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Critiquing Sprawl's Critics

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Executive Summary

Although most Americans are living better than ever, many now see “urban sprawl” as the source of most of society’s problems and “smart growth” as the logical antidote to those problems. That belief has spawned a host of local and state initiatives and been popularized nationally by Vice President Al Gore, who proposes to make urban sprawl a federal issue.

The assertions by the critics of urban sprawl do not stand up to scrutiny. Widely available data undermine most of their claims. The charge that urban sprawl fosters inequality, unemployment, and economic blight is disproven by the fact that lack of human capital, not workplace inaccessibility, is the main cause of poverty. Moreover, smart-growth plans exacerbate the problem of workplace inaccessibility by increasing housing costs for the poor, mak-

ing it difficult for them to locate near areas that are growing economically.

The argument that urban sprawl gives rise to excessively costly infrastructure, excessive transportation costs, and environmental damage is wrong. The facts point directly to the opposite conclusion.

Finally, the belief that urban sprawl leads to social pathologies is without foundation. No one knows the recipe for good or bad community formations or the best spatial mix of housing that would accommodate myriad personal preferences.

The American migration to the suburbs and exurbs can, in part, be seen as attempts by homeowners to move out of harm’s way and protect their property rights. The controls proposed by sprawl’s critics would add to the “push” forces, resulting ironically in more sprawl rather than less.

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Introduction

There is much to celebrate at the beginning of the millennium. The dignity of the individual is increasingly recognized around the world, as evidenced by the spread of liberal democracy and free markets. There is more liberty and prosperity than ever. In the last 20 years, child mortality rates in some of the world's poorest places have been halved,¹ and, "even with conservative assumptions about future growth, someone born in 1995 can expect to enjoy four times the lifetime income of someone born in 1970. The record of the last century demonstrates two points: Aggregate economic growth benefits most of the people most of the time; and it is usually associated with progress in other social dimensions of development."²

Moreover, we are beginning to understand how this all came to be. Free men and women in control of their property are most likely to be inventive and prosperous, and prosperous people are most likely to prefer institutions that allow them to be free and in control of their property. To be sure, there are always people who wish to realize economic gains by taking the property of others or by rigging the regulatory game unfairly in their favor.³ Yet the increasing mobility of labor and capital forces governments to compete and behave in a manner conducive to free markets and liberty. Deviations from the "virtuous cycle" should become less frequent and less severe.

Nevertheless, many people still dwell on the inevitable shortcomings of society, proposing "market-failure" explanations for what they find unattractive and constructing arguments for new state interventions to remedy perceived social imperfections. The possibility that previous state interventions might be the source of the perceived problem is seldom considered.

"Urban sprawl" is a perfect example of that phenomenon. Urban sprawl is now linked to all sorts of ills, including increasing income inequality, job insecurity, central-city

decline, increasing housing costs, long commutes, environmental problems (especially global warming), species extinction, loss of farmland, a sense of isolation, elevated blood pressure, muscle tension, intolerance, psychological disorientation, and even murder and mayhem. Some have blamed the Littleton shootings on the "anomie and ennui that's being produced in these environments."⁴

What exactly is urban sprawl? Although its critics usually leave the term undefined or simply equate it with "unplanned" growth, we use the phrase as a shorthand term for most current suburban and exurban development. Although it is not always clear what smart-growth plans really are, most discussions suggest mixed-use and more compact (including "infill") land development with plenty of mass transit, walkways, and bikeways.⁵

Many advocates of smart growth are architects and urban designers who perceive "a growing sense that the suburban paradigm, which has dominated since the 1940s and 1950s, cannot sustain another generation of growth."⁶ Peter Calthorpe, a prominent proponent of smart growth, is fairly specific when he suggests a "New Urbanism," a philosophy in which "there should be defined edges (i.e., Urban Growth Boundaries), the circulation system should function for the pedestrian (i.e., supported by regional transit systems), public space should be formative rather than residual (i.e., preservation of major open-space networks), civic and private domains should form a complementary hierarchy (i.e., related cultural centers, commercial districts and residential neighborhoods) and population and use should be diverse (i.e., created by adequate affordable housing and a jobs/housing balance)."⁷

Unfortunately, advocates of smart growth offer little analysis or discussion of the costs, the implied tradeoffs, the consistency of the vision, or even the consumer's desire for such communities. There is certainly no anxiety over the loss of property rights—or over their politicization.⁸ The New Urbanist fallback position that "building walkable neighbor-

hoods may not get people out of their cars and building front porches and neighborhood parks may not create more integrated convivial communities, . . . [but] people should be given a choice”⁹ ignores the fact that developers already offer a wide range of community and housing choices. Developers decide what sorts of communities to provide and what houses to build by investigating consumer preferences, which reflect opportunity costs and consumers’ willingness to pay. Markets do a better job of discovering consumer preferences and providing desired goods and services than does smart-growth planning.

There is also no acknowledgment that many similar experiments in social planning have been tried before, with less than satisfactory outcomes. Consider, for instance, how similar modern smart-growth theory is to the 1952 General Plan for Stockholm, which “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.”¹⁰

Stockholm’s General Plan, however, did not work out as planned. Surveys in the late 1970s found that 90 percent of Stockholm’s residents preferred single-family homes.¹¹ Not surprisingly, a more recent Swedish planned development is described as follows: “A vast linear Edge City of business parks and hotels and out-of-town shopping centres, 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.”¹²

It is the purpose of this paper to critically examine the long list of claims advanced by proponents of smart growth, especially their central idea that most of the problems that they see in modern society stem from subur-

ban development. We will examine those claims within the context of (1) the argument that present community-growth patterns foster inequality, unemployment, and suboptimal economic development; (2) the claim that “sprawl” is responsible for excessively costly municipal infrastructures, inefficient transportation patterns, and unnecessary environmental damage; and (3) the argument that uncontrolled growth is leading to alienation, assorted personal pathologies, and communal breakdown. We find that widely available data undermine each of the three critiques and that the case for smart growth is thus substantially weakened.

Inequality, Unemployment, and Economic Development

Concerns about increasing income inequality run up against several problems: (1) it is not clear that inequality is “bad,” although widespread poverty surely is;¹³ (2) it is not the case that inequality among races or between the sexes has been increasing¹⁴—studies on wage, income, and expenditure inequality all tell a different story; (3) income mobility is what counts for most people and is probably increasing;¹⁵ and (4) it is far from clear that income inequality has any direct relationship with urban structure or settlement patterns. In this section, we focus on the last of these problems.

