

Transportation Facts



The Crossings community of Mountain View, California, allows easy access to transit and offers plenty of opportunity for walking and biking.

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If you build it, they will come: Americans want smart growth alternatives to conventional transportation

Longer commutes, clogged streets, endless traffic delays—Americans want alternatives to the daily transportation grind. Smart growth land-use strategies, also known as location-efficient development or “new urbanism,” place a premium on what Americans value: shorter trips to and from the office and other destinations, opportunities to travel conveniently without having to drive, pedestrian-friendly sidewalks, and amenities like restaurants, shops, and libraries within walking distance of their homes. These options can save people thousands of dollars a year by cutting the cost of transportation—the second-biggest household expense. Even better, these quality of life improvements have significant benefits for the environment.

Unfortunately, the traditional methods of computer modeling currently used to guide land-management and transportation project development decisions are keeping communities locked into sprawl by severely under-predicting the value of these safer, healthier smart growth alternatives. NRDC has identified several critical problems with the current modeling system, as well as a set of recommendations for correcting the inaccuracies—and creating more livable communities.

The Benefits of Smart Growth

Residents of communities designed using smart growth strategies drive as little as one-fifth as much as their counterparts in conventional sprawl developments.¹ This reduced dependence on automobiles means less money spent on gas, increased outdoor activity like walking and cycling, improved rates of public transit ridership, and less global warming pollution released into the air. In fact, if all new communities were designed using smart growth strategies we could slash



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emissions by about 595 million metric tons after 10 years, or 10 percent of total U.S. emissions of global warming pollution.²

There are also substantial economic benefits: transportation costs can be reduced by at least \$600 a month, and property values can increase as a result of greater attractiveness and lower driving expenses. The overall benefits are so great that if all new residential construction in the United States over the next 10 years were built to resemble existing smart growth projects, the economic benefit to the economy would exceed \$2 trillion—about 20 percent of one year's gross domestic product.³

Poor Modeling Causes Roadblocks

The computerized models currently used to evaluate traffic problems and influence transportation planning decisions are biased, vastly understating the advantages of smart growth development solutions while also exaggerating the benefits of roadway expansion and construction. These models provide decision makers with misleading data that encourage traditional sprawl development by underrating the benefits of smart growth alternatives, making them look economically less attractive than they are. Moreover, the modeling bias creates a self-fulfilling prophecy: planning techniques predict ever-increasing vehicle traffic demand, which justifies automobile-oriented transportation policy and land-use projects, which then leads to increased vehicle traffic.

Building Better Communities

How a community's land is developed largely determines the travel patterns of its residents. Models should accurately assess the following key determinants of vehicle ownership and distance driven as a first critical step toward creating safer, more efficient, and more accessible communities.

- **Density**—the number of residents, households, or to a lesser extent, jobs in an area.
- **Regional location and accessibility**—the proximity of a building site to a larger region's jobs, shops, services, and homes.
- **Transit service quality**—the frequency of bus or train service within walking distance of homes and businesses.



Smart growth communities offer comfortable, walkable neighborhoods with plenty of green space.

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This mixed-use development in St. Louis Park, MN, was built using smart growth principles like high density and connectivity.

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- **Connectivity**—the degree to which roads and paths are connected and allow direct travel between destinations; the degree to which homes, businesses, shopping, and other attractions are physically close to each other.
- **Mix**—the combination of residential and commercial land use in an area.
- **Multi-modalism**—the degree to which land use supports alternative transportation modes such as walking and cycling.

With scientists saying that we need to turn the corner on global warming within the next 10 years, bold strategies are necessary to reduce greenhouse gas emissions. Better land use planning will reduce the distances people have to drive and thereby reduce the amount of global warming pollution coming from their tailpipes.

The first step that policy makers must take to realize these benefits of smart growth is to require improvements to the outdated models used by transportation planning agencies.

¹ "Location Efficiency: Neighborhood and Socio-Economic Characteristics Determine Auto Ownership and Use—Studies in Chicago, Los Angeles and San Francisco." John Holtzclaw, Robert Clear, Hank Dittmar, David Goldstein, and Peter Haas, *Transportation Planning and Technology Journal*, Volume 25, Number 1 (March 2002).

^{2,3} "Location Efficiency as the Missing Piece of the Energy Puzzle: How Smart Growth Can Unlock Trillion Dollar Consumer Cost Savings." Burer, Mary Jean, David B. Goldstein, J. Holtzclaw, *Proceedings of the 2004 Summer Study on Energy Efficiency in Buildings*, American Council for an Energy Efficient Economy, Washington, D.C., August 2004.

By the Numbers: Smart Growth-Style Communities Are in High Demand



■ **87 percent of people planning to buy a home in the next three years** say

that a shorter commute is their top priority.



■ **57 percent of Hispanics and 78 percent of African-Americans** say they

prefer walkable neighborhoods with shorter commutes to neighborhoods with bigger lots and longer commutes, making smart growth communities the neighborhoods of choice for many minorities.



■ **Nine out of 10 Americans** want

their state to fund improvements in existing communities over incentives for new, sprawling development.