Urban Thinker with an Ecologist’s Eye

Jane Jacobs’ Legacy
URBAN THINKER WITH AN ECOLOGIST’S EYE: JANE JACOBS’ LEGACY
Her ideas have become integral to contemporary urban planning.

A NEW FORMULA FOR URBAN RESILIENCE
Three variables that determine today’s urban health.

BUILDING THE MODERN INVENTOR COLONY
Adding new work to old work.

CAN SPRAWL AND INNOVATION COEXIST?
Silicon Valley says yes.

NEWS AND NOTES
• CCU President elected Consortium’s board chair
• S.C. MarketMaker™ wins award
• Two new employees at S.C. Sea Grant
• 2011 Environmental Awareness Award call for nominations
• 2011 Beach Sweep/River Sweep a success

EBBS AND FLOWS
• Southeast Tidal Creeks Summit
• New Partners for Smart Growth Conference
• Social Science for Coastal Decision-Making

ON THE COVER:
Closed to vehicle traffic for the “Second Sunday” event each month, a stretch of King Street in downtown Charleston bustles with pedestrian activity.
PHOTO/GRACE BEAHM

COPYRIGHT © 2011 by the South Carolina Sea Grant Consortium. All rights reserved.
In the enduring words of Yogi Berra: “You can observe a lot just by watching.”

Jane Jacobs was one of the great observers of urban life, a scholar of shopkeepers and sidewalk characters, of city parks and neighborhood factories. In her celebrated first book, *The Death and Life of Great American Cities*, published in 1961, she asked questions that continue to absorb us today.

What makes a place resilient? Can it rise again after people and jobs have moved away? Can it attract new people and businesses to circulate life and energy?

In the decades after World War II, city planners became impatient with aging, sagging neighborhoods. “You’re obsolete,” planners said, and razed them, scattering residents to the winds.

Jane Jacobs was a scathing adversary of that kind of short-term thinking. Throughout her long career as a journalist and activist, first in Manhattan and then Toronto, she bitterly criticized city officials for destructive “urban-renewal” projects.

She battled giant-scale, centrally planned responses to city problems, saying “no” to multi-lane commuter highways that would bisect existing neighborhoods and parks, and “no” to public-housing towers that bred gangs.

Instead, she supported fine-grained, locally designed, grassroots solutions. She said “yes” to preserving historic buildings and encouraging diverse small businesses, and to rehabilitating abandoned port areas for new uses: parks, aquariums, maritime museums, and harbor tours that could attract tourists and city residents.

One of the first to explain how people and the built environment are intertwined, Jacobs described urban places with an ecologist’s attention to detail.

On the 50th anniversary of Jacobs’ masterpiece, look around Charleston, S.C., to find her influence in renovated warehouses, apartments and offices above downtown storefronts, small-scale public housing blended into existing neighborhoods, and in the city’s many green spaces, including
Waterfront Park, where a 12-acre site of dilapidated wharves has been turned into one of the nation’s most beautiful urban gathering places.

Charleston’s leaders over the past few decades have applied a central principle of Jacobs’ thinking: help people connect. Build and renew sites where people can mix for commerce and recreation. People feel safer on busy sidewalks than on empty ones. People are attracted to variety, repelled by urban blankness, and enjoy mingling, exchanging knowledge and ideas.

All this seems obvious today. But it wasn’t 50 years ago.

Jacobs’ slashing critique of that era’s planning orthodoxy in *The Death and Life of Great American Cities* offended many urban officials who insisted they were doing the right thing, creating and implementing new blueprints for healthier communities.

It was a time when middle-class Americans were buying cars and fleeing to the suburbs. Urban cores were shedding residents, businesses, and tax bases. More and more city neighborhoods, including some in Charleston, fell into self-consuming destruction and crime.

City officials diagnosed cancers in aging or abandoned row houses, workers’ cottages, tenements, and rotting port facilities, warehouses, and manufacturing plants. Planners sought to root out these cancers and build new sleek, modern cities.

Beginning in the early 1950s, city redevelopment agencies obtained federal grants to fund and implement new master plans. With federal money, officials initiated or encouraged slum clearance, massive public-housing towers, and freeway projects that tore apart existing city fabrics. Many planners saw ethnic neighborhoods as fundamentally broken places that needed bulldozing.

“Postwar urban planners . . . abetted some of the most egregious acts of urban vandalism in American history,” writes Thomas J. Campanella, a professor of planning at the University of North Carolina at Chapel Hill, in a recent issue of *Design Observer* magazine.

Peninsular Charleston largely avoided the urban-vandalism phase. In the 1960s and 1970s, Charleston had many faded commercial streets and tattered neighborhoods, but its sleepy economy, historic-preservation ordinances, and respect for tradition discouraged radical changes.