Migration and Technological Evolution

The suburbanization of population and employment is not a new phenomenon. For many years, most societies have been urbanizing and their cities have been expanding outward. Geographers have linked city extension to the dominant transportation technology of the time, calling attention to the “Walking-Horsecar Era” (1800–1890), the “Electric Streetcar Era” (1890–1920), the “Recreational Automobile Era” (1920–45), and the “Freeway Era” (since 1945).¹⁶ The current era of extraordinarily cheap communications continues (and perhaps accelerates)

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a long-standing trend. That is why, to keep up with suburbanization, official urban boundaries are regularly adjusted outward. Yet, in the United States, change now outpaces the mapmakers, and substantial employment growth in recent years has gone beyond the officially recognized boundaries of metropolitan areas.¹⁷ For example, the Bureau of the Census reported that, in 1995–96, a quarter-million more people left metropolitan areas in the United States than moved into them.¹⁸

Whereas many firms, especially manufacturers, were once attracted to sites close to raw materials or to major crossroads or harbors, a variety of technological advances makes it possible for ever more firms to be “footloose” locators. The dramatic rise of information technology simply accelerates an ongoing decentralization process. Footloose firms are most likely to follow the labor force into the suburbs and exurbs. Most households seem to prefer suburban environments where single-family homes dominate the housing stock.

Smart Growth’s Prescription for Poverty

It has been widely asserted that those trends have left large numbers of the poor “isolated” from many jobs and, therefore, more likely to be unemployed. As a result, for critics of urban sprawl, inner-city unemployment has a spatial explanation as well as a spatial-policy antidote: “balance” jobs with housing in various zones of the region via “managed” growth. Furthermore, some proponents of smart growth want to draw employment back to the central city, while others want to bring work to “job-poor” parts of the suburbs to create opportunities for shorter commutes.

Even if we overlook the huge scale of spatially matching jobs with housing, the premise that it is an antidote to unemployment is false. Involuntary unemployment and poor job prospects more often result from a lack of human capital (including social networks) than from the inaccessibility of workplaces. Moreover, decentralization of

workplaces is occurring across the board in all major industrial and service sectors. There is no evidence that the best or most desirable jobs are disproportionately fleeing from traditional urban centers.¹⁹

Because of the lack of empirical evidence that a “spatial mismatch” is the cause of inner-city unemployment, proponents of the argument rely on much more general evidence of “social isolation and social access,” which moves the discussion well beyond the conventional focus on urban space and commuting costs.²⁰ The findings for four New Jersey metropolitan service areas (MSAs), however, add perspective to the spatial mismatch discussion: most of the employment-rate differential between white and minority youth was explained by differences in human capital, much less by differences in “exposure” or differences in geographic access to jobs.²¹

If workplace inaccessibility were a major contributor to poverty, we would expect to find that regions where jobs are relatively more accessible would have less poverty than would those regions where jobs are relatively less accessible. Yet workplace inaccessibility is probably less of a problem in New York City than in any other place in the nation. Transit use per capita is seven times the national average (37 percent of all 1997 transit boardings in the United States were in the New York metropolitan area). Such data suggest that, even for the poor without automobiles, getting to and from work in New York is less of a burden than it is elsewhere. Yet, in 1997, among the 10 largest American cities, New York City had, with the exception of Detroit in July, the highest monthly central-city unemployment.²²

A major problem that flows from smart-growth plans and the manipulation of the supply of buildable sites is the inevitable rise of housing costs, which contributes to the widely lamented housing “affordability” problem. Twenty years ago, economists warned that “environmental and growth controls have laid heavy cost burdens on California homebuyers.”²³ Today, Portland’s

growth boundary is credited with a 400 percent increase in the price of land and an 80 percent increase in the price of housing, making that area among the least affordable in the United States.²⁴ Landowners inside the growth boundary were spectacularly rewarded by windfall gains, while renters and first-time homebuyers, generally among the less well off, were hurt. Similarly, there were relocations into areas beyond the no-build zone, which created even longer commutes for those who continued to work inside the boundary as well as significant new infrastructure costs.

Housing-Market Failures?

The power of markets to promote the efficient use of resources is a key part of the explanation for the vastly enhanced material condition of humanity. Yet urban land and housing markets are presumed to fail by many observers. Proponents of smart growth see waste and inefficiency in the ways that cities are developing. But is that really so? Are there significant market failures? Or is it really that the critics of the suburbs are unhappy with people's tastes, which are revealed in the residential communities that they demand and get?

"Perfect" markets exist only on paper; it is easy to find real-world departures from some idealized model. Yet the competitive nature of the U.S. construction industry is apparent. There were 114,000 general contractors engaged in residential construction in the United States in 1992.²⁵ Moreover, Dun & Bradstreet data reveal that construction industry business starts regularly occur at higher rates than for industry overall, suggesting above-average ease of entry. Numerous surveys show consistency between people's overwhelming stated preferences for low-density living and their revealed preferences in the housing market.²⁶

The new houses entering the market are, on average, bigger and better than ever. The preference for larger houses is most likely to be met in outlying locations where combined land and access costs are lower. Between 1970

and 1997, the typical new home increased substantially in size, and the list of standard amenities became longer.²⁷ Moreover, homeownership in the United States has reached an all-time high. The placement, pricing, and configuration of upward of more than 1 million new units that annually clear the market could be accomplished only by a competitive industry that is keenly attentive to the wishes of consumers. There are even several, often expensive, developments already on the ground that feature various New Urbanist features. Arguments that developers are insensitive to consumer preferences strain credulity.

The Subsidy Excuse

Critics of sprawl point to a wide array of factors that could explain why we see Americans choosing to live in "sprawling" areas: favorable federal tax treatment of mortgage interest and property taxes, zoning codes that favor low densities, comparatively low gasoline taxes, highways built "at the expense of transit," large-lot residential zoning, local tax inducements to industrial locators, and many others.²⁸ There are two problems with those explanations.

The first problem is that the effects of such factors are often exaggerated. Urban economists have found that the alleged subsidies—to the extent that they exist—are minor and have little effect at the margin.²⁹ The second problem is that critics of sprawl overlook the many policies that favor central cities, such as downtown renewal, subsidized stadia placed in central cities, and heavily subsidized downtown-focused rail transit systems. Perhaps the truth is that not all government interventions that influence land development have had a suburban bias, as a General Accounting Office report concluded.³⁰

Also, it is becoming increasingly evident that widespread automobile ownership and suburban land-use patterns are evolving in Western Europe and Canada, where policies (most of them strongly favoring compact development) are very different.³¹ Per capita automobile ownership has been increasing in countries that are members of the

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Organization for Economic Cooperation and Development at more than twice the U.S. rate for the past 20 years and will converge with U.S. rates by 2015.³² Despite policies designed to curb suburbanization and automobile ownership, people in those countries seem to be continuing both trends.

Some opponents of sprawl see the decentralization of American cities as “path dependent: technological innovations helped chart an early course that has determined, and been amplified by, subsequent events.”³³ The trouble with that view of technology is that it leaves no room for people’s preferences to be the impetus for technological change. The view that technological change is an exogenous juggernaut has been forcefully challenged.³⁴ Furthermore, the much-decried interstate highway program, begun in 1956, is not strong evidence for the path-dependency argument. Although the interstate program was certainly too large a program to have had no effect on migration to the suburbs, there was significant suburbanization before 1956 and there is much of it in countries without infrastructure programs on the scale of the interstate highway program. The relative sparseness of highway networks in other countries doesn’t so much keep people downtown as it leads to high levels of traffic congestion, especially in cities or along major interurban corridors.

