



Sprawl Costs

By Robert W. Burchell, Anthony Downs, Barbara McCann, and Sahan Mukherji

"This book incisively and exhaustively documents the hidden costs and unintended consequences of sprawl that spreads development over the metropolitan landscape in pursuit of low-density living. It sounds an alarm to all who care about America's use of the land and expenditure of public funds should hear. The authors outline strategies for more compact development as an antidote to sprawl. Their book is a must read for advocates of smarter growth in this new century." William H. Hudnut III, Senior Resident Fellow, Urban Land Institute, Joseph C. Canizaro Chair for Public Policy

(Washington, D.C.) -- Americans are paying \$84 million a day (\$31 billion annually) to live in sprawling communities, according to the new book, *Sprawl Costs: Economic Impacts of Unchecked Development*, released today by Island Press. *Sprawl Costs* is the culmination of a 10-year research effort which offers the first comprehensive analysis of the economic costs of low-density development, or sprawl, from now to the year 2025.

Sprawl Costs also names the nation's top 20 sprawling metropolitan areas plus their rural counties (referred to as "economic areas" in the book and research) and documents both the cost of sprawl to the areas' economies as well as the savings of more compact development closer to the core (list of top sprawling areas below).

"Sprawl has direct and quantifiable costs to our economy and in our individual lives. This book shows that we are all paying a staggering price for sprawling development in this country, and that price will only go up as gas prices increase," said coauthor Robert Burchell.

"Sprawling communities need longer public roads, increase the cost of new water and sewer hookups by 20% to 40%, impose higher costs on police and fire departments and schools, and more. These costs are passed on to businesses and residents through higher taxes and fees and sometimes through fewer public services. And in most cases, sprawling developments do not generate enough property taxes to cover these added costs," added Burchell.

The environmental impacts of sprawl are well documented, but few studies have examined its economic costs. The research project and book were undertaken by Dr. Robert Burchell, co-director of the Center for Urban Policy Research at Rutgers University, Anthony Downs, senior fellow at the Brookings Institution, Barbara McCann, transportation and land use policy writer, and Sahan Mukherji, research associate at the Center for Urban Policy Research. *Sprawl Costs* documents the hidden costs of sprawl and takes a comprehensive look at the costs and benefits of different forms of growth.

Shifting just 25% of low-density development to more compact growth would save American taxpayers billions of dollars, according to *Sprawl Costs*. For example, we would save

- \$2.6 billion over 25 years (from 2000 2025) because 4.6 million fewer water and sewer hookups would be needed for single-family, detached homes;
- \$110 billion over 25 years in road construction costs because the need for local roads would be reduced by 188,000 lane miles;
- \$420 billion over 25 years in development costs because the average cost of a home would drop by \$16,000;
- \$24 million/day in costs associated with the automobile because Americans would drive 56 million fewer miles each day (and this figure was calculated prior to \$3 per gallon gasoline!).

Smaller mortgages in outlying communities give the false impression that the overall cost of living in these areas is lower. But low housing costs hide the higher cost of transportation and other costs in these areas.

Over the next thirty years, the United States is expected to become home to 90 million more people. Seventy-five percent of all the development on the ground today will be needed to support this boost in population. <u>To accommodate this rate of growth, sprawling development will cost \$6.4 trillion during the period 2000 – 2025. Under compact development, costs would be reduced by \$420 billion.</u>

What does that mean for the average American? The cost of buying a home would drop as well as the taxes necessary for roads and infrastructure. "It seems so much simpler to buy farmland at the edge and build a familiar housing subdivision, but in the long run, this is a more costly strategy for everyone," added Burchell. "If just a modest percentage of this growth were more compact, the savings we reap as a society overall would be huge."

States in the West and the South, where growth is expected to be highest, will bear the biggest cost burden from sprawl. For example, in South Carolina statewide infrastructure costs for the period 1995 to 2015 are projected to be more than \$56 billion, or \$750 per citizen per year for these twenty years, if sprawl continues unchecked. Covering these costs could require an increase in the gasoline tax of 2 cents per gallon, the tolling of all interstates at thirty-mile intervals, and an increase in property taxes of 12.5%. But if South Carolina switched to compact development and managed growth measures to curtail sprawl, the state could save a projected \$5.6 billion in infrastructure costs alone over 25 years.

