

WHITE PAPER

Urban Growth/Development and Long-Term Travel Demand

Summary

Cities and other developed areas have varying physical attributes. Their sizes, densities, settlement patterns, and forms all vary greatly, depending on the factors that have shaped them during the cities' development. This paper considers three urban growth and development factors that influence the physical characteristics of cities and are likely to affect future travel behavior: intra-regional distribution of growth, metropolitan development patterns, and land use controls.

- *Intra-regional distribution of growth:* Metropolitan areas in the United States will continue to grow. How that growth and the associated development are distributed within a region will have a direct effect on travel demand. An ongoing pattern of sprawl will likely increase use of cities' road and highway systems, and will present significant obstacles to the effective implementation of transit systems, particularly if their intended service areas continue to grow.
- *Metropolitan development patterns:* Densities, land uses, and development types directly affect how people are distributed throughout a metropolitan area. This, in turn, influences where, how, and when they will need to travel for both work and non-work purposes. Land use also plays a role in determining how much land is available for the development and expansion of transportation systems.
- *Land use controls:* Cities and other jurisdictions employ land use regulations and other techniques to shape future urban growth. The ways in which this is done, as well as the degree to which transportation systems are taken into account during the planning process, have a significant impact on how transportation systems will evolve in urban settings and how people will be likely to use them.

Intra-Regional Distribution of Growth

Overall Growth

Based on population projections for the United States, urban areas will almost certainly continue to grow in both population and geographic area. Significant development will accompany this growth: it is anticipated that cities will gain a collective 45% increase in the amount of built square footage between the years 2000 and 2030.

Interestingly, approximately half of the buildings in urban areas in the year 2030 will have been constructed after 2000; roughly one-third of these will be replacements for older buildings, while the remaining two-thirds will constitute additional space. If predictions for population increases are accurate, the majority of this new construction will be residential buildings to accommodate

the increased populations of the urban areas. The fact that approximately half the buildings that will exist in 2030 will have been built during the prior 30 years offers an opportunity to drastically affect the urban landscape. By guiding the construction as it occurs, civic leaders can change cities to patterns of land use and density that better suit their long-term goals, including those concerning transportation. As the next section discusses, however, such a shift is unlikely to occur.

More Sprawl

Short of significant intervention, the current pattern of increasing sprawl at the outer edges of urban areas is expected to continue. There is no indication that the balance between land costs and transportation costs, considered to be one of the more significant determinants in the selection of housing and employment locations, will shift enough to favor denser urban developments. Many larger cities will still have enough available land within their regions to support continued patterns of low-density suburbs, office parks, and other elements of urban sprawl.

The continued prevalence of sprawl can be attributed to several factors. There is an ongoing trend away from manufacturing work and toward professional services in the U.S. labor market. Within the world economy, the United States is increasingly focusing on “intellectual” work that is less likely to be lost to less expensive overseas labor. For this type of work, the geographic locations of employment centers are much less significant, since work can be done almost anywhere and delivered to the customer without heavy reliance on the established shipping and transportation networks used by manufacturing and agriculture. Employers are free to locate offices outside the city center, where land and facilities are less expensive. Telecommuting is another trend cited as relevant to lower urban densities. As it becomes easier for employees to work from home (a technological trend that will inevitably continue), the geographic link between home and office locations weakens; employees are much more willing to live farther from the office if they are not required to travel between the two on a daily basis.

Some studies do cite an increased market demand for more compact forms of housing located in urban areas as the beginnings of a trend toward significant re-densification. It is difficult, however, to support this prediction with the limited shift in demand demonstrated to date. As a result, much of the literature regarding future urban infill and higher metropolitan densities is prescriptive in nature, rather than purely predictive.

Survival of the CBD

Despite sprawl’s inevitable continued presence in the future, the central business district (CBD) is expected to remain a vibrant element of the urban landscape. Certain businesses rely on the “face to face” nature of work made possible by having an office downtown, and will continue to locate there. In addition, certain types of people – such as those characterized generally as the “creative class” by Richard Florida (more on this below) – value the urban lifestyle and the particular benefits it conveys. While planners feel comfortable in predicting the continued survival of CBDs as centers of activity, very few seem willing to predict that significant growth will occur there in the foreseeable future.