That’s one reason why the city is thriving today. Tourists and new residents come to Charleston for an urban experience found in few other places.
ways that Jacobs would have admired.

Postwar urban planners apparently couldn't imagine how to rebuild cities from existing brick and mortar and human capital. But Jacobs said she knew. To regenerate a city district, you must work from the inside with resources near at hand.

City officials, she argued, should study on-site, specific urban economic processes with the same rigor that scientists study ecological processes in a salt marsh or natural forest: “Cities are in a sense natural ecosystems—for us.”

A vibrant city district is created out of large numbers of diverse, small enterprises that sell or produce goods and services with varied customers and workers circulating at different times of day. It’s this commercial diversity that is a healthy city’s lifeblood.

Big businesses or a single major industry can help an urban center succeed, but only if there are also many small ones. She pointed to Manhattan’s then-monotonous financial district as a place of commercial giants that became a ghost town every evening when tens of thousands of workers headed home.

By contrast, “Whenever we find a city district with an exuberant variety and plenty in its commerce,” she wrote, “we are apt to find that it contains a good many other kinds of diversity also, including variety of cultural opportunities, variety of scenes, and a great variety in its population and other users.”

Jacobs was right, of course. Small enterprises are nimble, grow faster, and as a result create more jobs than big ones. In general, the period when a business is most innovative, creating the most rapid economic growth, is when it’s small.

Some journalists and scholars claim that Jacobs was anti-planning. That misses the mark. She fought heavy-handed, top-down, one-size-fits-all urban planning. She fought planning by theorists and bureaucrats who failed to understand how city neighborhoods function. But she admired city planning that is flexible and sensitive to local needs, planning with a light touch.

Jane Jacobs was born in 1916, and a year after graduating high school, she left her hometown of Scranton, Pennsylvania, for Depression-era New York, where she worked as a stenographer and secretary, taking college classes at night for two years.

Visiting the city’s commercial districts—fur, diamond, flower, and leather—she quizzed shopkeepers and workers about their enterprises. From scraps of notes she carried in her purse,
she wrote freelance articles for periodicals. She became a writer and editor for industry magazines, and in 1952 she took a job as associate editor at Architectural Forum, the nation's leading architecture journal.

Her husband, an architect, tutored her in reading technical drawings and other materials. With his help and her quick intelligence, she gained an invaluable on-the-job training in urban development and design.

Writing critical articles of giant-scale projects and urban-renewal schemes, she found her subject and her voice. The Rockefeller Foundation, a leading funder of urban research, offered a grant that allowed her to write her first book, which became the classic The Death and Life of Great American Cities.

She made her message clear to planners and urban officials. Don’t ignore local knowledge. Don’t tear down a struggling neighborhood and drive out residents and businesses. Talk to local people and find out what’s working in their community and build on that.

Better yet, assist residents and business owners in restoring their own city districts. It’s time, she argued, to re-energize cities by deploying talents and insights from home ground.

She praised the regeneration of buildings, creating life from death, as people made new uses for old buildings. She enjoyed seeing the “townhouse parlor that becomes a craftsman’s showroom, the stable that becomes a house, the basement that becomes an immigrant’s club, the garage or brewery that becomes a theater.”

No one is surprised today when a Columbia or Greenville developer renovates an empty factory building and it becomes a bustling restaurant, or a neighbor cultivates a vegetable garden in an empty lot, or an urban pioneer buys an abandoned house from a city agency for a buck and fixes it up, or residents and business owners organize to fight a highway project they don’t want.

No one is surprised when a Charleston developer collaborates with city planners and residents to create “infill projects” that blend new homes, commercial spaces, and historic homes into existing city fabrics.

Jane Jacobs was an inspiration for all these efforts, whether or not many of the people involved ever heard of her.

“She has become integral to [contemporary] planning’s DNA,” says Christopher Morgan, director of the city of Charleston’s Planning and Neighborhoods Division.

Jacobs saw urban commercial diversity, human creativity, and economic growth as intertwined threads. Remove one, and the others unravel. Her book helped change community development, architecture, economics, and many other fields.

“At the time she died, in 2006, she was widely recognized as the most influential urban thinker of her time,” writes Witold Rybczynski, a professor of urbanism at the University of Pennsylvania.

Jacobs shared much with Rachel Carson, according to Jay Walljasper, an author on urban issues and a senior fellow with On the Commons, a nonprofit organization based in Minneapolis, Minnesota.

“Rachel Carson, who wrote Silent Spring [published in 1962], showed the unintended consequences of the pesticide DDT in the environment,” says Walljasper. “Jane Jacobs, a year earlier, published The Death and Life of Great American Cities, and showed the unintended consequences of an equally poisonous endeavor—slash-and-burn urban renewal. Carson looked at the natural world, and Jacobs looked at the built environment.”

