the U.S., was falling (55 percent of the voting age population voted in the 1972 presidential election while 49 percent did so in 2000). It appears that in modern America exit trumps voice.

Not only are there ambitious plans afoot to reverse established settlement trends but there are also claims that the reversal has already begun.⁵ In what follows, we review the most recent data and show that the claim of a reversal is dubious. We then discuss the meaning of the observed trends in more detail, giving special attention to the migration to far-flung places and into private communities. We conclude with a discussion of how minimal local government involvement in land markets might be achieved. At a time when the vitality of market driven allocations is widely appreciated, moreso than at any time within memory, many states are nevertheless becoming engaged in centralized land use planning and growth controls, limiting private property rights. It is, therefore, useful to note the power of markets in shaping the built environment.

The simplest way to illustrate the nature of people's lifestyle preferences and the extent to which these are expressed is to look abroad. It appears that suburbanization is the dominant settlement trend not just in the U.S., 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 U.S. planners dream of. Consider Sir Peter Hall's discussion of the 1952 General Plan for Stockholm: "It proposed establishing new suburban districts, each for 10,000 to 15,000 inhabitants, strung like beads along the lines of a new subway system. Within them, apartment blocks were to be built within 500 yards of subway stops; single-family houses, constituting no more than 10-15 percent of housing units in each district, were to be built within 1000 yards of the stops but no further ... the city's policy was that each station on the subway should generate enough traffic to make it self-supporting" (p. 862,3). Things did not work out as planned. Hall notes that, "... surveys in the late 1970s reaffirmed the fact that 90 percent of people preferred single-family homes" (p. 876). Not surprisingly, a more recent Swedish development is described as follows: " ... a vast linear edge City of business parks and hotels and out-of-town shopping centers, stretching along the E4 highway, for twelve miles and more towards the Arlanda Airport. It is almost indistinguishable from its counterparts in California and Texas" (p. 878). Most people's preferences regarding residential lifestyles are fairly clear and strong enough to overcome the various policies designed to overcome them, here and abroad. Moreover, the claim that U.S. development patterns are simply the response to peculiar pro-low density U.S. policies is undermined.

2

-

⁴www.publicpurpose.com. Pucher (2002) reports a "renaissance" of public transit use in the U.S. His report focuses on a trough-to-peak period and is driven by the outlier New York metro area's experience, which accounted for half of the reported 1995-2000 national increase.

⁵This, of course, contradicts the alarms over declining densities.

2. U.S. SETTLEMENT TRENDS

Growth controls and efforts to influence the direction of settlement and development are gaining strength throughout the U.S. Yet, these have had very little effect. There are a variety of data sources that help to establish the point. The recently released 2000 Census of Population reported ten-year population growth for the nation of slightly more than 13 percent. Most of the large cities did not keep up although most of their suburbs grew as fast or faster. Of the top 50 cities, only 13 significantly beat national growth (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 some time. Both are explained by the lifestyle choices made by large numbers of people, facilitated by new technologies, especially falling communications and transportation costs. Indeed, recent electronic wonders have caused communications costs to plummet to such an extent that some commentators have wondered why clustering of any sort persists.

As always, however, the details are complex and hard to reduce to just one story. Table 1 compares some recent metro area employment trends with concurrent population trends. At this writing, these are unfortunately not available for all the same geographic units. With respect to *population*, we note that areas outside the central cities of metro areas usually also grew fastest. The same pattern is apparent for all of the size and geographic groupings of MSAs (bottom of the table). There were also exceptions: population growth in eight CBDs of the top-20 metros outpaced the surrounding central cities as well as the surrounding suburbs. Yet, CBD population growth constituted a small share of metro area growth even in these eight places.

For seven of these eight metros, suburban county *employment* growth beat core county job growth (San Diego is not counted because the 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 look. Also, these CBD definitions necessarily vary from the ones used to measure ten-year population growth. Yet, it is worth noting that metro area job growth (County Business Patterns definitions) for the 19 areas covered for the three-year period was 8.7 percent. Only seven CBDs surpassed this rate.