The Missing Human Equation

The futility of the attempt to pack people into tightly urbanized areas, discourage car ownership, and heavily subsidize mass transit can be seen in the miserable traffic and commuting conditions in such places as Seoul, Athens, Rome, Tokyo, Jakarta, and Paris. More newly affluent people are choosing personal transportation despite widely available transit and despite the absence of freeways and American-style highway networks. Studies find that, as income rises, automobile use rises even faster, regardless of the presence of mass transit.³⁵ Those people also have fewer suburb-to-suburb commuting opportunities. The result is congestion

levels and traffic conditions that would appall Americans.

People are attracted to the suburbs for reasons that go beyond housing quality and affordability. Suburban lifestyles offer job, shopping, and social arrangements that seem to work well for many people. Net migrations out of the higher-density 19th-century central cities continue unabated. Critics who assert that “sprawl systematically deprives inner-city residents of opportunities and adequate services”³⁶ have their cause and effect backward. In any migration, there are push and pull forces. People are making moves that are in their best interests; they are leaving less suitable and less attractive surroundings.

Critics of sprawl talk of central cities “losing” jobs, people, and capital. Such arguments imply that we should be more concerned about the economic prosperity of certain places than the economic prosperity of actual people. That line of argument is similar to one adopted by trade protectionists, who are perennially more concerned about the loss of jobs than the highest and best use of human capital. In the fast-paced modern economy, the key to prosperity lies in flexible markets where participants are able to exploit new opportunities quickly. Augmenting the role of regulators, especially growth controllers, is more costly than ever. A recent incident in Portland evokes comparisons with European-style anti-job policies: a stipulated \$1,000 per employee annual exaction is to be levied by a suburban Portland county on Intel if the company hires beyond a negotiated employment ceiling.³⁷

Infrastructure, Transportation, and Environment

Older and more compact urban forms are costly in many ways: building vertically, enduring crowded roads and facilities, and living in small spaces all incur extra costs. Bearing those costs may have made sense in the past, when Americans were less mobile than they are today. It is the newer and flatter suburbs

that benefit from newer infrastructure, which is less costly to install and maintain.³⁸

The Real Estate Research Corporation's 1974 *Costs of Sprawl* report used questionable simulations to make the case for infrastructure savings associated with high residential densities.³⁹ Although the methodology used renders the findings highly dubious,⁴⁰ the conclusions have been widely cited. Moreover, recent studies that attempt to rehabilitate the approach are not very convincing.⁴¹ Data show that (1) high-density urban areas have the higher infrastructure costs, and (2) the lowest per capita infrastructure costs are in areas with 250–1,250 people per square mile.⁴² Not surprisingly, all of the 10 fastest-growing cities between 1990 and 1996⁴³ and all of the five fastest-growing one-million-plus cities between 1990 and 1998⁴⁴ have population densities in that range.

Finally, simple cost comparisons are necessarily incomplete: mere cost minimization is not optimal. The benefits of suburban lifestyles, clearly difficult to quantify, have been widely ignored.

Commuting: Fact and Fiction

In spite of unpriced access, average highway speeds keep *rising* as more commuting occurs on less congested suburb-to-suburb roads. In a recent letter to the editor, Barry W. Starke, president of the American Society of Landscape Architects, wrote that "sprawl is the kind of unchecked and unplanned growth that creates appalling lifestyles marked by two-hour commutes between decaying cities and traffic-choked suburbs."⁴⁵ The writer fails to reveal how few two-hour commutes there are. According to Bureau of the Census data, the average (one-way) commuting time in 1990 was 22.4 minutes (all modes). Suburb-to-suburb commutes (within the same metro areas) were even shorter, averaging 20.8 minutes. Suburb-to-suburb commuting accounted for 44 percent of all metropolitan commuting in 1990 and is the fastest-growing type of flow. In 1990 only 12.5 percent of commuters traveled more than 45 minutes and fewer than 6 per-

cent traveled longer than 60 minutes. The longer trips included a disproportionately larger number of public-transit riders. Trip-time changes since 1980 have been minor in spite of significant population growth and much faster growth in vehicle-miles traveled (VMT).⁴⁶

The Nationwide Personal Transportation Survey data highlight good news over an even longer time span: average commuting times fell from 22.0 minutes in 1969 to 20.7 minutes in 1995.⁴⁷ Yet in the 65 largest U.S. urbanized areas, VMT grew much faster than roads (measured in lane-miles), resulting in a substantial increase in average traffic densities;⁴⁸ nationwide, in the last 10 years, urban VMT grew at almost 2.5 times the rate of urban lane-miles.⁴⁹ The combination of more people in more automobiles traveling more miles at faster speeds without concomitant highway-capacity growth is an amazing example of beneficial market adjustments. It also exposes the erroneous interpretations routinely attached to "congestion indices," that is, comparisons of available metropolitan lane-miles with recorded area VMT.

Urban economic theory to the contrary, most households do not choose locations by simply calculating the commuting time to work. Instead, most households consider tradeoffs among a wide variety of possible destinations and other locational considerations. Most notably, families with children rank access to good schools and other family services at the top. Some urban economists have mistakenly concluded that those households indulge in "excess commuting."

Furthermore, in the absence of proper pricing, congestion is inevitable. Congestion is the default system for rationing roadway capacity. The real news is just how little highway congestion there is. The suburbanization of jobs is the explanation for the relatively low highway congestion; it is the solution, not the problem.

Most people enjoy the personal mobility provided by the auto-highway system and the suburban lifestyles that it makes possible. Nevertheless, they bemoan its shortcomings, such as the inevitable pockets of congestion,

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while resisting the logical antidote: peak-load pricing. Free access continues to be regarded as an entitlement. However, the problems of congestion can be avoided by restraining consumption by requiring the payment of the full opportunity cost.

Mass Wishing about Mass Transit

A favorite response to the dilemma of congestion is to advocate high-capacity transit systems in the hope that everyone else will use them. A recent San Francisco Bay Area Council opinion survey showed that 40 percent of respondents ranked transportation as “the most important problem facing the Bay Area today” (education was a distant second at 14 percent). The same poll found that to “expand public transit” was the first choice (82 percent agreed) among “effective ways to improve quality of life.”⁵⁰ It is revealing to compare the attitudes expressed in public opinion surveys with the preferences revealed in actual transportation patterns.

