

# COASTAL HERITAGE

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THE  
**FREEWAY**  
*City*

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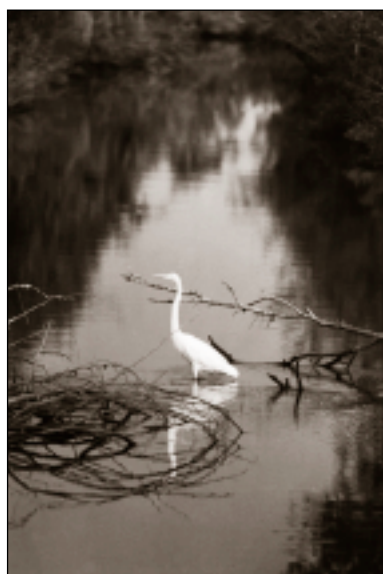
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*Interstate 85, which cuts through upstate South Carolina, forms part of the freeway spine of the Tuscaloosa, Alabama, to Raleigh, North Carolina megalopolis. PHOTO/WADE SPEES*



### SAFE HAVEN.

*To limit sprawl and protect wildlife, governments should purchase valuable lands outright and encourage property owners to establish easements that prevent development, conservationists say. PHOTO/WADE SPEES*



*Coastal Heritage* is a quarterly publication of the S.C. Sea Grant Consortium, a university-based network supporting research, education, and outreach to conserve coastal resources and enhance economic opportunity for the people of South Carolina. Comments regarding this or future issues of *Coastal Heritage* are welcomed.

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THE  
**FREEWAY**  
City  
*Is sprawl outsmarting  
“smart growth”?*

**CAR TREK.** Like many other South Carolinians, Jon Boettcher commutes long-distance to work each day, primarily along four-lane highways.  
PHOTO/WADE SPEES

By John H. Tibbetts

Southerners are building a new kind of city, the semi-rustic megalopolis, hundreds of miles long. Researchers have found this startling land-use pattern spreading across the Carolinas and other southern states where bits and pieces of sprawl blend together along major freeways.

“We’ve become aware of development that is not really urbanization” in the traditional sense, says Ralph Heimlich, an agricultural economist with the U.S. Department of Agriculture (USDA). “Particularly in the South, you’re seeing growth and development that has no center.” The South, in fact, has become a trendsetter in the “deconcentration” of American life—the scattering of people, homes, and businesses across the landscape.

Until 1950, the typical American city included a dense urban core dominated by factories and tall commercial buildings built around seaports and river landings and railroad depots. The urban core was ringed by tightly knit suburbs, which in turn were surrounded by open countryside.

After World War II, suburban tentacles reached into new territory and then filled in with development. Giant cities grew in spurts that, over decades, could be measured like rings on a tree, with first- and second- and third-ring suburbs. Until the 1960s, most suburban workers commuted to the urban core where business and industry still flourished.

Starting in the 1980s, some outlying suburbs bloomed into “edge cities,” a term coined by author Joel Garreau. Suburban office towers and corporate campuses got mixed with cineplexes and mega-malls and car dealerships. Edge cities became the new business centers after jobs fled urban cores and inner-ring suburbs.

What distinguishes edge cities is that everybody drives everywhere.

Conservationists and social activists have condemned sprawl—low-density, car-dependent development—for harming the environment and for leaving city dwellers behind in decaying urban cores. Sprawling



## Sprawl inevitable?

Is sprawl in your future? Probably. “Urban sprawl is more or less inevitable unless it runs up against an immovable barrier” like the ocean or a steep mountain range, says Rutherford Platt, a planning professor at the University of Massachusetts.

Witold Rybczynski, a professor of urbanism at the University of Pennsylvania, has said that America does not have a future of very compact towns. It’s impractical to hope for greater densities in most urban areas, because “it’s not how we live.” The solutions to spread-out growth, moreover, “are pretty tough: they either involve raising the cost of gas by a factor of two, or imposing restrictions on private property. And neither of these things is likely.”

Author Suzannah Lessard also believes that fighting sprawl is futile. Instead, “we must first accept sprawl’s fundamental legitimacy—its inevitability—as a form” of development, she writes in a recent essay. In researching a book on land use, Lessard began to realize that “visibly or invisibly, sprawl was everywhere. It was the shaping force in our landscape. It was the ascendant, determining place form of our time.”