Both writers broke down social and professional barriers, Walljasper adds. “Both were women, both were outsiders, and both were challenged on their credentials. Carson didn’t have a Ph.D., and Jacobs never finished college. But maybe because they were outsiders and had a different perspective, they really changed the way we think about the world around us.”

The city of Charleston recently renovated the former downtown home of a local television station into an innovation hub called Flagship2. It’s a larger version of a two-year old, city-sponsored innovation center next door called—you guessed it—Flagship. Located on East Bay Street in Charleston, the two centers nurture business startups by offering them modern, relatively affordable workspaces.

Firms in high-tech and creative fields, including software, architecture, and marketing, are housed at the center.

One new startup is Step Ahead, Inc., which helps clients combine the best of traditional public relations with the power of online technologies, says Holly Fisher, the firm’s executive director. Companies are attracting new customers through social-media sites such as Facebook. But managing social media is timeconsuming and complex. So some companies outsource this function to specialists.

“We’re on these tools all day, every day,” says Lyn Mettler, the Step Ahead founder, who is based in the company’s Indianapolis office. “Flagship2 is a wonderful spot for us. It looks very much like a high-tech space, and that has given us credibility.”
A new formula for urban resilience

Edward Glaeser, a Harvard University economist, has devised the sparsest of formulas for American urban resilience. To thrive in a globalizing economy, a U.S. city (metro area, actually) must have at least two of three variables: many small businesses, many skilled workers, and mild winters.

Charleston is blessed with all three.

Pity Detroit, the giant company town, which has none.

A half-century ago, it was common for an industrial town to depend on a single manufacturing sector or even a single company that employed low-wage, relatively low-skill workers. A company-town approach can work for a time—until the company fails.

Remember the once-busy textile industry in the South Carolina piedmont? Textile jobs fled overseas, and many southern mill towns have since hollowed out.

“Traditionally,” writes Glaeser in his 2011 book, *Triumph of the City*, “single-industry cities . . . haven’t done well in the long run because their industrial monocultures discourage the growth of new ideas and companies.”

Detroit has been a company town for nearly a century. By the 1920s, the Big Three automakers had already turned themselves into commercial monoliths by absorbing smaller enterprises that built machine tools and parts. The automakers became more efficient, but Detroit lost what had made those small firms successful—their creative diversity, fleetness, and entrepreneurial independence.

“The Big Three didn’t want another company coming in to compete for labor,” says Bob Becker, director of economic policy and strategy at the Clemson University Strom Thurmond Institute. “What the Big Three wanted done, got done.”

For decades after World War II, automakers prospered, and organized labor gained higher wages and benefits. The city’s labor and business cultures saw no reason to encourage formal education. Why do homework if you can get a stable, high-paying job with Cadillac-style benefits on a production line?

In 1970, Detroit’s strategy seemed foolproof. Per capita income was higher in Detroit than in Seattle and Minneapolis, which had better educated workforces, Glaeser notes.

In the 1970s and ’80s, however, U.S. labor markets began to roll. Factory jobs were shipped abroad, or they disappeared when assembly-line tasks were automated and global competition accelerated.

Japan and other nations learned how to manufacture autos more efficiently and at lower cost, and the Big Three’s share of the U.S. market fell. Still, the Big Three didn’t adapt quickly to new realities. Then came the financial crisis of 2008-2010.

Today, the city of Detroit has an...
city has been hit by losses in the manufacturing sector. But some have rebounded successfully. Cold-winter New York City is thriving. So is Chicago. Boston is flourishing while just-as-freezing Buffalo limps along. Frigid Minneapolis-St. Paul prospers while similarly rotten-weather Cleveland fades.

How do successful cold-winter cities do it?
First, they avoid dependence on a single industry, as Detroit did. Second, successful cold-winter cities invest in worker skills, in education and training.

It’s the kiss of death—or at least of severe, perpetual decline—for a U.S. cold-winter city to lose skilled people or fail to develop them through education. Glaeser writes, “The era of the [low-skill American] industrial city is over.”

The financial crisis of 2008-2010 raised job stakes for nearly every worker. Employers have outsourced jobs and deployed new software, robotics, and automation technologies to replace people.

Downtown Charleston’s law and finance firms were hit especially hard by the economic crisis, according to Ernest Andrade, the city’s director of business development. “Workers who succeed today make new or incrementally better products or services for the marketplace, creating wealth that didn’t exist before.”

Overall, though, Charleston “weathered the economic downturn pretty well,” says David Hughes, a Clemson University economist. The metro area “has a much more diverse economy than it once did, and a growing high-tech sector.”