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

We sought 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 favor 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 small; social coordination via the exchange of ideas is likewise augmented. The latter has both economic and community consequences. But of 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) metro areas (MSAs or CMSAs); ii. their suburbs (noncore counties); iii. the core counties of middle-sized (1-3 million) metro areas; iv. their suburbs; and v. those counties constituting the small (less than 1-million) metro areas. All data aggregations based on political boundaries are 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 nonmetro counties were divided into seven groups, using the USDA's 1993 Urban Influence Codes. If counties are adjacent to metro areas, there is a four-way partition: adjacent to larger metropolitan areas (defined for the nonmetro analysis as larger than 1 million) or to small metro areas, and with or without a city of 10,000-plus people. If counties are *not* adjacent to a metro 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.⁶

The long-standing trends in U.S. settlement patterns are well known, and include the following:

- 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.

Table 2 shows that most thirty-year population and job growth occurred in the suburbs of the mid-sized metro areas. The pattern held for each of the major industries except manufacturing which is known to have been de-urbanizing for many years (Carlino, 1985)⁷. Manufacturing job growth was greatest in the rural counties. As may be expected, wholesale employment grew where manufacturing grew although it did not de-urbanize, growing beyond the national pace everywhere except the core counties of large and mid-sized metros. All of the major sectors' growth rates in the core counties of the largest metros lagged their national growth rates.

Population growth surpassed national growth in the suburbs of the largest metros, in the core counties of the largest metros, in the small metro areas and in exurban counties adjacent to the larger metros. It also lagged in the core counties of the largest metros. 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 reurbanization over the past 30 years. The 1970s were thought to be a time of deconcentration with nonmetropolitan growth rates surpassing metropolitan rates. The reversal reversed in the 1980s which were reported to be a time of urban revival. As already suggested, 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 1). Applying our more detailed categorization of counties, Table 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 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 corroborated.

⁶Spatial 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.

⁷In 1999, manufacturing led all sectors in the volume of ecommerce shipments (www.census.gov/estats).

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. Just looking at the 1997 data, however, we note that the top-50 central cities only included 26 percent of their metro areas' manufacturing jobs. For wholesale, retail and services, the respective proportions were 32 percent, 26 percent and 34 percent. Mieszkowski and Mills (1993) report that in the 1950s, 70 percent of all metro area jobs were in the central cities.

3. PRIVATE COMMUNITIES AND NIMBYISM

Property owners demand property rules. For the case of 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. Yet, private zoning is now making a comeback out of necessity because increasingly the public rules of property in the era of environmentalism have diminished property and development rights by extending standing to all manner of "stakeholders". The rise of environmental controls and the revival of private zoning both date to the early 1970s and have grown in tandem ever since.

In the past 25 years, more than 40 million Americans have moved into private communities. These are places are guided by rules of governance (CC and Rs) that are similar to neighborhood zoning. In parallel to these CIDs, there has been the rise of large shopping centers and industrial parks. These also include the private delivery and maintenance of public goods and services. Nelson (1977) and Fischel (1985) have suggested that these developments are more a response to policy failures than to market failures. Neighborhood quality is a collective good that the zoning board rather than neighborhood members typically transact with developers. Not surprisingly, alternative forms of governance have become attractive.

There is, of course, also a "voice" response that accompanies the "exit" reaction. Realizing that neighborhood rights are being transacted between zoning boards and developers, denizens of established neighborhoods 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 the capitalization of their values in land rents. Hence, these are actually "territorial" goods and there is less of a market failure reason for conventional government. There is, instead, a market-responsive supply side which helps to explain the CID phenomenon. Finally, many local governments that forever claim to be cash-strapped welcome the help. All of these views explain a Hayekian evolution of market institutions, fashioning a decentralized response to the problems of managing neighborhoods and communities. It is perhaps ironic that these events are unfolding at a time of widespread advocacy for enhanced top-down land use planning in the name of "smart" growth, growth-controls, statewide land use planning, etc. The controllers typically assert their readiness to mitigate the effects of "uncontrolled" and "unplanned" growth. There is plenty of planning but much of it is market-based bottom-up rather than political top-down. Antipathies to private property in the modern era come from the environmental movement and ignore the widespread nature of the reaction; people usually decamp from places where the price system, property rights and Hayekian discovery are suppressed. In the U.S. case, they are now mostly choosing exit over voice and moving away from the controllers into far-flung and/or private places.