Many politicians, planners, and advocates of smart growth continue to stress the importance of expanding public transit, especially expensive rail transit. Yet conventional public transit continues to be a declining industry. Since the mid-1960s, more than \$360 billion of public subsidies has resulted in transit use per capita falling to a historic low. Only 1.8 percent of all person-trips (2.1 percent of all person-miles) are via public transit; that is substantially less than trips on foot (5.4 percent of person-trips) but slightly greater than trips by school bus (1.7 percent of person-trips).⁵¹ Transit work-trips make up 3.5 percent of both person-trips and person-miles.⁵² Yet, between 1977 and 1995, public transit received more than 15 percent of all public money spent on transportation.⁵³

Vast sums have been spent on the wrong transportation projects (usually rail) administered by politicized (and often unionized) monopolies. The disappointing results from several new heavy-rail projects (Los Angeles’s \$5 billion 16-mile subway project, among others) have led rail boosters to emphasize light rail.⁵⁴ Yet the light-rail systems tend to

be even less cost-effective. The 10 U.S. cities that added light rail in the years 1980–95 experienced a collective systemwide ridership loss of 2 percent. Even the few systems that show modest gains are not close to being cost-effective.⁵⁵ Because transit is still promoted as a way to save energy, clean the air, decongest the roads, and promote new land-use patterns, it bears repeating that none of those things can possibly occur when ridership gains are small or negative.

Although the failure of rail transit has by now been widely documented,⁵⁶ expensive proposals for new rail projects are put forth regularly, usually sold as a way to “get people out of their cars.” Even the transit industry’s trade magazine recently noted: “At first glance, the largesse of the Transportation Equity Act for the 21st Century (TEA-21) seems to have turned the U.S. rail projects pipeline into a gusher. Indeed, the law enacted last summer, the nation’s largest public transport bill in history, authorized funding for more than 200 specifically identified projects over the six-year life of the law.”⁵⁷ At the height of the Cold War, there was supposedly at least one military base in every congressional district; as a parallel, there may soon be a light-rail transit system in each U.S. metropolitan area.

Responding to the poor record of recently installed rail transit facilities, advocates of rail projects now promote “transit-oriented development” (TOD), a key element of smart growth, as a way to create development densities around train stations in order to ensure adequate patronage. In support of that idea, some studies have found slightly higher transit use by people living in densely developed areas near stations.⁵⁸ From this it is inferred that forcing high-density development will generate greater transit use. Yet the obvious logical fallacy is ignored: even if there are some people willing to trade low density for transit access, it does not follow that others, somehow compelled to live at higher densities, will choose the same tradeoff.⁵⁹ A widespread and powerful preference for personal mobility cannot be so easily dismissed.

“Although empirical evidence on the relationship between residential density and various aspects of travel behavior has been widely reported,” observes economist Don Pickrell of the U.S. Department of Transportation, “surprisingly little of it withstands scrutiny. . . . None of these results explicitly recognizes the critical influence of differences in income, household size, gasoline prices, and automobile taxation.”⁶⁰ The consensus of economists who have studied the issue, reports Pickrell, is that “relationships between land use characteristics—such as residential and employment density, mixing of different uses, and the relative distribution of employment and population—and measures of urban travel demand are generally empirically weak and often statistically unreliable.”⁶¹

While there are negligible differences in automobile trips per capita in TOD areas compared with those in non-TOD areas, there are many more people in the TOD areas. The higher density of people in those locations causes traffic conditions to worsen. After controlling for income and other household variables, studies find that a doubling of densities would decrease VMT per household by 10 percent—but with twice as many households, there would be many more trips.⁶² Other cross-sectional studies corroborate the observation that high development densities are associated with high congestion.⁶³ That helps explain why higher-density areas generally have the worst air pollution.⁶⁴ Finally, the steepest losses in transit ridership in recent years have been in transit’s strongest markets, the 10 U.S. cities with considerable rail transit capacity and relatively strong and high-density employment centers.⁶⁵ It seems that the availability of mass transit options just won’t get people out of their cars.

Unconventional forms of transit (including privately owned transit companies) and a host of commonsense transportation management approaches (including proper pricing) have received scant attention from municipal authorities. Because those alterna-

tive types of transit are low cost (even when subsidized), they lack the built-in pork-barrel constituencies attached to rail projects.

Sprawl and Environmental Degradation

What are the environmental consequences of sprawl? Critics of sprawl offer a long list of environmental concerns: some critics emphasize the well-known problems associated with common-property resources; others stress the “finiteness” of resources and embrace vague notions of “sustainability.”⁶⁶ Those critics ignore the substantial stewardship inherent in asset ownership as well as falling commodity prices.⁶⁷ Evidence of the long-term decline in natural resource prices has been available for many years;⁶⁸ however, such evidence has not satisfied those who rest their case on “finiteness” and continue to ignore the accelerating rate of technological change and its beneficial consequences.⁶⁹

There are several responses to the environmentalist critiques of sprawl: (1) we have already shown that the traffic consequences of suburbanization are benign; (2) new fuel mixes used in newer automobiles burn cleaner than previous mixes (“although total vehicle mileage more than doubled between 1970 and 1995, emissions of all auto-related pollutants declined”);⁷⁰ and (3) trading arrangements for market-based emissions rights are promising ways to improve the environment at relatively low cost.⁷¹ Suburbanization does not lead to increases in commuting times, and, even in the absence of beneficial market reforms, emissions per VMT are declining. All the above factors suggest that attempts to rebuild cities and lifestyles in the service of the environment are not simply undesirable but also unnecessary.

Some critics have argued that the growth of suburbs imperils the nation’s food supply. Those claims cannot be taken seriously. By any measure, farmers today, requiring less land to grow more crops, are more productive than ever. That is why cropland use in the United States peaked in 1930 and real food prices continue to fall. The productivity trends are so powerful that a land shortage is

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inconceivable. Unfortunately, public concern over vanishing farmland seems impervious to facts; the concern dates to the late 1960s, and despite being discredited time and time again, it continues to reemerge anew every decade or so.⁷² Even if shortage of farmland were to become a problem, land markets are always available to allocate land to its highest and best uses, even back to farmland if necessary.

The claim that individual farmers are harmed by rising land values induced by outward development is also unfounded. Rising asset values are generally viewed as a positive, not negative, development for property owners. Indeed, there is evidence to suggest that farmers are reaping the benefits of suburbanization.⁷³

Urban expansion into “environmentally sensitive areas” is another contentious issue. Conservation groups and their supporters can, of course, choose to buy and retire any parcel (or its development rights if available) that they want preserved. Public bodies can, given the power of eminent domain at their disposal, do the same even more easily. The challenge is to identify the best areas for protection and to raise the funds to purchase them.

While that approach is occasionally practiced, “greenline” advocates seek something quite different: the imposition of easements at the expense of property rights. That tactic has three serious drawbacks: (1) it might violate constitutional safeguards against “takings”;⁷⁴ (2) it attaches new uncertainties to property ownership; and (3) it inevitably results in the suboptimal use of land.

Alienation, Community, and Social Pathologies

Although today’s social problems—crime, divorce, family disintegration, and illegitimate teenage pregnancy—have been well documented, the reasons for those problems are not well understood. In recent years, some people have decided that urban sprawl is the source of those problems and smart growth is the solution.⁷⁵ Yet we also know that the

“Great Disruption,” as Francis Fukuyama called these trends in social disorganization, has occurred in all industrialized nations, encompassing a wide variety of physical urban forms and structures.⁷⁶ Modernity is complex, and urban sprawl is only one of its manifestations.