Industry, of course, still needs skilled workers who can do jobs that technology or outsourcing can’t. New products are being phased into the economy faster than ever, and they become obsolete faster too. New software, for instance, is updated soon after it hits the market, so industry needs resilient workers who can adapt to constantly changing conditions.

How do you know whether your city has skilled workers? Many experts count the percentage of college graduates among a metro area’s working-age residents. But that leaves out skilled people in trades such as machinists, carpenters, and plumbers. It also leaves out some giants of innovation: Steve Jobs and Bill Gates never finished college.

Ironically, it also leaves out the great urbanist Jane Jacobs, who, perhaps more than any other thinker, explained how commercial diversity drives urban economies. But she never finished college and scorned what she called the phony credentialing of college diplomas. She turned down numerous honorary degrees, including one from Harvard University.

Jacobs studied Manhattan working districts at a time when independent artisans and assembly-line manufacturers still had a place there. But the world changed, and Manhattan’s blue-collar jobs have been replaced by jobs that usually require a college degree.

High-paying employers are increasingly locating businesses in urban places with many college graduates. Over the past four decades, U.S. metro areas with larger percentages of college

---

**U.S. Unemployment Rate in 2010**

- Doctoral degree: 1.9%
- Professional degree: 2.4%
- Master’s degree: 4.0%
- Bachelor’s degree: 5.4%
- Associate degree: 7.0%
- Some college (no degree): 9.2%
- High school diploma: 10.3%
- Less than a high school diploma: 14.9%

Average: 8.2%

*Source: Bureau of Labor Statistics*

**U.S. Median Weekly Earnings in 2010**

- Doctoral degree: $1,550
- Professional degree: $1,610
- Master’s degree: $1,272
- Bachelor’s degree: $1,038
- Associate degree: $767
- Some college (no degree): $712
- High school diploma: $626
- Less than a high school diploma: $444

Median: $782

---

**A four-year college degree often helps workers perform higher-skill jobs and get positions with higher-paying companies.**

GRAPHIC/CHARLESTON REGIONAL DEVELOPMENT ALLIANCE/CHARLESTON REGIONAL BUSINESS JOURNAL
Fastest Growing Occupations – Charleston Region

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Estimated % growth over next 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architect Support/Drafting</td>
<td>136%</td>
</tr>
<tr>
<td>Web Site Developer</td>
<td>124%</td>
</tr>
<tr>
<td>Network Administrator (IT)</td>
<td>122%</td>
</tr>
<tr>
<td>General Mechanic</td>
<td>119%</td>
</tr>
<tr>
<td>Production Engineer</td>
<td>99%</td>
</tr>
<tr>
<td>Mechanical Engineer</td>
<td>88%</td>
</tr>
<tr>
<td>Information Technology Support</td>
<td>86%</td>
</tr>
<tr>
<td>Quality Control Technician</td>
<td>82%</td>
</tr>
<tr>
<td>Computer Programmer</td>
<td>78%</td>
</tr>
<tr>
<td>Process/Production Operator</td>
<td>75%</td>
</tr>
<tr>
<td>Registered Nurse</td>
<td>68%</td>
</tr>
<tr>
<td>Operations Manager/Supervisor</td>
<td>67%</td>
</tr>
<tr>
<td>Commercial Driver</td>
<td>67%</td>
</tr>
<tr>
<td>Customer Service Representative</td>
<td>65%</td>
</tr>
<tr>
<td>Engineering Technician</td>
<td>63%</td>
</tr>
</tbody>
</table>

Source: Opportunity Next Regional Workforce Survey

Technically advanced businesses relocating to Charleston will need additional educated workers.

GRAPHIC/CHARLESTON REGIONAL DEVELOPMENT ALLIANCE/CHARLESTON REGIONAL BUSINESS JOURNAL

graduates have experienced stronger economic growth because of those workers’ accelerated productivity, according to studies by Jesse Shapiro, a University of Chicago economist.

A four-year college degree, economists say, usually helps workers perform higher-skill jobs, get positions with higher-paying companies, or open their own small businesses.

Since 1970, college education is the most important variable driving urban economic growth, according to Glaeser.

So how is Charleston doing? Recent census figures show that 37% of Charleston's young adults (age 25 to 34) have a bachelor’s degree or higher. Nationally, about 33% of young adults do.

The Charleston metro over the past decade, moreover, has been the top “brain gainer” in the country. Among 100 metros, the Charleston area showed the largest percentage-point increase (6.9%) in the nation for the percentage of residents with four-year college degrees between 2000 and 2010, according to analysis of U.S. Census Data by the Brookings Institution and The Wall Street Journal.