Sprawl is expensive for local governments. Taking into account all revenues and costs, sprawl will create a fiscal deficit for local governments that is 10% higher than it would be if compact growth were to take place instead. Ironically, the argument for developing agricultural lands into housing developments is that the new homes will expand the tax base. However, the infrastructure costs associated for those homes outweigh their tax benefit.

Contrary to popular belief, the quality of life of people who live in more compact communities is not lower than those who live in sprawling, spread out areas. The quality of life index highlighted in *Sprawl Costs* shows that overall quality of life would not be greatly affected if compact growth were to replace sprawling development.

In addition to fiscal costs, *Sprawl Costs* evaluates some of the quality-of-life consequences of unplanned development that are more difficult to quantify. A study cited in the book found that people living in more sprawling counties are more likely to be overweight and have hypertension.

"The type of compact development presented in the book allows all development that would have taken place under sprawl growth to occur, but it directs that development to locations where public services can be provided more efficiently," added Burchell. "Its more compact form gives more people the option to travel via foot, bicycle, or transit, easing the burden on the road network and creating savings in a relatively short time."

For example, Atlanta has expanded more rapidly than just about any other urban area in the U.S. and has until recently expanded road capacity to accommodate the growth. Between the mid-1980s to the mid-1990s, Atlanta's population grew by 32%. The total vehicle miles traveled in Atlanta in this period grew by 17%, the number of people commuting in a single-occupancy vehicle grew by 15% and commute times grew 1%.

In contrast, Portland, Oregon, one of the few U.S. areas with a long-standing urban growth boundary, pursued a comprehensive strategy to create walkable neighborhoods. During that same time period, Portland's population grew by 26%, total vehicle miles traveled in Portland edged up just 2%, the number of people commuting in a single-occupancy vehicle dropped by 13% and Portland's commute times dropped by 9%.

"Communities must learn to grow in more centrally focused development patterns that consume fewer resources because there's too much at stake. Land is being consumed at triple the rate of household formation, car use is growing twice as fast as the population, and prime agricultural land, forests and fragile lands are decreasing at comparable rates," stated Burchell.

Sprawl Costs researchers used sophisticated economic modeling to calculate the sprawl costs of housing development, water and sewer infrastructure, transportation, land consumption, and other factors for the years 2000-2025. The book presents policy options to moderate sprawl, save Americans money, and improve the quality of life, while providing politicians, planners and concerned citizens with real data on the huge financial implications of sprawl.

Top 20 Sprawling Economic Areas *

- 1. **Los Angeles Area:** Residents will pay \$535 billion over 25 years (2000 2025) to live in sprawling communities or \$30,465 per person. If just 25% of low-density growth is shifted in the future to compact growth, residents would save \$149 billion or \$2,813 per person.
- 2. **Washington/Baltimore Area:** Residents will pay \$384 billion over 25 years (2000-2025) to live in sprawling communities or \$46,603 per person. If just 25% of low-density growth is shifted in the future to compact growth, residents would save \$50 billion or \$6,069 per person.
- 3. **San Francisco Bay Area:** Residents will pay \$378 billion over 25 years (2000-2025) to live in sprawling communities or \$42,720 per person. If just 25% of low-density growth is shifted in the future to compact growth, residents would save \$19 billion or \$2,178 per person.
- 4. **New York City Area:** Residents will pay \$287 billion over 25 years (2000 2025) to live in sprawling communities or \$11,759 per person. If just 25% of low-density growth is shifted in the future to compact growth, residents would save \$17 billion or \$676 per person.
- 5. **Dallas-Fort Worth, Texas Area:** Residents will pay \$228 billion over 25 years (2000 2025) to live in sprawling communities or \$31,590 per person. If just 25% of low-density growth is shifted in the future to compact growth, residents would save \$18 billion or \$2,598 per person.
- 6. **Atlanta, Ga. Area:** Residents will pay \$227 billion over 25 years (2000 2025) to live in sprawling communities or \$44,678 per person. If just 25% of low-density growth is shifted to compact growth, residents would save \$16 billion or \$2,981 per person.
- 7. **Boston-Worchester-Lawrence-Lowell-Brockton, Mass.:** Residents will pay \$202.7 billion over 25 years (2000 2025) to live in sprawling communities or \$26,294 per person. If just 25% of low-density growth is shifted to compact growth, residents would save \$20.8 billion or \$2,698 per person.