Compact urban development is promoted not merely as a way to reduce automobile use and create a demand for public transit—“New Urbanism” is widely sold as a way to foster close-knit communities and general contentment. Yet no one knows the recipe for good or bad community formation, let alone an easy spatial fix. Nevertheless, Vice President Al Gore’s criticism of sprawl articulates a widely shared view: “This kind of uncoordinated growth means more than a long drive to work. It means that working families have to spend thousands of dollars a year or more on transportation costs. . . . It means mothers isolated with children far from playmates, and older Americans stuck in their homes alone.”⁷⁷

We have already shown that alarmist assertions of long commutes are widely off the mark. The few people who do choose longer commutes presumably have their reasons for doing so. Are many people alone and stranded? Are there increasing numbers of such people? Are they more likely to be isolated if they live in the suburbs? The answer to those questions is a clear no.

There are few reliable data sources that describe the nature of community in America. We utilized travel information from the NPTS data files. The broad NPTS trip-purpose categories reveal that in 1995 approximately 20 percent of all person-trips (all modes) were for commuting and otherwise work-related travel, another 20 percent were for shopping, and most of the rest were for personal and social purposes (Table 1). If we count the 25 percent of person-trips that are for “Social and Recreational” purposes (including vacation, visiting friends and family, and other related trips), plus the 24 percent for “Other” for “Family and Personal” trips, plus a small portion of the 9 percent for

Table 1
Number of Vehicle-Trips, VMT, Person-Trips, and Person-Miles of Travel (millions) by Trip Purpose, 1995

Purpose	Vehicle-Trips	VMT	Person-Trips	Person-Miles of Travel
<i>Work trips</i>				
To or from work	54,782	642,616	66,901	766,198
Work-related business	7,921	137,869	9,860	196,705
Percentage of total	27.29	37.73	20.26	28.23
<i>Family and personal</i>				
Shopping	49,554	277,887	76,688	461,250
Doctor and dentist	3,315	30,614	5,583	52,720
Other	61,964	426,350	91,493	677,972
Percentage of total	49.98	35.53	45.86	34.94
<i>Civic, educational, and religious</i>				
Percentage of total	4.24	3.79	8.80	5.73
<i>Social and recreational</i>				
Vacation	246	20,319	775	57,194
Visits (friends and relatives)	15,323	195,072	31,100	382,784
Other	26,670	256,175	62,487	606,579
Percentage of total	18.39	22.80	24.90	30.68
<i>Miscellaneous</i>				
Other	204	2,797	623	13,009
Purpose not reported	33	422	67	1,736
Percentage of total	0.10	0.16	0.18	0.43
Total*	229,745	2,068,433	378,930	3,411,451

Source: Nationwide Personal Transportation Survey, <http://www-cta.oml.gov/npts/1995>.

* Includes travel for which purpose of vehicle-trips, VMT, person-trips, and person-miles of travel was unreported.

Table 2
Distribution (by percentage) of Vehicle-Trips and VMT by Trip Purpose, 1969, 1977, 1983, 1990, 1995, 1997, 1983, 1990, and 1995

	Vehicle-Trips					VMT				
	1969	1977	1983	1990	1995	1969	1977	1983	1990	1995
<i>Work trips</i>										
To or from work	31.9	29.3	27.8	26.3	23.8	33.6	31.7	30.1	32.1	31.1
Work-related business	4.4	5.3	2.9	1.8	3.4	7.9	7.6	4.2	3.0	6.7
Subtotal	36.3	34.6	30.7	28.1	27.3	41.5	39.3	34.3	35.1	37.8
<i>Family and personal</i>										
Shopping	15.3	8.6	20.0	20.3	21.6	7.5	11.1	13.4	11.5	13.4
Doctor and dentist	1.7	1.5	1.2	1.1	1.4	1.6	1.8	1.5	1.3	1.5
Other	14.0	14.9	18.3	24.1	27.0	10.2	12.0	15.5	20.0	20.6
Subtotal	31.0	35.0	39.5	45.5	50.0	19.3	24.9	30.4	32.8	35.5
<i>Civic, educational, and religious</i>										
Subtotal	9.3	7.3	5.9	5.3	4.2	4.9	5.2	4.1	4.4	3.8
<i>Social and recreational</i>										
Vacation	0.0	0.1	0.2	0.1	0.1	2.6	0.6	2.1	1.5	1.0
Visits (friends and relatives)	9.0	9.3	9.9	8.8	6.7	12.1	12.1	13.5	11.6	9.4
Pleasure driving	1.4	0.5	0.4	0.3	NA	3.1	0.9	1.1	0.6	NA
Other	11.9	12.3	12.1	11.3	11.6	15.3	13.7	13.3	13.2	12.4
Subtotal	22.3	22.2	22.6	20.5	18.4	33.1	27.3	30.0	26.9	22.8
Other*										
Subtotal	1.1	0.9	1.3	0.6	0.1	1.2	3.3	1.2	0.8	0.1
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Sources: Patricia S. Hu and Jennifer Young, *1990 NPTS Databook* (Washington: Office of Highway Information Management, Federal Highway Administration, U.S. Department of Transportation, 1993), HPM-40, Table 5.31; and Nationwide Personal Transportation Survey, <http://www-cta.ornl.gov/npts/1995>, Table NPTS-1.

* Includes travel for which trip purpose was unreported.

Table 3
Vehicle-Trips and VMT by Place of Residence and Trip Purpose, 1990

	MSA (within central city)		MSA (not within central city)		Not in MSA		Total	
	Vehicle-Trips	VMT	Vehicle-Trips	VMT	Vehicle-Trips	VMT	Vehicle-Trips	VMT
Work trips								
Percentage of total	14,679,857 27.7%	136,656 33.7%	20,314,471 29.0%	247,320 37.4%	9,643,150 26.9%	111,400 32.5%	44,637,478 28.1%	495,378 35.1%
Family and personal								
Percentage of total	24,079,845 45.4%	130,272 32.1%	31,508,523 45.0%	212,545 32.1%	16,648,211 46.4%	119,049 34.8%	72,236,579 45.5%	461,866 32.8%
Civic, educational, and religious								
Percentage of total	2,846,803 5.4%	17,716 4.4%	3,488,735 5.0%	27,253 4.1%	2,099,095 5.8%	17,232 5.0%	8,434,633 5.3%	62,201 4.4%
Social and recreational								
Percentage of total	11,108,919 20.9%	115,203 28.4%	4,199,580 20.3%	170,856 25.8%	7,239,227 20.2%	92,929 27.1%	32,547,726 20.5%	378,988 26.9%
Other*								
Percentage of total	319,999 0.6%	5,384 1.3%	441,111 0.6%	3,758 0.6%	260,603 0.7%	1,855 0.5%	1,021,713 0.6%	10,996 0.8%
Total								
Percentage of total	53,053,726 100.0%	405,278 100.0%	69,973,368 100.0%	661,826 100.0%	35,900,373 100.0%	342,472 100.0%	158,927,467 100.0%	1,409,576 100.0%

Source: Patricia S. Hu and Jennifer Young, 1990 *NPTS Databook* (Washington: Office of Highway Information Management, Federal Highway Administration, U.S. Department of Transportation, 1993), HPM-40, Table 5.10.