4. DISCUSSION

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 matters 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 predation. 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." These insights more than undermined the traditional market failure discussion of public goods, they turned it upsidedown. Rather than markets failing, demand and supply, together, 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).

Yet, even these transactions take place within some system of public sector rules. The best are those that Olson (2000) described as *market-augmenting*. These are also most likely to be in the newer far-flung jurisdictions. Here, too, there is competition and the two exit options support each other. As far as exit vs voice are concerned, it is never simply either-or but voice prospects in the newer settings are more promising

Fischel (2000) reports that the results of his investigation of new-city formation corroborate a similar point: "Every source that students and I examined confirmed that the desire by homeowners to form a smaller community to control their own land-use was a driving force common to all of the incorporations." (p 20).

If markets determine the highest and best use of land and if market-compatible institutions emerge that best manage it (including the various interspersed common properties, roads and other infrastructure facilities), how far can the privatization of land use planning go? Holcombe (2001) and Nelson (1977) have suggested that land markets be completely freed; all that would be left for the top-down planners is the planning of major infrastructure trunk line systems (the "rules of the game" for further development). This might be a fine idea even if its realization is not yet on the horizon. Nevertheless, the observed trends remind us once again that most people avoid the controllers when they can.

leaders.

6

⁸Fischel notes the differences between municipal and state governments. He emphasizes that the former are most likely to be entrepreneurial and that this establishes the supply-side of the Tiebout model. Yet, the supply-side rests on value capitalization which motivates the actions of CID-developers as well as those of small-city political

5. REFERENCES

Boudreaux, Donald J. and Randall G. Holcombe (2002) "Contractual Governments in Theory and Practice" in David Beito, Peter Gordon Alex Tabarrok (eds.) *The Voluntary City*. Ann Arbor: The university of Michigan Press.

Carlino, Gerald A. (1985) "Declining City Productivity and the Growth of Rural Regions: A Test of Alternative Explanations" *Journal of Urban Economics* 18, 11-27.

Diamond, Jared (1999) Guns, Germs and Steel. New York: W.W. Norton and Co.

DiLorenzo, Thomas J. (1999) "Suburban Legends: Why 'Smart Growth' Is Not So Smart". Washington University in St. Louis Center for the Study of American Business, Issues Series 97.

Fischel, William A. (1985) *The Economics of Zoning Laws: A Property Rights Approach to American Land Use Controls.* Baltimore: The Johns Hopkins University Press.

Fischel, William A. (2000) "Municipal Corporations, Homeowners, and the Benefit View of the Property Tax" presented at conference on Property Taxation and Local Government Finance, Paradise Valley, Arizona, January.

Foldvary, Fred (1995) *Public Goods and Private Communities: The Market Provision of Social Services.* London: Edward Elgar.

Glaeser, Edward L. and Matthew E. Kahn (2001) "Decentralized Employment and the Transformation of the American City" Cambridge, MA: National Bureau of Economic Research, WP 8117.

Gordon, Peter and Harry W. Richardson (2000) "Critiquing Sprawl's Critics" CATO Institute Policy Analysis No. 365.

Hall, Sir Peter (1998) Cities in Civilization. New York: Pantheon Books.

Haughwout, Andrew F. (2001) "Infrastructure and Social Welfare in Metropolitan America" Federal Reserve Bank of New York Economic Policy Review 7:3, 1-16.

Holcombe, Randall G. (2001) "The New Urbanism Versus the Market Process" presented at the 2001 meetings of the Southern Economics Association, Tampa, FL.

Lindsay, Brink (2002) *Against the Dead Hand: The Uncertain Struggle for Global Capitalism.* New York: John Wiley and Sons, Inc.