- 8. **Miami-Fort Lauderdale, Fla. Area:** Residents will pay \$194 billion over 25 years (2000 2025) to live in sprawling communities or \$36,336 per person. If just 25% of low-density growth is shifted in the future to compact growth, residents would save \$18 billion or \$3,277 per person.
- 9. **Chicago-Gary-Keno Area (Ill., Ind., Wis.):** Residents will pay \$189.3 billion over 25 years (2000 2025) to live in sprawling communities or \$19,103 per person. If just 25% of the low-density growth is shifted in the future to compact growth, residents would save \$15.3 billion or \$1,544 per person.
- 10. **Denver-Boulder-Greeley, Colo. Area:** Residents will pay \$188 billion over 25 years (2000 2025) to live in sprawling communities or \$49,767 per person. If just 25% of low-density growth is shifted in the future to compact growth, residents would save \$21 billion or \$5,570 per person.
- 11. **Houston-Galvenston-Brazoria**, **Texas Area**: Residents will pay \$180 billion over 25 years (2000 2025) to live in sprawling communities or \$33,047 per person. If just 25% of low-density growth is shifted in the future to compact growth, residents would save \$12 billion or \$2,232 per person.
- 12. **Phoenix-Mesa, Ariz. Area:** Residents will pay \$174 billion over 25 years (2000 2025) to live in sprawling communities or \$55,002 per person. If just 25% of low-density growth is shifted in the future to compact growth, residents would save \$15 billion or \$4,704 per person.
- 13. **Orlando, Fla.:** Residents will pay \$157.7 billion over 25 years (2000 2025) to live in sprawling communities or \$44,955 per person. If just 25% of the low-density growth is shifted to compact growth, residents would save \$9.5 billion or \$2,708 per person.
- 14. **Sacramento Yolo, Calif**.: Residents will pay \$129.8 billion over 25 years (2000 2025) to live in sprawling communities or \$57,093 per person. If just 25% of the low-density growth is shifted to compact growth, residents would save \$8.2 billion or \$3,607 per person.
- 15. **Las Vegas, Nev.-Ariz.-Utah Area:** Residents will pay \$109.2 billion over 25 years (2000 2025) to live in sprawling communities or \$72,697 per person. If just 25% of the low-density growth is shifted to compact growth, residents would save \$10.0 billion or \$6,657 per person.
- 16. **Portland-Salem, Ore. -Wash. Area:** Residents will pay \$104.5 billion over 25 years (2000 2025) to live in sprawling communities or \$36,976 per person. If just 25% of the low-density growth is shifted to compact growth, residents would save \$8.8 billion or \$3,114 per person.
- 17. **San Antonio, Texas Area:** Residents will pay \$80.4 billion over 25 years (2000 2025) to live in sprawling communities or \$37,128 per person. If just 25% of the low-density growth is shifted to compact growth, residents would save \$6.9 billion or \$3,186 per person.
- 18. **Nashville, Tenn.-Ky.:** Residents will pay \$79.3 billion over 25 years (2000 2025) to live in sprawling communities or \$33,605 per person. If just 25% of the low-density growth is shifted to compact growth, residents would save \$6.0 billion or \$2,543 per person.
- 19. **Indianapolis, Ind. Ill. Area:** Residents will pay \$78.3 billion over 25 years (2000 2025) to live in sprawling communities or \$25,869 per person. If just 25% of the low-density growth is shifted to compact growth, residents would save \$3.8 billion or \$1,255 per person.

20. **Jacksonville, Fla. – Ga.:** Residents will pay \$72.3 billion over 25 years (2000 – 2025) to live in sprawling communities or \$38,888 per person. If just 25% of the low-density growth is shifted to compact growth, residents would save \$3.3 billion or \$1,775 per person.

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For further information about *Sprawl Costs*, to request additional review copies, or to arrange an interview with one of the authors, please contact Carrie Collins at (202) 537-9166 or via email at carriehcollins@aol.com.

If you review or include *Sprawl Costs* in your publication, please forward two tearsheets to: Island Press, 1718 Connecticut Avenue, NW, Suite 300, Washington, DC 20009

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^{*} An economic area is a metropolitan area plus its rural counties. It is physically about twice as large as a metropolitan area, but in population only about 20% greater. A metropolitan area contains only metropolitan counties (urban and suburban); an economic area is unique in that it includes rural counties that attach themselves to metropolitan areas.