David Barkley, co-director of the Clemson University Regional Economic Development Research Laboratory, credits the College of Charleston, The Citadel, and the Medical University of South Carolina for turning out skilled graduates.

“Charleston is creating a significant skilled labor force,” Barkley says. He points to Boeing’s decision to open a facility to build Dreamliner 787 passenger jets in North Charleston.

Aviation is a high-skill industry. “Boeing and [the software company] Blackbaud have come here for a reason.”

It’s time to ask the chicken-or-egg question. Do workers follow jobs? Or do jobs follow workers?

That depends on the state of the economy. In good times, many footloose college graduates are choosing attractive, exciting places to live before they pick a career path—and innovative cities are hungry for their youthful energy. College graduates have moved to Charleston for its art festivals, historic neighborhoods, bustling downtown streets, clean beaches, tidal creeks, and mild winters.

David Slovenec, 31, a solutions engineer for Benefitfocus, a software company headquartered on Daniel Island, relocated to Charleston from suburban Philadelphia in 2007 before the financial crisis hit.

“I came down here and fell in love with the place,” says Slovenec, a Pennsylvania State University graduate. “I really wanted to get out of the cold weather, and I liked the beaches, the water, and the coast. I wanted an active, outdoor place.”

Fortunately, he found a job in Charleston before the bottom fell out of the economy. He took an entry-level position with Benefitfocus, which has 610 employees nationwide, and was promoted.

“It’s a young company,” he says, “and we’re all friends, like-minded people who are active. The majority of us are transplants from out-of-town. It’s been going on four years for me in Charleston. It feels like home now. I plan on staying here for good.”

TRANSPANT. David Slovenec, 31, moved south to Charleston for milder winters and the coast’s outdoor recreation. Now, he’s building a career at Benefitfocus, a high-tech company based on Daniel Island, S.C.

PHOTO/GRACE BEAHM
Building the modern inventor colony

It was a strange new world. In the 1950s, Americans bought millions of televisions, air conditioners, refrigerators, and other innovations that had never been available before. With unprecedented speed, innovations were being funneled from laboratories to factories to distribution networks to America’s shelves and showrooms.

Companies built research-and-development laboratories and hired engineers, chemists, and other skilled workers to invent and develop marketable technologies. Industry increasingly looked to research universities for new knowledge and skilled graduates.

Yet the research-and-development process still seemed too slow. Go find more innovation, business executives told their staffs. Find out where great new ideas are hiding.

Where to look?

In 1988, Robert E. Lucas, a University of Chicago professor who later won a Nobel Prize for economics, noted in a journal article that he had learned where many innovations came from by reading Jane Jacobs’ “remarkable” second book, The Economy of Cities.

She described New York City’s working districts as places of intense creativity where skilled artisans invent new products and services out of older ones. Innovative economies expand and develop, she explained, by adding new work to old work.

Jacobs tells the story of a custom seamstress, Ida Rosenthal, who in the early 1920s made dresses in a small shop she owned, but was disappointed with the way her dresses draped on customers.

“To improve the fit, she began experimenting with improvements to underclothing and the result was the first brassiere. The customers liked the brassieres, and it became Mrs. Rosenthal’s practice to give out a custom brassiere with each dress she made.”

At this point, brassiere making was just a sideline from her older work, dressmaking. But she found a partner and enough capital to open a workroom where they focused exclusively on manufacturing, wholesaling, and distributing brassieres.

Now, the new work stood on its own; it had replaced the old work. But the brassiere factory needed to incorporate more hands, skills, capital, and materials.

Jacobs continued: “There were all the tasks of designing the brassieres, of making, packing, selling advertising, and distributing them, and also the tasks of financing the work, printing labels, and providing hooks, eyes, elastic, and cloth. One reason Mrs. Rosenthal, her partner, and their initially small staff of workers were able to manage all this was that in New York they could use many suppliers of goods and services to help them out: shippers, sewing machine suppliers, box makers, textile suppliers, bankers, and so on.”

In every New York commercial district, entrepreneurs were continually creating new work out of old work. To stay ahead of the competition, they needed to improve products and invent new ones. Once Rosenthal’s brassiere became a popular item, manufacturers of corset covers and ferris waists lost most of their customers.

Cities are the places where most new goods and services are created, Jacobs explained. Cities are economically more diverse, so they have more kinds of work. Compared to a rural area, a city also has a greater variety of raw materials. And a city, perhaps most important, has a bigger pool of talent—more skilled people in one place, and therefore more ideas from which to choose. That’s why cities, she argued, are where economic growth occurs.

Robert E. Lucas was dazzled by her descriptions of inventiveness in New York’s commercial districts. He decided that commercial innovators must be “as creative as artists and scientists,”

COLD STORAGE. In the 1950s, scores of innovative products—refrigerators, air conditioners, and televisions—were rolled off assembly lines and introduced to American homes.