Rybczynski has called for improved planning, returning suburbs to a nineteenth century ideal of a “much more . . . green, country environment.”

An ecologically benign sprawl? Is it possible to create spread-out suburban communities—places of elegance, open space, fresh air, trees—that won’t harm the wider environment with auto emissions and runoff pollution? “This is happening at the micro-scale in some developments and in some of the better planned communities,” says Timothy Beatley, an associate professor of urban and environmental planning at the University of Virginia. “But certainly on the larger regional scale it’s very, very hard.”

development chews up wildlife habitat, damages air and water quality, and paves over farmland and other open space, conservationists say. Sprawl is expensive, costing taxpayers billions to build extended roads and water and sewer infrastructure.

Yet, despite its harmful legacy, sprawl is stretching beyond edge cities, creating a new urban form, which gains energy from its spine—the four- or six- or eight- or even ten-lane freeway. Across the South, development sprouts from highways like leaves from a tree limb. “Today, the nerve center of the metropolitan area is the highway, not the center city,” says Robert F.

Becker, director of Clemson University’s Strom Thurmond Institute of Government & Public Affairs. “This is more of a linear development pattern than we’ve seen before.”

Arcing through the southern piedmont, growth along interstates has knit together the Atlanta metro area, small towns and mid-sized cities and their suburbs, plus rural areas populated by long-distance commuters, into “a huge countrified city across a vast space,” in the words of Robert E. Lang, director of the Metropolitan Institute at Virginia Tech. This 600-mile-long megalopolis stretches along the I-20, I-85, and I-40 corridors from Tuscaloosa, Alabama, to Raleigh, North Carolina, including the South Carolina metro areas of Anderson, Greenville, and Spartanburg.

Another sprawling agglomeration is starting to fill in along 150 miles of interstate and U.S. freeways from Augusta, Georgia, to Florence, S.C. Meanwhile, the Myrtle Beach metro area is bleeding southward, linking up with growth from the

Georgetown area along Highway 17. And the Charleston metro area will eventually spread west along I-26 to connect with Orangeburg, creating a 60-mile-long city, according to a recent computer model.

Such vast tissues of development have emerged partly because of massive investments in major freeways. The 44,000-mile Dwight D. Eisenhower System of Interstate and Defense Highways, initiated in 1956, was the world’s biggest public-works project ever. The system was designed to move goods, farm produce, and military supplies. But it also soon formed the backbone of the nation’s highway commuting system.

In 1960, Daniel Patrick Moynihan, then a university professor and later U.S. senator from New York, predicted that the interstate network would transform urban America: “Highways determine land use, which is another way of saying they settle the future of the areas in which they are built.”

Without proper planning, Moynihan argued, highways would draw people and businesses to the suburbs, and split and disrupt older urban neighborhoods.

Yet no one in 1960 could have anticipated that Americans at the turn of the twenty-first century would build homes so far into the countryside and commute such distances via freeways. Federal and state governments have spent vast sums improving highway systems, largely for commuters’ benefit, over the past forty years.

“A generation ago, a 60-mile commute on a two-lane road seemed very long,” says Michael T. Ratcliffe, a geographer with the U.S. Census Bureau. “But now on a limited-access highway it’s easier. We are seeing rings of settlement within an hour’s commute of the metropolitan edge. These

### ROBERT F. BECKER

*“Today, the nerve center of the metropolitan area is the highway, not the center city.”*



**LOADING ZONE.** Americans continue to avoid mass transit and increasingly drive alone to work. Slightly less than five percent of Americans commuted to work via public transportation in 2000, a modest decrease from a decade earlier. Nearly 76 percent of Americans drove alone in their cars in 2000, up from 73 percent in 1990.

PHOTO/WADE SPEES





### **CLOSE QUARTERS.**

*A number of subdivisions are being built according to “smart-growth” principles, including narrower streets and smaller lots, which some say could reduce sprawl’s impact on the rural landscape. But the vast majority of these subdivisions remain as car-dependent as conventional sprawl.*

PHOTO/WADE SPEES

settlements spawn small retail centers that push the commuting field out,” because people travel from distant rural areas for jobs in the small service centers.