Metropolitan Development Patterns

Rise of the “Edgeless Cities”

The idea of “edge cities” was popularized in the 1990s to describe one of the prevalent urban growth patterns of the 1980s and 1990s: concentrations of development located outside the urban core, which met certain thresholds for density and mixes of land uses. Since the mid-1990s, however, virtually no new such edge cities have come into existence, and existing edge cities in turn have started to be replaced by “edgeless cities.” These areas, the current and future result of urban sprawl, are the product of office parks located far on the outskirts of metropolitan areas. These developments are so spread out and isolated from each other that they do not attract even the basic mixed-use amenities (some retail, entertainment and limited residential) attributed to edge cities. Edgeless cities are single-purpose destinations with no clear center or boundaries that mark them as urban areas of any degree. Since they are sited far away from areas that have sufficient densities of development or population to support other land uses such as retail or entertainment, they do not attract co-location of such other land uses and remain isolated destinations.

CBDs

Some planners argue that the “downtown” will continue to be a relevant component of the urban landscape. While CBDs have lost their dominance in the market for office space footage to suburban developments and office parks, they still remain a critical site for certain knowledge- and creativity-based industries such as high finance, innovation and entrepreneurship. These types of industries will continue to rely on the prestige of a downtown location as part of their professional model for some time to come.

In 2001, Richard Florida espoused the notion of what he referred to as the “creative class” who will continue to seek the CBD lifestyle. This category of people, stereotypically younger and more active, value the characteristics of life normally found in the urban core: a wide variety of retail and dining opportunities, arts activities, and cultural diversity. The presence of this demographic in the urban core supports housing and retail development in the CBD, and serves to attract some of the companies that typically employ this group to locate their offices in the same area.

It is unclear whether the factors that maintain CBDs will be significant enough to cause actual growth in these urban areas – predictions vary significantly – but they are expected to preserve the existence of CBDs for the foreseeable future. It is possible the preference of the “creative class” for denser urban areas will change over time as the members of that demographic age and develop preferences that are better served by traditional suburban development patterns.

The “Bull’s Eye”

The combination of the above two trends, edgeless cities and CBDs, will continue to produce a “bull’s eye” pattern of urban development. The urban core serves as a focal point of activity in the metropolitan area, and suburban residential and office park development establish a distant ring around the periphery. Since both these areas are predicted to continue to thrive, the important question concerns what happens to the “no man’s land” in between the two. The long-term future of the “inner” suburbs between the CBD and the outer ring is unclear. It is possible

they will continue in their current form, or that they will gradually become depleted as more people choose to relocate farther inwards or outwards. Regardless, transportation planners will have to address how people travel between the CBD and the edgeless cities or, conversely, whether such movement between the two will be common at all. Suburb-to-CBD commuting has declined steadily over time, and non-work travel between the suburbs and the CBD has also decreased as people choose to patronize suburban shopping centers over traditional “downtown” retail areas.

Movements for Increased Urbanization

Over the past decade, there has been a significant movement in support of increased urbanization. Under a variety of names (Smart Growth, New Urbanism, etc.), these groups have been advocating the revitalization and re-densification of urban areas. Their arguments in favor of such activity encompass a number of issues, including quality of life, economic factors, and environmental benefits. Such urban infill would result in metropolitan areas that are less prone to sprawl, mix mutually supportive land uses and make transit systems use more viable.

While these movements have been gaining popularity in the United States, their long-term success is far from certain. Urbanization receives much attention and is a popular topic of discussion within the development and planning professions, but there have been relatively few manifestations of re-urbanization trends in the United States. Cities and real estate developers have been slow to adopt these practices, and while there is some market demand for such environments, it is not nearly large enough to support wholesale changes in the urban landscape on a par with what the urbanist movements envision.