Long, Larry and Alfred Nucci (19xx) "The 'Clean Break' Revisited: Is U.S. Population Again Deconcentrating?"

Mieszkowski, Peter and Edwin S. Mills (1993) "The Causes of Metropolitan Decentralization" *Journal of Economic Perspectives* 7:3, 135-147.

Nelson, Robert H. (1977) Zoning and Property Rights. Cambridge: MIT Press.

Olson, Mancur, Jr, (1982) The Rise and Decline of Nations. New Haven and London: Yale University Press.

Olson, Mancur, Jr. (2000) Power and Prosperity: Outgrowing Communist and Capitalist Dictatorships. New York: Basic Books.

Pennington, Mark (2002) Liberating the Land: The Case for Private Land Use Planning.

Pucher, John (2002) "Renaissance of Public Transport in the United States?" Transportation Quarterly 56:1, 33-49.

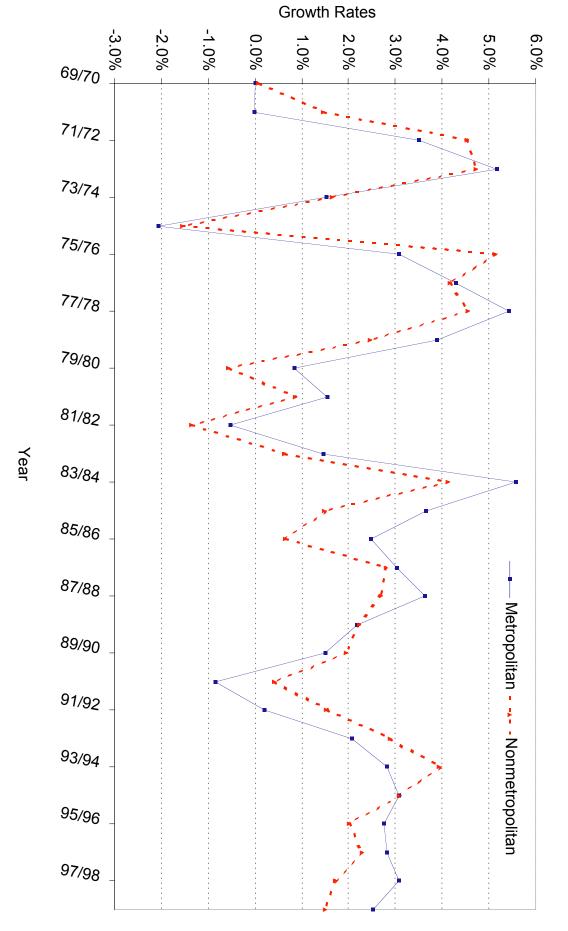
Rauch, Jonathan (1994) Demoscelrosis. New York: Time Books.

Schachter, Jason (2001) "Why People Move: Exploring the March 2000 Current Population Survey" *Special Studies*. Washington, DC: U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau.

Tiebout, Charles (1956) "A Pure Theory of Local Expenditures" Journal of Political Economy 64, 416-424.

Treese, Clifford J. (1999) Community Associations Factbook. Alexandria, VA: Community Associations Institute.

Figure 1: U.S. Private Employment Growth Rates, Metropolitan and Nonmetropolitan Counties, 1969-1999



^{* 1998} MSA definitions were used.