Americans are moving into houses along two-lane rural roads, setting down trailers on five-acre spreads, building vacation or weekend homes along lakes and salt marshes, and buying into large-lot subdivisions in the woods.

“There is a real desire for this kind of lifestyle,” says Heimlich. “It’s a development trend that has been going on for quite a long time. But traditional urban statistics never picked it up. It may not be urbanization in the technical sense, but it has accounted for a tremendous amount of land-use change.”

The South is where sprawl is king. Nine of the nation’s 10 lowest-density metro areas are located in the South, according to a forthcoming study by Lang. By contrast, eight of the 10 highest-density metro areas are in the West, where vast public lands, steep mountains, canyons, and water scarcity have con-

tained leapfrogging growth. A July 2001 study by the Brookings Institution similarly showed that 12 of the 15 highest-density metro areas were western, while 9 of the 15 lowest-density metro areas were southern.

Cities in the Northeast and Midwest are spreading out too, but, with some exceptions, they’re not increasing their populations by very much. The South, however, is a growth powerhouse in both population and jobs.

Being mostly flat, the South has few geographic constraints to spread-out development. And the South lacks extensive public lands or high-value agricultural areas, which limit sprawling growth, according to the Brookings report.

Perhaps most important, the South is historically a “wet” region with relatively high rainfall and plentiful reservoirs, though a five-year drought and rapid development have severely cut into supplies. In the mistaken belief that water supplies are unlimited, many southern metro areas, Becker says, have subsidized sprawl by constructing water and sewer lines willy-nilly across the landscape.

Yet the South’s sprawl maladies are just beginning. A recent Transit Cooperative Research Program study, led by Rutgers University’s Center for Urban Policy Research, created a “sprawl index,” rating each state’s vulnerability to future growth in current “sprawl locations.” According to this index, three of the top five contributors to the nation’s sprawl until the year 2025 will be southern states, with Florida ranking first, and North Carolina and South Carolina ranking fourth and fifth, respectively.

That said, distinctions between metropolitan and rural are breaking down in every corner of the nation. People are migrating from center cities to suburbs; from suburbs to farther-flung rural areas; from larger, denser metros to smaller, less dense metros; and even from rural towns to the outskirts. This migration is so pervasive that “we have begun to change our notion of what is urban, suburban, and rural,” says Ratcliffe.

“Rural” once meant a landscape where people lived by farming, fishing, or forestry. Over the past several decades, though, the southern agricultural economy has virtually collapsed in many regions. Johns Island 30 years ago was a major tomato-producing area

with 2,500 acres under cultivation and 41 growers. Today, there are three growers who cultivate 500 acres; many local growers have been driven out by competition from Mexico.

As the agricultural and small-town manufacturing economies have faded, country folks haven't moved away. Instead, they drive to jobs in metro areas and tourism centers.

Rural places still exist in South Carolina, of course. But every year, another stretch of our countryside establishes closer links with a nearby metro area. "What people are not really acknowledging is the level of interaction going on between rural and urban areas," says Ratcliffe. "The divide between urban and rural areas is disappearing. We tend to think of metropolitan as urban and not as rural. Yet within these metro areas there is quite a bit of rural territory."

Rural folks often declare they want to remain separate and distinct from metro areas. Yet old distinctions between city and country are dissolving, and many Americans who call themselves rural are not, in fact, rural in any practical sense. "They are urban in outlook, urban in their personal

relations, urban in the way they make their living," Peirce Lewis, an emeritus professor of geography at Pennsylvania State University, has written. Even so, they "proudly

claim rural status and are indignant when it is suggested that are really residents of a city."

### **SMALL TOWN TO SPRAWL**

The South's sprawling megalopolises have been shaped, ironically, by the region's history of small-town and rural settlements.

In the eighteenth century, many inland southern towns were originally built quite close together. Settlers founded communities along the "fall line," where rivers flow off the rolling, hilly landscape of the piedmont, creating small waterfalls and rapids. Columbia, Raleigh, and Durham used fast-moving water for power generation, which eventually set the stage for manufacturing. In the late nineteenth century, upstate river towns took the lead in manufacturing by exploiting hydropower. Thousands of poor

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**AUTO MILE.** Americans' love affair with their cars makes "smart-growth" principles politically difficult to implement. U.S. society continues to move toward greater reliance on automobile transportation and freeway networks. PHOTO/WADE SPEES



southerners fled exhausted farmland to work in textile mills.