* Includes travel for which trip purpose was unreported.

Sprawl's critics presume that people are consistently making the "wrong" choices and that they have only poor choices from which to select. Neither proposition is plausible.

"Civic, Educational, and Religious," we find that more than one-half of all person-trips are for social and personal reasons. If shopping is also considered a social activity, the proportion is much higher. We have shown that this trend has continued since 1983, and that it is associated with increasing affluence.⁷⁸

Comparisons over a longer time span can be made by looking at vehicle-trips over the period 1969–95 (see Table 2). Work trips as a share of all household vehicle-trips have declined steadily.⁷⁹ During the same period, "Family and Personal" trips increased from 31 percent in 1969 to 50 percent in 1995. Within that category, the share of shopping vehicle-trips grew by 41 percent, from 15.3 to 21.6 percent, while the share of "Other" for "Family and Personal" vehicle-trips increased by 93 percent, from 14 to 27 percent. The nation's share of suburban residents continued to grow significantly, rising from 37 percent in 1970 to 46 percent in 1990.

If the critics of urban sprawl are right, we could assume that (1) suburban residents would take fewer social trips than would nonsuburban residents and (2) the trips that the suburban residents take would be longer. Is that the case? The 1990 NPTS data can be compiled by place of residence, whether or not respondents lived inside an MSA, and, if they did, whether they resided inside or outside central cities. Table 3 shows that, within MSAs, households both inside and outside central cities allocate their trip times and mileage in approximately the same manner. Accordingly, the available data do not support the alarming picture, painted by Al Gore and others, of socially isolated suburbanites. The critics, however, base their assertions not on evidence but on anecdotes, which they use to justify suggested sweeping policies to impose drastic lifestyle changes.

Conclusion

Upward mobility is at the core of the American Dream. In prosperous times, people are likely to "move on," both spatially and

socially. They leave behind old neighborhoods and networks. They choose the trade-offs that they consider best for them—"maximizing their utility," to use economic jargon.

Consider, for example, a recent survey conducted by the *Los Angeles Times*. It was discovered that, of the 2,385 suburbanites interviewed by the newspaper, "the people who live in the suburbs generally love their lives. And the farther they get from Los Angeles, the more they love them."⁸⁰ Sprawl's critics presume that people are consistently making the "wrong" choices and that they have only poor choices from which to select. Neither proposition is plausible, and both evince a disrespect (often bordering on contempt) for the wishes of people whose tastes are not shared by the anti-sprawl activists.

Two contemporary migrations are auspicious: (1) the migration to the outer suburbs, exurbs, and rural areas (already discussed) and (2) the migration to private communities (homeowners' associations, condominium associations, and especially gated communities). In 1998 there were 205,000 neighborhood associations involving 42 million people; there were only 500 of such associations in 1962 and just 10,000 in 1970.⁸¹ Such associations adopt the institutional arrangements that internalize the costs of the collective decisions and minimize negative externalities. Those types of associations are also likely to include the amounts and the kinds of open spaces that their member-residents want.

The two migrations are, of course, lamented (and scorned) by New Urbanists (although several New Urbanist communities in practice adopt the private association format) who never connect "livability" with the choices made by real people. The 10 fastest-growing U.S. cities between 1990 and 1996 (mentioned above) were all in the Sunbelt; were for the most part suburban, low-density areas; and reported comparatively low per capita municipal expenditures.

Both types of migration can be characterized as people's attempts to move out of harm's way and to secure their property rights.⁸² It is ironic that the collectivists' urg-

ings to increase regulation and diminish private property rights will only exacerbate the migrations that they deplore. Suburbanization as a response to people's preferences (and technological change) is natural and efficient. Policies (existing as well as proposed) that worsen the conditions that "push" people out of the inner city are neither natural nor efficient.

The smart-growth platform relies on "the romantic image of the benevolent and capable state."⁸³ In the words of Nobel laureate James Buchanan, "The romance of socialism, which is dependent both on an idealized politics and a set of impossible behavioral presuppositions, has not yet disappeared."⁸⁴ The romance of activist environmentalism coupled with the visions of urban designers shift the discussion of the harms of urban sprawl from fact to rhetoric and emotion. To give an example, in his well-known September 1998 talk at the Brookings Institution, the vice president praised Portland and its light-rail system, saying that "it has attracted 40 percent of all commuters."⁸⁵ Despite being wildly inaccurate, the vice president's assertion has been routinely repeated and usually passes without challenge. In fact, all combined transit in Portland serves only slightly more than 5 percent of the workforce, and light rail carries less than 15 percent of the transit total.⁸⁶

Finally, the tradeoff between equity (no matter how defined) and efficiency is nowhere to be found in the discussions of urban sprawl. Instead, we see a battery of policy instruments likely to make everyone, but especially the poor, worse off. The most powerful antidote to poverty remains economic development, not politicized changes in living arrangements. Smart-growth prescriptions weaken property rights and, as a result, limit the power of markets to deliver growth. Notably, the scarcities imposed by such prescriptions tend to be most injurious to those in the lowest income brackets. In the final analysis, "smart growth" is a solution in desperate search of a problem.

Notes

1. "Child Mortality," *The Economist*, October 10, 1998, p. 110.
2. Joseph E. Stiglitz and Lyn Squire, "International Development: Is It Possible?" *Foreign Policy* 110 (Spring 1998): 138–51.
3. Fred S. McChesney, *Money for Nothing: Politicians, Rent Extraction and Political Extortion* (Cambridge, Mass.: Harvard University Press, 1997).
4. Neal R. Peirce, "Littleton's Legacy: Our Suburban Dream Shattered," *Houston Chronicle*, June 6, 1999, p. 3. The same theme was repeated by Richard Rodriguez on a *NewsHour* with *Jim Lehrer* segment that aired on June 29, 1999.
5. Charles Schmidt, "The Specter of Sprawl," *Environmental Health Perspective* 106, no. 6 (June 1998): A274–79.
6. Peter Katz, ed., *The New Urbanism: Toward an Architecture of Community* (New York: McGraw-Hill, 1994), p. xiii.
7. Peter Calthorpe, "The Region," in Katz, p. xiii.
8. Randall G. Holcombe, "Growth Management in Florida: Lessons for the National Economy," *Cato Journal* 10, no. 1 (1990): 109–25.
9. Peter Calthorpe, *The Next American Metropolis: Ecology, Community and the American Dream* (New York: Princeton Architectural Press, 1993), p. 10.
10. Peter Hall, *Cities in Civilization* (New York: Pantheon Books, 1998), pp. 862–63.
11. *Ibid.*, p. 876.
12. *Ibid.*, p. 878.
13. Finis Welch, "In Defense of Inequality," *Papers and Proceedings of the 111th Annual Meeting of the American Economic Association* 89, no. 2 (1999): 1–17.
14. Marvin Koster, *Wage Levels and Inequality: Measuring and Interpreting the Trends* (Washington: American Enterprise Institute, 1998).
15. W. Michael Cox and Richard Alm, *Myths of Rich and Poor: Why We're Better Off Than We Think* (New York: Basic Books, 1999).
16. Peter Mueller, "Transportation and Urban Form: Stages in the Spatial Evolution of the American Metropolis," in *The Geography of Urban Transportation*, ed. Susan Hanson (New York:

It is ironic that the collectivists' urgings to increase regulation and diminish private property rights will only exacerbate the migrations that they deplore.