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

Table 1: US METRO GROWTH PERFORMANCE IN THE 1990s

			1990-2000 Pop Growth	Pop Growth			1990-1999	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 YorkNorthern New JerseyLong Island, NYNJCTPA CMSA	8.4%	9.4%	0.8%	7.2%	10.9%	1.02%	8.0%	9.1%	7.4%
Los AngelesRiversideOrange County, CA CMSA	12.7%	6.0%	13.9%	14.9%	5.7%	0.11%	7.4%	21.3%	-0.8%
ChicagoGaryKenosha, ILINWI CMSA	11.1%	4.0%	20.0%	14.4%	%0.08	1.83%	15.1%	32.7%	2.2%
WashingtonBaltimore, DCMDVAWV CMSA	13.1%	-5.7%	-11.5%	18.6%	4.0%*	0.12%	15.7%	18.0%	6.0%
San FranciscoOaklandSan Jose, CA CMSA	12.6%	7.3%	12.1%	13.8%	32.3%	1.35%	18.8%	21.1%	13.8%
PhiladelphiaWilmingtonAtlantic City, PANJDEMD CMSA	5.0%	-4.3%	na	8.4%	4.9%	1.24%	9.2%	13.9%	-6.2%
BostonWorcesterLawrence, MANHMECT CMSA	6.7%	2.6%	3.8%	7.5%	4.7%	1.00%	13.3%	14.1%	10.1%
DetroitAnn ArborFlint, MI CMSA	5.2%	-7.5%	-4.5%	9.1%	2.1%	0.28%	14.8%	24.2%	-9.7%
DallasFort Worth, TX CMSA	29.3%	18.0%	22.5%	37.3%	28.2%	0.28%	33.6%	40.9%	-7.7%
HoustonGalvestonBrazoria, TX CMSA	25.2%	19.8%	na	29.3%	7.6%	0.06%	27.4%	43.3%	1.6%
Atlanta, GA MSA	38.9%	5.7%	na	44.0%	25.1%	0.37%	42.3%	51.0%	37.6%
MiamiFort Lauderdale, FL CMSA	21.4%	1.1%	2.0%	25.2%	31.6%	0.70%	21.5%	30.6%	-24.1%
SeattleTacomaBremerton, WA CMSA	19.7%	9.1%	15.0%	22.7%	54.4%	1.14%	23.7%	27.8%	3.6%
PhoenixMesa, AZ MSA	45.3%	34.3%	35.3%	68.8%	-9.1%	-0.06%	52.2%	28.8%	12.2%
MinneapolisSt. Paul, MNWI MSA	16.9%	3.9%	-12.2%	26.2%	-16.6%	-1.40%	24.1%	31.1%	9.4%
ClevelandAkron, OH CMSA	3.0%	-5.4%	-2.7%	5.6%	32.2%	2.71%	13.9%	22.4%	9.2%
San Diego, CA MSA	12.6%	10.1%	22.9%	13.9%	16.1%	0.78%	22.4%	na	3.0%
St. Louis, MOIL MSA	4.5%	-12.2%	na	7.6%	-17.5%	-1.44%	12.5%	11.3%	2.9%
DenverBoulderGreeley, CO CMSA	30.4%	18.6%	na	34.0%	51.4%	0.24%	40.7%	51.7%	10.1%
TampaSt. PetersburgClearwater, FL MSA	15.9%	8.4%	5.8%	19.6%	11.6%	na	32.7%	26.1%	na
TOP 10	11.5%	6.7%	9.0%	13.7%	11.3%	0.65%	13.5%	17.8%	5.6%
TOP 20	13.7%	7.6%	9.5%	16.5%	11.6%**	0.52%	17.1%	20.6%	8.7%
TOP 50	14.7%	9.0%	9.9%	17.5%	na	na	18.4%	22.8%	na
SUNBELT (30)	22.0%	15.6%	15.8%	25.6%	na	na	22.0%	31.7%	na
FROSTBELT (20)	8.4%	3.4%	-2.0%	11.0%	na	na	8.3%	17.3%	na
*Politimore CDD countb = 5 10/ ** to CDD data for Towns Ct Datasabura	0`	-0.6% -3.1%	-3.1%	11.8%	na	na	14.7%	21.3%	na
*Coltimore (E) or E		***	217 212 2						

^{*}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.