During the mid-twentieth century, small industrial towns and cities diversified in the southern piedmont, producing tobacco, furniture, and other wood products.

Since the 1960s, state and local governments have offered incentives and subsidies to companies, encouraging their relocation from the North to industrial parks on metro edges and rural areas. "That made it possible for (southerners) to stay in low-density areas and commute in and have jobs," says Kenneth M. Johnson, a demographer and sociologist at Loyola University, Chicago.

Companies migrated to the South partly for its cheap land. And southern government made it even less expensive to develop at the urban edge by subsidizing spread-out growth, pouring enormous amounts of money into upgrading highways, bridges, and water and sewer lines.

Northern industrial cities, originally built around railroads and ports, contain physical and cultural legacies that have made mass transit feasible in some corridors. Public transportation is most popular in New York City, Jersey City, Boston, and Washington, DC.

Modern southern growth, by contrast, emerged in the era of the car and truck. "Because the South developed later, the car and the truck were more significant factors in its spatial development than they were in the North," says Johnson.

Over the past two decades, the southern industrial base has stretched out and flourished in a spectacular fashion along free-ways, particularly in the piedmont. International investment poured into the region, which has become a center for banking,



**TALL REMINDER.** Over the past several decades, the southern agricultural economy has virtually collapsed in subdivisions and golf courses. PHOTO/WADE SPEES

high-tech industry, and automobile manufacturing.

Now dozens of old factory centers, mill towns, railroad towns, and county seats are growing out to meet one another, creating urban agglomerations across a vast scale. "The sprawling mega-regions of the piedmont are the engines of southeastern growth," says Lang.

That region helps drive coastal prosperity too. Residents of booming Charlotte, and Raleigh-Durham-Chapel Hill and Atlanta are buying vacation homes along the southeastern coast. The Grand Strand's largest tourism segment relies on travelers driving from within 300 miles away, including large stretches of the southern piedmont, according to Ashby Ward,





many areas. Farms have increasingly disappeared in the South Carolina lowcountry, replaced by

president of Myrtle Beach Area Chamber of Commerce.

### **A FREEWAY RUNS THROUGH IT**

Jon Boettcher lives in Sumter, a small midlands city (pop. 39,000), and commutes to his job at the S.C. Emergency Manage-

ment Division in Columbia 45 miles away. His commute, mostly along four-lane freeways, takes less than an hour. During the past five years, traffic and development have increased between the two cities, though Columbia and Sumter aren't growing together because the Wateree Swamp divides them, he says. "The two communities are

still separate enough that there's a definite distinction. I don't see Sumter as part of the greater Columbia metro area."

But Dick Dondero, a research analyst with the Santee-Lynches Regional Council of Governments, a planning agency, argues that Sumter County already belongs to the Columbia metro area. "Sumter is really an outer ring of Columbia, though many people here don't think of it that way."

Nevertheless, Sumter's place within the midlands commuting pattern is dizzyingly complex. People, after all, don't just commute from suburbs or outlying small towns into cities anymore. They travel from city to suburb; from city to small town; from suburb to suburb; from mid-sized city to mid-sized city; from far-flung rural area to suburb; and on and on. We commute every which way, and on weekends we travel some more.

On a weekday morning, a typical couple might travel in separate directions for jobs in two different towns. On the weekend, they might shop in a third town and visit friends in a fourth town, traveling everywhere on freeways.

Decades ago, the American giant city was like the sun in the solar system, with an overwhelmingly dominant gravitational pull. Now, writes Peirce Lewis, the typical urban agglomeration is actually a "galaxy" of small towns and mid-sized cities. The result, Lewis has written, is a new kind of city "where all of the traditional urban elements float in space like stars and planets in a galaxy, held together by mutual gravitational attraction but with large empty spaces in between."

Sumter County, for example, has its own gravitational influence that balances Columbia's. Its businesses draw workers from west (Richland County, home to the state capital), from east (Florence County), from north (Kershaw County), and most of all from south (Clarendon County).