Guilford, 1986), pp. 24–48.

17. Peter Gordon, Harry Richardson, and Gang Yu, “Metropolitan and Non-Metropolitan Employment Trends in the U.S.: Recent Evidence and Implications,” *Urban Studies* 35, no. 7 (1998): 1037–57.

18. U.S. Bureau of the Census, www.bls.census.gov/cps/pub/1997/mobility.htm.

19. Gordon, Richardson, and Yu.

20. Katherine O’Regan and John Quigley, “Where Youth Live: Economic Effects of Urban Space and Employment Prospects,” *Urban Studies* 35, no. 7 (1998): 1187–1205.

21. Daniel Immergluck, “Job Proximity and the Urban Employment Problem: Do Suitable Nearby Jobs Improve Neighborhood Employment Rates?” *Urban Studies* 35, no. 1 (1998): 15–27.

22. Economagic, www.economagic.com.

23. Bernard Frieden, “The New Regulation Comes to Suburbia,” *Public Interest* 55 (1979): 16.

24. National Association of Homebuilders, “Housing Opportunity Index: Third Quarter 1998,” www.nahb.com; and Alex Anas, “The Costs and Benefits of Fragmented Metropolitan Governance and the New Regionalist Policies,” *Planning and Markets* (1999), www-pam.usc.edu.

25. U.S. Department of Commerce, Economics and Statistics Administration, as cited in U.S. Bureau of the Census, *Statistical Abstract of the United States: 1998* (Washington: Government Printing Office, 1998), Table 1190, p. 713.

26. Richard Morrill, “Myths about Metropolis,” in *Our Changing Cities*, ed. John Fraser Hart (Baltimore: Johns Hopkins University Press, 1991).

27. Cox and Alm, Table 1.1.

28. Pietro Nivola, *Laws of the Landscape: How Policies Shape Cities in Europe and America* (Washington: Brookings Institution, 1999).

29. William Fischel, *The Economics of Zoning Laws: A Property Rights Approach to American Land Use Controls* (Baltimore: Johns Hopkins University Press, 1985), pp. 281–84.

30. U.S. General Accounting Office, “Extent of Federal Influence on ‘Urban Sprawl’ Is Unclear,” GAO/RCED-99-97, April 1999.

31. See Richard Morrill and Wendell Cox, “The

President’s New Sprawl Initiative: A Program in Search of a Problem,” Heritage Foundation Backgrounder no. 1263, 1999; Christian Gerondeau, *Transport in Europe* (Norwood, Mass.: Artech House, 1997); and Genevieve Guliano, “Land Use Policy and Transportation: Why We Won’t Get There from Here,” Transportation Research Board Circular, 1999.

32. Joyce Dargay and Dermot Gately, “Income’s Effect on Car and Vehicular Ownership Worldwide: 1960–2015,” Working Paper, C.V. Starr Center for Applied Economics, New York, 1997.

33. Nivola, p. 11.

34. Paul Romer, “Increasing Returns and Long-Run Growth,” *Journal of Political Economy* 94, no. 5 (1986): 1002–37.

35. Gregory Ingram and Zhi Liu, “Determinants of Motorization and Road Provision,” in *Essays in Transportation Economics and Policy*, ed. José Gomez-Ibanez, William Tye, and Clifford Winston (Washington: Brookings Institution, 1999).

36. Robert Freilich and Bruce Peschoff, “The Social Costs of Sprawl,” *Urban Lawyer* 29, no. 2 (1997): 183–98.

37. Sam Howe Verhovek, “Fighting Sprawl, a County Gets Intel to Limit Jobs,” *New York Times*, June 9, 1999, p. A1.

38. Witold Rybczynski and Peter Linneman, “How to Save Our Shrinking Cities,” *Public Interest* 135 (1999): 30–44.

39. Real Estate Research Corporation, *The Costs of Sprawl: Environmental and Economic Costs of Alternative Residential Development Patterns at the Urban Fringe* (Washington: U.S. Government Printing Office, 1974).

40. Duane Windsor, “A Critique of the Costs of Sprawl,” *Journal of the American Planning Association* 45, no. 2 (1979): 279–92.

41. See Parsons, Brinckerhoff, Quade, and Douglas, Inc. and ECONorthwest, *The Full Social Costs of Alternative Land Use Patterns: Theory, Data, Methods, and Recommendations* (Washington: U.S. Department of Transportation, 1998); and Transit Cooperative Research Program, TCRP Report 39, “Costs of Sprawl Revisited,” Washington, Transportation Research Board, National Research Council, 1997.