PHOTO/LIBRARY OF CONGRESS
capable of exchanging ideas and knowledge with the same intensity as professors, lawyers, and doctors.

The implication was clear. If cities want to boost economic growth, they must create places where skilled, inventive people of many trades and professions gather to learn from one another. We are social animals, scientists remind us, and we trade knowledge most effectively not by telephone, videoconference, email, or text message, but instead face-to-face, eyeball-to-eyeball, pheromone-to-pheromone.

Musicians, painters, and poets tend to live in artist colonies in cheap, ragged urban neighborhoods. Perhaps inventors could live in inventor colonies. (Cheap and ragged, though, would be optional.)

Almost by accident, a number of clever people had already gathered in the most dynamic inventor colony in the United States. In the 1950s and '60s, major technology companies, including Hewlett-Packard, settled in Santa Clara County, California, in an industrial park developed by a professor at nearby Stanford University.

In the 1970s, two former Hewlett-Packard employees, Steve Jobs and Steve Wozniak, helped start Apple, Inc. In the 1990s, after a former Apple employee started eBay, Silicon Valley became known as the place to develop applications for the Internet. Stanford University graduates, in turn, built Google and Yahoo! near their alma mater.

Not by any single plan but instead by actions of disparate individuals who often shifted jobs and alliances, Silicon Valley became an immensely powerful invention nexus, drawing high-level talent from industry and academy.

Richard Florida, a business professor at the University of Toronto and author of Who’s Your City?, explains why technological whirlwinds are escalating in intensity in locations where many inventive people live and work.

“Places that bring together diverse talent accelerate the local rate of economic evolution,” he writes.

“When large numbers of entrepreneurs, financiers, engineers, designers, and other smart, creative people are constantly bumping into one another inside and outside of work, business ideas are formed, sharpened, executed, and—if successful—expanded. The more smart people, and the denser the connections among them, the faster it all goes.”

This innovation-location principle has been stirred and re-stirred and poured into new packages by academic economists, local Chambers of Commerce, urban-development policymakers, and speakers at Rotary Clubs around the country.

Cities hear the message. Today, every decent-sized burg promotes an inventor colony—a research-and-development cluster—intended to bring together smart people of diverse skills in one place in hopes of eventually reaping an innovation whirlwind.

Charleston, for instance, is developing an advanced health-research cluster downtown. Completed in December 2009, a joint S.C. Research Authority (SCRA)—Medical University of South Carolina (MUSC) Innovation Center is attracting start-up companies with a new wet lab and equipment space on upper King Street, primarily in concert with entrepreneurs commercializing MUSC research findings.

The city of Charleston, in partnership with MUSC and SCRA, is also working on a Horizon Area Redevelopment Project adjacent to the Ashley River waterfront and Brittlebank Park.

The project will integrate a life-sciences research cluster and incubator facilities; commercial mixed uses, including retail and office; new public urban spaces, recreational facilities, and parks; infrastructure, including streets, utilities, and drainage; and eventually new residences.

Charleston Mayor Joseph P. Riley,
Do you need a four-year college degree in today's economy? No. But having a diploma doesn't hurt, even if your ambition is to be a first-rate plumber or carpenter, though the financial cost of obtaining that degree is rising dramatically.

During the Great Recession and its aftermath, many workers without a post-high-school degree—and the metro areas where they predominate—experienced crushing unemployment. Many of the jobs that less-educated workers have traditionally held in manufacturing, construction, and retail are gone, perhaps for good.

Moreover, full-time workers whose highest degree is a bachelor's earn 74% more money, over the course of their careers, than workers with only a high-school diploma, according to a May 2011 study by the Georgetown University Center on Education and the Workforce. That's almost double the difference 30 years ago, and the gap will widen to 96% by 2025, if current trends continue.

Having a four-year degree has pushed up wages even in many fields that don't require one. Construction workers, police officers, and retail salespeople, among others, make more (often significantly more) with a degree than without one, according to the Georgetown University researchers.

Many employers seem to use the college degree as a kind of IQ test, as an indication of a worker's capacity to learn. A college degree presumably shows that a worker has learned material in a number of different fields. Can a worker adapt to rapidly changing demands of a modern workforce?

Still, a college degree doesn't test all kinds of learning and skill.

“You should never stop being a student, but not everyone is cut out for just one path,” says Elizabeth Vernon Bell, marine education specialist with the S.C. Sea Grant Consortium. “We need talented people in the trades who can work with their hands, who can build and repair things. Perhaps there is too much social pressure on people to attend a four-year college, which is very expensive.”