Sumter is just one planet among many in the emerging Augusta-Columbia-Sumter-Florence agglomeration. A 1994 USDA Economic Research Service study showed that at least 30 percent of residents in all census tracts stretching 150 miles from east-central Georgia to South Carolina's Pee Dee region commuted for jobs in the four metro cores. (In 2003, the U.S. Census Bureau will complete its analysis of commuting patterns based on the 2000 census.)

It's striking how many rural people imitate suburbanites. That is, they live in a green, quiet place and every morning drive along the freeway to a job. "Rural people are more mobile than ever," says Dondero, "and they are mentally prepared to commute longer distances."

### **DISPERSAL AND DECONCENTRATION**

Many conservationists have called for "smart growth" policies to control spread-out development in the countryside.

Smart-growth advocates call for denser housing patterns in cities and suburbs. They urge smaller lots for single-family homes, plus more apartments and townhouses, in already urbanized areas. People living closer together in towns and cities apply less development pressure on farmlands, forests, and wildlife habitat on the metro outskirts. Meanwhile, transit is more feasible in communities with higher population densities, so residents can reduce their automobile use.

According to smart-growth principles, states and localities should agree on where they want development to occur. They should fund or support construction of freeways and water and sewer lines only in designated growth areas.

When communities do not carefully control infrastructure, they end up with chaotic growth.

Developers of office parks, large subdivisions, and strip development usually want to build on cheap land on the outskirts of metro areas and along highways where government has constructed water and

sewer lines. As a result, sprawling growth explodes along these infrastructure corridors. "If you can't control the infrastructure, you can't control anything," says Becker. If government managed these growth subsidies, then development into the countryside could be curtailed.

Smart-growth advocates also call for closely connecting downtown business districts politically and administratively to suburban areas through metro or regional governments.

Finally, conservationists have convinced government agencies, individuals, and nonprofit groups to preserve hundreds of thousands of acres from development through land purchases, conservation easements, and regulation. Along the South Carolina coast, the Ashepoo-Combahee-Edisto (ACE) River Basin and other protected lands effectively prevent development from blending together between the Charleston metro area and Georgetown-Myrtle Beach area to the north, and between the Charleston area and Beaufort County's resort communities to the south.

#### **ROB ATKINSON**

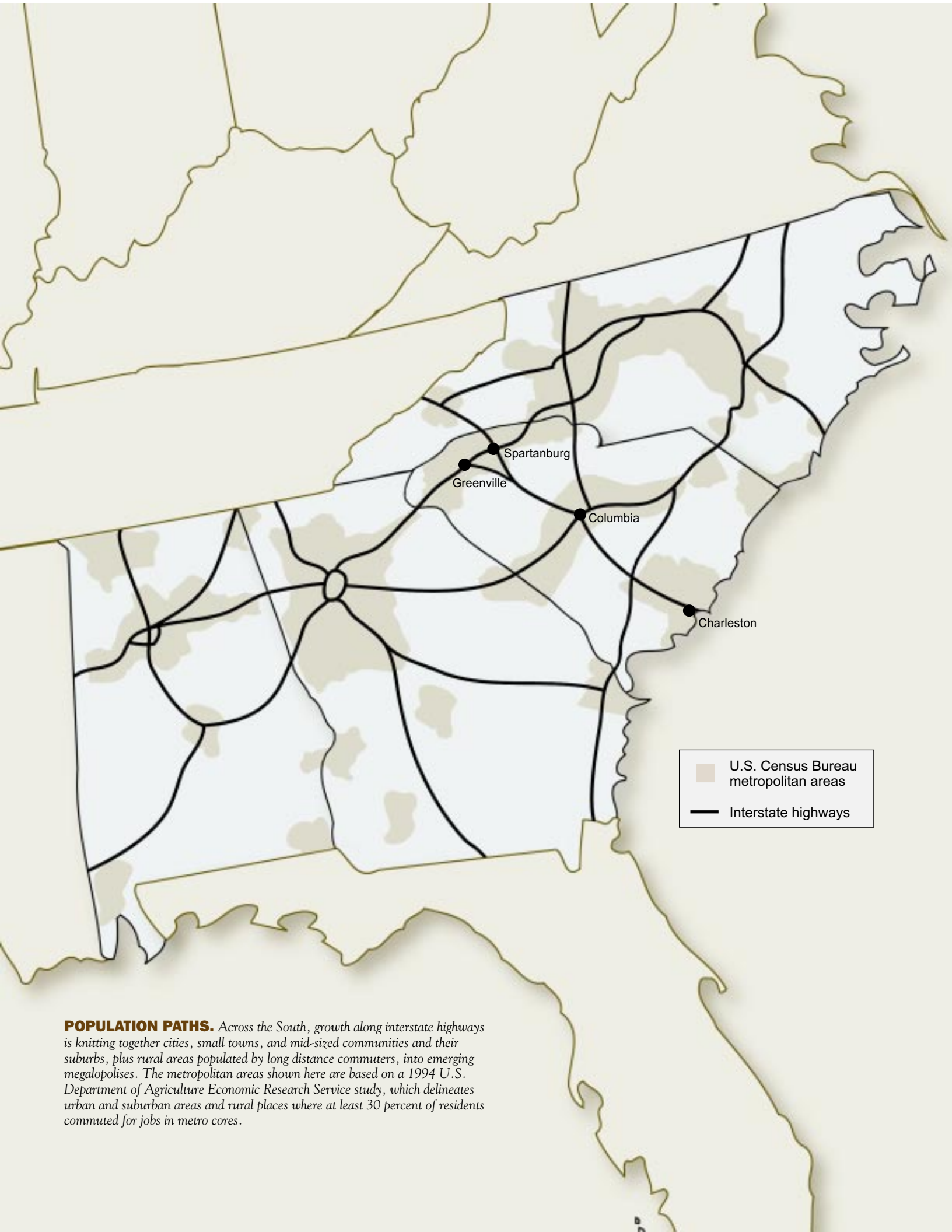
*"The infrastructure of the interstate system and the information-technology revolution is already built for another generation of sprawl."*