Land Use Controls

Increase in Governmental Land Planning

The forces that guide land use in the United States are slowly shifting. Although market forces and the real estate developers who respond to them have traditionally driven land use decisions and patterns, there is a growing trend towards active, “top-down” planning on the part of cities, counties and other regulatory jurisdictions. According to the American Planning Association (APA), there has been a significant, albeit slow, increase in the amount of regulatory planning legislation introduced and enacted since the late 1990s, and they expect the pattern to continue. In support of its prediction that planning activity is increasing, the APA cites several recent statistics: over 2,000 planning bills introduced between 1999 and 2001; 27 governors made specific planning proposals in 2001; and almost one-third of states are pursuing their first major statewide planning reforms for smart growth.¹

This trend is attributed to cities seeing the mediocre results of purely market-driven growth patterns enabled by traditionally laissez-faire policies. There is a common realization that the current development patterns will cause long-term problems for cities, including limited land availability and increased cost for civic utilities provided over longer distances.

¹ American Planning Association. “Planning for Smart Growth: 2002 State of the States.” February 2002, pp. 6-7. (www.planning.org/growingsmart/pdf/states2002.pdf)

Cities and counties are also becoming more sophisticated in their understanding and use of land use controls. They are combining traditional land use restrictions with more advanced techniques such as performance-based zoning, to ensure desired development patterns within their jurisdictions.

Regional Planning

Along with the growth in active land use planning, there is an increased focus on planning at the regional level. While regional planning is common for transportation planning (e.g., MPOs and their wider jurisdictions), this represents an important conceptual shift away from the longstanding practice of city-based planning. Although cities have long realized that the scope of factors affecting them extends well beyond their city limits, they traditionally focused on land use and development patterns within their jurisdictions, and have only recently begun to implement regional solutions.

As a result, regional development patterns are being analyzed more actively, and cities are increasingly working together to establish regionally-based entities to apply traditional planning tools on a broader scale. The goal of regional planning is to achieve cohesive integration of land uses, utilities and transportation networks on a wider geographic scale. This trend is still far from prevalent, but it is likely to have a significant influence on the long-term future of land planning.

Urban Growth Limiters

An important element of governmental land use planning is the growing interest in and use of urban growth limiters. These policies and actions deliberately limit the geographical growth of development and direct it to certain areas. While such policies have been popular in other countries (notably the greenbelts in England), they are a relatively recent addition to planning techniques in the United States. Many states, however, have revised their laws to permit urban containment policies, although relatively few states employ them (primarily in the West). Studies indicate a gradual increase in their use, and some states, such as Oregon and Washington, actually require the development of such policies for their metropolitan areas.

Growth limits can be used to support several types of goals effectively:

- Preserve agricultural/rural/natural land
- Promote higher-density land uses
- Focus investment on revitalizing existing urban areas
- Promote cost-effective environments for urban infrastructure investments

Urban growth limiters come in several forms, although three are by far the most common: greenbelts, urban growth boundaries, and urban service boundaries. Greenbelts are large tracts of land, typically government-owned, that encircle an urban area and serve as a hard geographic boundary for growth. These focus development inside the boundary, until development pressure becomes great enough to pass beyond the greenbelt entirely and start a new urban development far from the original area. Urban growth boundaries are regulation-based lines beyond which development is not permitted to spread. Unlike greenbelts, however, these boundaries can be easily changed to accommodate additional growth once development within the boundary exceeds the desired density. The third limiter, urban service boundaries, presents practical (rather than regulatory) restrictions to the spread of development. Cities decide how far public utility infrastructure will extend from the urban center on the theory that the urban area is unlikely to

grow beyond that point; it is often financially impractical for private development to occur outside areas served by public utilities.

Economic Incentives

Economic incentives are an additional means by which cities and other jurisdictions can influence development patterns. These are policies that can make it more profitable – or more costly – for developers to use particular parcels of land in certain ways. Transferable Development Rights (TDRs), for example, encourage landowners to use certain parcels for low-density development or open space by allowing them to transfer the legally-permitted development square footage to a parcel in another area, thereby enabling a larger building on the second parcel than would otherwise be allowed. Conversely, impact fees impose financial penalties on landowners for development that imposes certain types of burdens on municipalities.

The use of such policies is well established in most parts of the United States. While there is no clear trend about whether their use will increase, they remain an important tool for guiding land development patterns.

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