Forty years ago, about 15% of Americans obtained a bachelor's degree, but now one-third of young adults have one. A four-year degree is not the distinguishing accomplishment that it was in 1970, and it might not be worth the financial investment for some.

“How can you set yourself apart from others in a competitive labor market?” Bell asks. “If you go to a four-year college, you can incur a lot of debt. You can end up ten steps behind financially and not have a leg up.”
Suburbs are inert, crass places that lack any redeeming cultural and commercial value. That’s what many city lovers, such as Jane Jacobs, the renowned writer on urban themes, said in the early 1960s. She loathed the “fresh-minted decadence of the new unurban urbanization” and its “monotony, sterility, and vulgarity.”

Lewis Mumford, an influential architecture critic, meanwhile condemned suburbia as a kind of “anti-city,” which couldn’t equal a real city’s “stimulating and creative common life.”

Civilization and thriving economies, Jacobs and Mumford pointed out, have always depended on high densities of people and structures. Major American cities were no different. Companies built factories and mills as close as possible to ocean harbors or river ports, and workers followed. Waterways were the cheapest and fastest transportation avenues for trade, whether it was Seattle, St. Louis, Cleveland, New York, or Charleston.

In these intensely competitive urban centers, commercial success emerged from collaborations among creative people of specialized talents within a relatively small geographic circle. Manhattan was at the center of countless small geographic circles of innovation in New York.

But transportation logistics began to change in the 1950s and 1960s when government built freeways through and around cities. Companies opened satellite offices and warehouses along freeways. American commerce began a process of decentralization that continues today.

In the 1970s and ’80s, William H. Whyte, author of The Organization Man and a mentor to Jane Jacobs, worried that America’s businesses would suffer as corporate headquarters moved out of Manhattan to the suburbs. Skilled people would lose face-to-face contact with one another, and as a result innovation would slow to a crawl.

That didn’t happen. California’s Silicon Valley is a relatively low-density, center-less region of commuter highways and corporate headquarters, home to Apple, Oracle, Google, and many other high-tech giants.

It seems that some of today’s circles of innovation have widened. Instead of a few square miles in 1940s Manhattan, Silicon Valley’s circle is many times larger. But a circle of innovation still exists.

The United States, according to Amar Bhidé, a business professor at Columbia University, will continue to change in the 1950s and 1960s. Major American cities were no different. Companies built factories and mills as close as possible to ocean harbors or river ports, and workers followed. Waterways were the cheapest and fastest transportation avenues for trade, whether it was Seattle, St. Louis, Cleveland, New York, or Charleston.

In these intensely competitive urban centers, commercial success emerged from collaborations among creative people of specialized talents within a relatively small geographic circle. Manhattan was at the center of countless small geographic circles of innovation in New York.
**CCU President elected Consortium’s board chair**

David A. DeCenzo, Ph.D., president of Coastal Carolina University, has been elected as chair of S.C. Sea Grant Consortium’s Board of Directors. DeCenzo will begin his one-year term on January 1, 2012.

DeCenzo, a native of Maryland, is the second president of Coastal Carolina University (CCU). Prior to his appointment as president, DeCenzo served as dean of CCU’s E. Craig Wall Sr. College of Business Administration from 2002-2006, and was named provost of the university from 2006-2007. He was instrumental in the establishment of the Master of Business Administration program in 2006.

DeCenzo’s teaching and research interests have focused on management, human-resource management, and organizational behavior. He is the author or co-author of nearly 30 textbooks that are used widely at colleges and universities.

“It is an honor for me to serve an organization that plays such an important role in the life of our state,” said DeCenzo. “The Consortium’s work is vital to the effective management of our coastal resources, and I look forward to working with the board and administration to build on its successful record of achievement.”

“I am very pleased that our board has elected Dr. DeCenzo to serve as chairman,” said Rick DeVoe, executive director of the S.C. Sea Grant Consortium. “His extensive experience with strategic planning, program assessment, and growing programs will greatly enhance the success of the Consortium over the next year.”

**S.C. MarketMaker™ wins award**

South Carolina is the first state to formally develop seafood producer and product profiles into the interactive, Web-based marketing tool called MarketMaker™, helping agricultural and seafood producers connect with buyers.

Since 2008, 50 South Carolina seafood businesses and fishermen have registered online with S.C. MarketMaker™ and created profiles. Web-based profiles allow producers to describe their business and advertise products—which species they have available, product attributes, hours of operations, any value-added products, and other relevant information.

Consumers can now use the interface to search for seafood products and contact the producers directly to place orders.

“This is a great tool for producers who don’t have the time or ability to create and manage an individual Web site for their seafood business,” said Amber Von Harten, fisheries specialist with the S.C. Sea Grant Extension Program. “The idea is to connect seafood producers with seafood buyers, processors, and consumers.” The seafood component was developed on a national level for use in all state MarketMaker™ programs.