Smart-growth policies can be effective in controlling low-density, land-gobbling growth in some metro regions, experts say. But governments that apply these tools are pushing against long-term economic, technological, and demographic currents. American society is racing not toward more urban concentration but toward further dispersal.

For many companies, location simply matters less than it used to. Until the 1980s, businesses had to be situated in an urban core, where they could expeditiously ship out products and import supplies and raw materials via a port or railway terminal. But improvements in communications technology and transportation have reduced the "friction of distance," says Johnson. Satellite technology, fax machines, the Internet, plus massive state and federal investment in roads and airports have changed how Americans work and play.

Suzannah Lessard, a recent fellow at the Woodrow Wilson Center, has argued that "technology made a spreading, decentralized world inevitable, a world in which the distinction between city and country was dissolved." Take the catalog retailer Lands' End, which operates a national distribution headquarters out of the small town of Dodgeville, Wisconsin. The success of Lands' End is partly due to the fact that state government upgraded a two-lane U.S. highway to a four-lane divided highway in the 1980s. Because Federal Express trucks armed with technological equipment can swiftly deliver packages almost anywhere, a retailer can set up in what used to be backwoods.

"Companies can afford to be out there because the logistics systems are so good," says Rob Atkinson, director of the Technology and New Economy Project at the Progressive Policy Institute,



**POPULATION PATHS.** Across the South, growth along interstate highways is knitting together cities, small towns, and mid-sized communities and their suburbs, plus rural areas populated by long distance commuters, into emerging megalopolises. The metropolitan areas shown here are based on a 1994 U.S. Department of Agriculture Economic Research Service study, which delineates urban and suburban areas and rural places where at least 30 percent of residents commuted for jobs in metro cores.





## Worldwide sprawl

The United States has some of the most extreme examples of spread-out growth on the planet. Yet virtually every metropolitan area in Western Europe, North America, and Japan is experiencing some form of long-distance “deconcentration”—or urban development spreading across the landscape—due to the influence of commuting by automobile and the dispersing effects of information technologies, according to Peter Hall, professor at the University of London’s Bartlett School of Planning.

In Pacific Asia—from Indonesia to Japan—outer fringes of giant cities have grown the fastest in population and land-use changes, says Yueshan Yeung, director of the Hong Kong Institute of Asia-Pacific Studies at the Chinese University of Hong Kong. Land-use controls are weakest in the metro edges of cities such as Jakarta, Indonesia, and Manila, Philippines. Now these urban centers are spreading out and blending into adjacent smaller towns and cities.