42. Helen Ladd, “Population Growth, Density and the Costs of Providing Services,” *Urban Studies*

- 29, no. 2 (1992): 273–95.
43. Henderson, Nev.; Chandler, Ariz.; Pembroke Pines, Fla.; Palmdale, Calif.; Plano, Tex.; Las Vegas, Nev.; Scottsdale, Ariz.; Laredo, Tex.; Coral Springs, Fla.; and Corona, Calif.
44. Phoenix, Ariz.; San Antonio, Tex.; San Diego, Calif.; Houston, Tex.; and Dallas, Tex.
45. Barry W. Starke, *Wall Street Journal*, June 7, 1999, p. A23.
46. Alan Pisarski, "Commuting in America," The ENO Foundation, Washington, 1996.
47. Wendell Cox Consultancy, www.publicpurpose.com.
48. David Hartgen and Daniel Curley, "Beltways: Boon, Bane, or Blip? Factors Influencing Changes in Urbanized Area Traffic, 1990–1997," Center for Interdisciplinary Transportation Studies, University of North Carolina, 1999, WP 190.
49. Marilyn Gross and Richard Feldman, *National Transportation Statistics 1997* (Washington: Bureau of Transportation Statistics, U.S. Department of Transportation, 1997), Table 1-15.
50. Sheila Muto, "Quality of Life: Traffic Troubles," *Wall Street Journal*, December 9, 1998, p. CA4.
51. U.S. Department of Transportation, *Our Nation's Travel: 1995 NPTS Early Results Report* (Washington: Office of Highway Management, Federal Highway Administration, 1997), Figure 15.
52. *Ibid.*, Figure 21.
53. Nivola, Figure 3-1, p. 15.
54. Don Pickrell, *Urban Rail Transit Projects: Forecasts versus Actual Ridership and Cost* (Washington: Office of Grants Management, Urban Mass Transit Administration, U.S. Department of Transportation, 1989).
55. Jonathan Richmond, "New Rail Transit Investments—A Review," John F. Kennedy School of Government, Harvard University, 1998, Table 2-15.
56. For comprehensive summaries of the literature, see Charles Lave, ed., *Urban Transit: The Challenge to Public Transportation* (San Francisco: Pacific Institute for Public Policy Research, 1985); and Gomez-Ibanez, Tye, and Winston.
57. Cliff Henke, "More Cities Prepare to Join Rail Club," *Metro*, July 1999, p. 32.
58. Robert Cervero, "Surviving the Suburbs: Transit's Untapped Frontier," *Access* 2 (Spring 1993): 29–34.
59. Ray Brindle, "Four Titles Touching on 'Sustainable Transport,'" *Road and Transport Research* 4, no. 1 (1995): 126–31.
60. Don Pickrell, "Transportation and Land Use," in Gomez-Ibanez, Tye, and Winston, p. 423. This chapter is an excellent review of the literature on the subject.
61. *Ibid.*, pp. 431–32.
62. In economic parlance, the elasticity of household VMT with respect to residential density is approximately -0.1. Don Pickrell and Paul Schmieck, "Trends in Personal Motor Vehicle Ownership and Use: Evidence from the NPTS," in *Searching for Solutions: Proceedings from the NPTS Symposium*, October 29–31, 1997, Report no. 17, Federal Highway Administration, February 1999, pp. 85–128.
63. See Morrill and Cox; and Hartgen and Curley.
64. Randal O'Toole, "Dense Thinking," *Reason*, January 1999, pp. 44–52.
65. The 10 cities and their respective transit systems are the following: New York (NYCMTA), Chicago (RTA), Los Angeles (LACMTA), Washington, D.C. (WMATA), Boston (MBTA), Philadelphia (SEPTA), San Francisco (Muni), New Jersey (NJ Transit), Atlanta (MARTA), and Baltimore (MDMTA). See Brian Taylor and William McCullough, "Lost Riders," *Access* 13 (Fall 1998): 19–26.
66. Norman Myers, "Consumption: Challenge to Sustainable Development," *Science*, April 4, 1997, pp. 53–57; and United Nations Development Programme, *Human Development Report 1998* (New York: Oxford University Press, 1998).
67. Julian Simon, ed., *The State of Humanity* (Cambridge, Mass.: Blackwell, 1995), pp. 279–322; R. David Simpson, "Mother Nature Necessitates Invention and Technology Buys Industry," *Resources* 135 (Spring 1999): 5–8; "A Raw Deal for Commodities," *The Economist*, April 17, 1999, pp. 75–76; and Jeffrey Krautkraemer, "Nonrenewable Resource Scarcity," *Journal of Economic Literature* 86, no. 4 (1998): 2065–107.
68. Harold Barnett and Chandler Morse, *Scarcity and Growth: The Economics of Natural Resource Availability* (Baltimore: Johns Hopkins University Press, 1963).

69. Richard Easterlin, *Growth Triumphant: The Twenty-First Century in Historical Perspective* (Ann Arbor: University of Michigan Press, 1996).
70. Arnold Howitt and Alan Altshuler, "The Politics of Controlling Auto Air Pollution," in Gomez-Ibanez, Tye, and Winston, p. 223.
71. Paul Portney, "Does Environmental Policy Conflict with Economic Growth?" *Resources* 115 (Spring 1994): 19-23; and Dallas Burtraw, "Trading Emissions to Clean the Air: Exchanges Few but Savings Many," *Resources* 122 (Winter 1996): 3-6.
72. Julian Simon, *Hoodwinking the Nation* (New Brunswick, N.J.: Transaction, 1999), pp. 17-29.
73. James Sterngold, "Dairy Farmers in California Find Gold in Urban Sprawl," *New York Times*, October 22, 1999, p. A1.
74. Roger Pilon, "Property Rights and Regulatory Takings," *Cato Handbook for Congress: 106th* (Washington, Cato Institute, 1999), pp. 203-21.
75. See, for instance, William Hamilton, "How Suburban Design Is Failing Teenagers," *New York Times*, May 6, 1999, p. F1. The social indictment of suburbia is so far-reaching that even obesity has been linked to urban sprawl. See Ann Carrns, "On a Rainy Night in Georgia, What Can You Do but Eat?" *Wall Street Journal*, October 29, 1999, p. A1.
76. Francis Fukuyama, "The Great Disruption: Human Nature and the Reconstitution of the Social Order," *Atlantic Monthly*, May 1999, pp. 55-80.
77. Quoted in David Goldberg, "Your Next Neighborhood: Rethinking a 50-Year-Old Concept of City and Neighborhood," *Atlanta Journal-Constitution*, November 8, 1998, p. G1.
78. Peter Gordon, Ajay Kumar, and Harry Richardson, "Beyond the Journey to Work," *Transportation Research 22A*, no. 6 (1998): 419-26.
79. The 1969, 1977, 1983, and 1990 results for this measure are from Patricia S. Hu and Jennifer Young, *1990 NPTS Databook* (Washington: Office of Highway Information Management, Federal Highway Administration, U.S. Department of Transportation, 1993), HPM-40, Table 5.31. For comparable 1995 data, see Table 1.
80. Daryl Kelley, "As Suburbs Change, They Will Satisfy," *Los Angeles Times*, October 19, 1999, <http://www.latimes.com/news/reports/suburbs/>.
81. Robert Nelson, "Privatizing the Neighborhood: A Proposal to Replace Zoning with Private Collective Property Rights to Existing Neighborhoods," *George Mason Law Review* 7, no. 4 (1999): 1-54.
82. Peter Gordon and Harry Richardson, "Hayek and Cities: Guidelines for Regional Scientists," in *Essays in Honor of Ben Stevens*, ed. R. E. Miller and M. E. Lahr (forthcoming, 2000).
83. James Buchanan, "Notes on the Liberal Constitution," *Cato Journal* 14, no. 1 (1994): 2.
84. *Ibid.*, p. 7.
85. Cited in Morrill and Cox.
86. Wendell Cox Consultancy.

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The Difference between Critique and Criticism. Criticism finds fault/Critique looks at structure. Criticism looks for what's lacking/Critique finds what's working. Criticism condemns what it doesn't understand/Critique asks for clarification. Criticism is negative/Critique is positive (even about what isn't working). Criticism is vague and general/Critique is concrete and specific. Criticism has no sense of humor/Critique insists on laughter, too. c. criticism. What is the main problem with the following critique? "Your organization was confusing, you spoke too quietly and couldn't be heard, your visual aids were distracting, and your presentation was much too long." a. It is not specific. b. It is not objective. c. It is not positive. d. It is not ethical. c. It is not positive. What is the main problem with the following critique? "You put some thought into it, but you obviously do not care much about the topic you are presenting." a. It is not ethical. b. It Critique vs Criticism There are many pairs of words in English language that are confusing for those trying to learn the language. The pair consistin. Difference Between Critique and Criticism. July 28, 2012 Posted by Admin. Critique vs Criticism. There are many pairs of words in English language that are confusing for those trying to learn the language. The pair consisting of critic and critique is one example where people consider both as synonyms and use them interchangeably.