Table 2. U.S. Population and Industrial Sector Growth Rates by Area Groups, 1969-1999

* 7.	U.S. Total			1 11 0 43	Metro	<u>Z</u>			Small Met Population	million	Metro A	3 million	Metro A	
VI. mumbar of counting	.a1	Area	Adjacent to a Metro	Not	Metro Areas	Adjacent to Small	Metro Areas	Adjacent to Large	letro Areas on	million Population	Metro Areas with 1-3	3 million Population	Metro Areas with	
		with no City or a City with a Population less than 2,500	t with a City of 2,500 to 9,999 Population	with a City of 10,000 or more Population	without a City of at least 10,000 Population		without a City of at least 10,000 Population	with a City of 10,000 or more Population	Small Metro Areas with fewer than 1 million Population	Non-Core	3 Core	Non-Core	Core	Area Group
	3132	529	560	225	621	182	122	62	455	175	34	154	13	Z
	1.02%	0.27%	0.58%	0.73%	0.89%	0.75%	1.22%	1.04%	1.10%	1.63%	1.10%	1.18%	0.52%	Population
	2.25%	1.92%	2.03%	2.21%	2.08%	1.87%	2.43%	2.16%	2.37%	3.09%	2.57%	2.58%	1.25%	Private Employment
	2.67%	0.65%	1.24%	1.82%	1.28%	1.70%	1.80%	2.15%	2.79%	3.60%	3.43%	3.44%	3.07%	Proprietor Employment
	3.85%	2.85%	3.03%	3.34%	3.04%	3.13%	3.90%	3.44%	3.89%	4.76%	4.38%	4.40%	2.96%	Services
	2.65%	1.98%	2.27%	2.19%	2.30%	2.19%	3.01%	2.32%	2.73%	3.84%	3.11%	3.33%	1.45%	FIRE
	2.49%	2.22%	2.21%	2.28%	2.80%	2.30%	2.94%	2.84%	2.56%	3.76%	2.57%	2.80%	1.20%	Construction
	2.35%	1.22%	1.99%	2.48%	2.05%	2.27%	2.37%	2.48%	2.71%	3.40%	2.53%	2.42%	1.14%	Retail
	2.03%	3.17%	2.66%	2.36%	2.63%	2.43%	3.33%	2.91%	2.14%	3.79%	1.88%	3.09%	0.38%	Wholesale
	1.70%	1.92%	1.47%	1.30%	1.81%	1.18%	2.05%	1.57%	1.83%	2.33%	2.12%	2.09%	0.79%	Transportation and Public Utilities
	-0.19%	0.96%	0.95%	0.75%	0.78%	0.32%	0.85%	0.52%	-0.01%	0.59%	-0.43%	-0.44%	-1.44%	Manufacturing

N: number of counties

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. 1993 USDA Urban Influence Codes were used to determine which non-MSA group the various non-metro counties belong to; 1998 population

Table 4: U.S. Private Employment Growth Rates, 1969-1999

	Area Group	Z	69/99	69/76	76/88	88/95	95/99
Metro Areas with more	Core	13	1.25%	0.07%	2.21%	0.13%	2.41%
3 million Population	Non-Core	154	2.58%	1.75%	3.66%	1.31%	3.03%
Metro Areas with 1-3	Core	34	2.57%	1.73%	3.22%	1.93%	3.25%
million Population	Non-Core	175	3.09%	2.65%	3.35%	2.91%	3.41%
Small Metro Areas with 1	Small Metro Areas with fewer than 1 million Population	455	2.37%	2.34%	2.52%	2.17%	2.33%
Adjacent to	with a City of 10,000 or more Population	62	2.16%	1.84%	2.16%	2.48%	2.14%
Areas	without a City of at least 10,000 Population	122	2.43%	2.20%	2.27%	2.75%	2.75%
	with a City of 10,000 or more Population	182	1.87%	1.81%	1.90%	1.85%	1.88%
Metro Areas	without a City of at least 10,000 Population	621	2.08%	2.10%	2.01%	2.31%	1.88%
	with a City of 10,000 or more Population	225	2.21%	2.66%	1.92%	2.47%	1.86%
to a Metro	with a City of 2,500 to 9,999 Population	560	2.03%	2.73%	1.58%	2.31%	1.70%
/ H C 4	with no City or a City with a Population less than 2,500	529	1.92%	2.52%	1.41%	2.39%	1.59%
U.S. Total		3132	2.25%	1.72%	2.76%	1.69%	2.65%
4 4 4 1 0 1							

^{*} N: number of counties

** 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.