In China’s Pearl River Delta, the cities of Hong Kong, Shenzhen, and Guangzhou are becoming one continuous urban area containing more than 20 million people. Development has been spurred in part by China’s first superhighway, the Shenzhen-Guangzhou tollway, which runs for 72 miles through this corridor, one of the fastest-growing regions in the world.

Many developing countries have become more dependent on the private car for transportation. Most Chinese major cities, such as Shanghai, have moved factories out to industrial zones on the metro edge. This relocation has freed up land for gentrification at the urban core. Inner-city workers have been moved to satellite suburbs, where they live in concrete high rises. Now many urban Chinese, who once bicycled to nearby factories, have to commute by buses or private cars. China has spent billions of dollars on expressways to accommodate increasing traffic, while bicycle sales have plummeted.

based in Washington, D.C. “Now companies are able to do all their functions” outside of denser urban centers. Information technologies and freeways allow companies to be “physically dispersed while still being functionally close.”

For most of the twentieth century, Americans migrated from rural areas to cities to find jobs. Today, skilled workers pick where they want to live, and companies follow them. “The old economy was all about the location of companies, and now it’s much more about the location of workers,” says Atkinson.

More than ever, Americans choose to live in single-family homes in low-density neighborhoods. When a suburb gets too crowded, they simply move farther out. Or when one city becomes too densely populated, they move across the country to another, less dense one.

The typical household commuted almost 40 percent more miles in 1995 than in 1990, according to a 1999 study by the U.S. Department of Transportation. Yet commuters did not spend an equivalent increase of time on the road. Commuting times grew by less than 20 percent through the entire decade of the 1990s. Americans spent nearly 26 minutes commuting to their jobs each way in 2000, up from 22 minutes in 1990, according to recent census figures.

Why have commuting times gone up less than half as quickly as miles traveled? One reason is that employers have moved to the suburbs, where three-quarters of Americans now live. The outward movement of jobs has also

made it easier for people living in the countryside to reach workplaces at the metro edges. A worker traveling from a rural county to an office park on an outer beltway often has a shorter travel time than a suburbanite battling rush hour traffic to a downtown office.

“I’m a Yankee who fought New York traffic for years, so this is easy for me,” says Paul Pietrowski, who commutes 50 miles in 50 minutes along I-26 from his home in small-town St. George in Dorchester County to his civilian job at the Air Force Base in North Charleston. In the early 1990s, he settled in Summerville on the Charleston metro’s western edge. Then three years ago, Pietrowski and his wife, Stephanie, thinking that Summerville was becoming too crowded and expensive, decided to move farther out to St. George.

Many Americans have similarly fled giant metros to mid-sized and smaller cities. The share of jobs in the largest 61 metro areas declined slightly from 1988 to 1997. The share of jobs in mid-sized metros (between 250,000 and 1 million), like Charleston and Columbia, grew by 4 percent. The share in small metros (between 50,000 and 250,000), like Myrtle Beach, expanded by 7 percent.

During the 1990s, Americans flocked to rural recreational counties, retirement counties, and counties beyond the metro edges but within driving distance of metro jobs. Non-metro counties (those lacking an urban center of 50,000 or more) gained 10.3 percent in population between April 1990 and April 2000.

## Web sites

### Center for Urban Policy Research:

<http://policy.rutgers.edu/cupr/index1.htm>

**South Carolina Real Estate Center, USC Moore School of Business.** This site provides links to smart-growth information, including a document outlining the South Carolina Smart Growth Initiative: <http://realestate.moore.sc.edu/smartgrowth.html>

**Economic Research Service (U.S. Dept. of Agriculture) Rural Indicators Map Machine:** [http://maps.ers.usda.gov/new\\_rural/](http://maps.ers.usda.gov/new_rural/)

Over the past decade, the fastest growing South Carolina counties were found along the coast. New-comers poured into places such as Beaufort County, South Carolina, home of Hilton Head Island, which had a population increase of 40 percent in the 1990s.

Even so, migrants to South Carolina are spreading throughout the state, says Pat Mason, co-founder of the Center for Carolina Living, a marketing and research enterprise, "We see all ages, all motivations for moving here. It's surprising how many people are moving to places you wouldn't think of." But one thing stands out, he says. "A huge majority of them have college degrees." It's people with money and education who are likeliest to relocate, and can afford to.