As a result of this effort, South Carolina’s program, “Helping MarketMaker™ ‘Float’ in U.S. Coastal States and Beyond,” was among one of the first recipients of the 2011 National Food MarketMaker™ Innovation Award.

![Gary Matteson (center), Farm Credit vice-president, presents the 2011 National Food MarketMaker™ Innovation Award to Amber Von Harten (left), fisheries specialist, and Bob Bacon, leader, of the S.C. Sea Grant Extension Program.](photo/lori_dalfonso_university_of_illinois_national_markettaker)

The award was based on the partnership between Clemson University Extension and the S.C. Sea Grant Extension Program to develop the pilot seafood component which evolved into a national component. This effort diversified product offerings, engaged new producers and consumers, and helped expand MarketMaker™ into several new states.

The 2011 award, sponsored by Farm Credit, was presented at the National Value Added Agriculture Conference in Pittsburgh to South Carolina partners Clemson University and the S.C. Sea Grant Extension Program.

Developed by the University of Illinois, MarketMaker™ is supported...
made toward the protection, conservation, and improvement of South Carolina’s natural resources.

Each year the public is invited to submit nominations that are then reviewed by an awards committee, which includes representatives from the state’s natural-resource agencies. In judging nominees, the committee considers excellence in innovation, leadership, and accomplishments that influence positive changes affecting the natural environment.

Members of the awards committee represent the S.C. Forestry Commission, S.C. Department of Health and Environmental Control, S.C. Department of Natural Resources, and S.C. Sea Grant Consortium.

Frank S. Holleman, III received the award in 2010 for exceptional leadership, creativity, and passion for conservation and education during his leadership at Naturaland Trust. Mr. Holleman was instrumental in conservation of the Blue Wall Connection and Stumphouse Mountain.

Nomination guidelines, application form, and a list of previous award winners are available at www.trees.sc.gov/sceaa2011.htm or by calling Guy Sabin at (803) 896-8593.

Two new employees at S.C. Sea Grant

Michael Slattery, Ph.D., has been selected as the coastal processes specialist with the Sea Grant Extension Program. Based at Coastal Carolina University, he will seek to bridge the gap between leading-edge science and the communities that could benefit by understanding how scientific findings affect management of coastal hazards.

Slattery’s work will address a variety of challenges, including coastal hazards like waves and rip currents, shoreline variability, and drainage issues.

Judy Linder has rejoined the Consortium as accountant/fiscal analyst. She was previously manager for the Charleston office of the S.C. Education Lottery. Linder prepares and processes all vendor payments, budgets, financial reports, and many other day-to-day financial activities of the Consortium. She is a graduate of the College of Charleston with a degree in Business Administration and attended graduate school at The Citadel.

2011 Environmental Awareness Award call for nominations

The state of South Carolina is seeking nominations for an award to recognize individuals who are doing extraordinary work for the natural environment. Nominations will be accepted through December 31, 2011.

The S.C. General Assembly established the Environmental Awareness Award, now in its 19th year, during the 1992 legislative session to recognize outstanding contributions made toward the protection, conservation, and improvement of South Carolina’s natural resources.

Volunteers made a success of the 2011 Beach Sweep/River Sweep.

Bringing MarketMaker™ to South Carolina was a cooperative effort among Clemson University, S.C. Sea Grant Extension Program, S.C. Department of Agriculture, and U.S. Department of Agriculture Natural Resources Conservation Service. To find seafood and agricultural products from South Carolina, visit www.scmarketmaker.com.

Two new employees at S.C. Sea Grant

Michael Slattery, Ph.D.

Judy Linder

2011 Environmental Awareness Award call for nominations

Volunteers in McClellanville, S.C. sort recyclables during the 2011 Beach Sweep/River Sweep. Over 4,500 volunteers participated on the coast in the 23rd annual event, which is part of the Ocean Conservancy’s International Coastal Cleanup.

2011 Beach Sweep/River Sweep a success

Volunteers in McClellanville, S.C. sort recyclables during the 2011 Beach Sweep/River Sweep. Over 4,500 volunteers participated on the coast in the 23rd annual event, which is part of the Ocean Conservancy’s International Coastal Cleanup.
ATTENTION SCHOOL TEACHERS! The S.C. Sea Grant Consortium has designed supplemental classroom resources for this and past issues of Coastal Heritage magazine. Coastal Heritage Curriculum Connection, written for K-12 educators and their students, is aligned with the South Carolina state standards for the appropriate grade levels. Includes standards-based inquiry questions to lead students through explorations of the topic discussed. Curriculum Connection is available on-line at www.scseagrant.org/education.