Workers in the future will be less limited geographically by their jobs, largely due to a confluence of new technologies. "People are going to make more decisions on where they live based on lifestyle choices," says Becker.

The nation's freeway system and continued exploitation of technologies will probably encourage further spread-out growth, says Atkinson. "Our nation's economic fundamentals and spatial distribution are going in the opposite direction from smart growth. Dispersive forces are just going to continue," largely because Americans have already created the framework for the spread-out, polycentric urban constellation. "The infrastructure of the interstate system and the information technology revolution is already built for another generation of sprawl."

Now we may have only one choice. Over the next few decades, particularly in the South, we may have to accept our overwhelmingly popular urban form: the sprawling "freeway city." ❧

## Can "smart-growth" techniques work in South Carolina?

Three "smart-growth" tools offer the best chance to control sprawl in U.S. metro areas, according to a new report, *Costs of Sprawl—2000*, by the Transit Cooperative Research Program led by Rutgers University researchers. Each of these smart-growth tools encourages higher housing densities in urban and suburban areas. Each tool guides development toward central cities, towns, and densely populated suburbs, reducing growth pressures on rural areas at the metro edges. Each technique, though, requires strong action by regional agencies or state legislatures.

The first tool is the regional urban-growth boundary. With this tactic, a state legislature requires each metro area to draw an urban-growth boundary around its periphery. Future growth then would be directed within this boundary, creating higher densities there. This technique has been used in Oregon and Florida.

The second tool is a regional urban-service district. A state legislature would give authority to a statewide or regional agency to designate growth areas within each metro area. Growth areas would be the only places to receive state funds to finance roads, sewer and water systems, and other infrastructure. This technique has been used in the Twin Cities region of Minnesota.

The third tool makes state aid contingent on local governments creating growth zones. A state legislature would limit financing assistance for new infrastructure only for those localities that designate growth zones and keep new development within those areas. Communities that have growth boundaries would receive more "points" in a statewide system for infrastructure improvements. Maryland has adopted this technique.

Two more strategies could help control sprawl if used by most counties in a metro region. Large-lot zoning in rural areas—10 acres or more—can discourage traditional suburban-style development. Finally, governments can designate land that would remain undeveloped for some public purpose, such as wetland or watershed protection.

Yet none of these strategies would significantly reduce sprawl within South Carolina's fastest-growing regions over the next two decades, according to the TCRP report. Smart-growth tools would likely be ineffective in the Charleston metro area, in Beaufort County, Horry County, in some rapidly urbanizing stretches of the South Carolina midlands, and in most of the upstate, according to the comprehensive, five-year study of U.S. sprawl.

For one thing, low-density development is "proceeding too quickly" in these South Carolina regions for any measures to make a large dent in growth patterns, according to the TCRP report. Another roadblock is South Carolina's suspicion of state or regional land-use planning and regulation. "There is little history of strong intergovernmental coordination and cooperation in South Carolina, though it is improving slowly," says Daniel Pennick, assistant director of Charleston County Planning. "South Carolina has a tradition of independence, of not depending on anyone else."

Property-rights advocates would fight any attempt to establish regional land-use agencies with authority to draw regulatory or public-service boundaries in South Carolina. "There are horror stories all across the country of people's property rights being trampled by regional bureaus," says John Templeton, chairman of the S.C. Landowners Association. "The state needs to stay out of it, and we're definitely opposed to regional agencies. Local governments should control their own destinies."

When localities act alone to control sprawl, they are usually ineffective, and their efforts can even aggravate sprawl, says the TCRP report. Development simply moves to localities that lack growth controls.

The Smart Growth Initiative, sponsored by the Urban Land Institute and the S.C. Real Estate Center, is identifying smart-growth options for the state. In September 2002, this group organized a symposium in Charleston, where stakeholders offered dozens of recommendations, such as creating a statewide vision for growth, identifying sensitive lands for protection, and improving infrastructure and regional planning.

But symposium speakers were realistic about where new development will take place. One million residents will pour into South Carolina over the next 25 years, and the majority will live in rapidly growing areas at the metro edges. "Most new development in this state will be in outlying green-field areas" at the urban fringes, said Terrance Ferris, director of Clemson University's city and regional planning program. The Smart Growth Initiative will present its recommendations next year. ❧

# EBBS & FLOWS

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