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Small, Green, and Good

The role of neglected cities in a sustainable future

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Growing up in a small town, I regularly took bus trips with my mom and little sister into “the city”: Syracuse. Like most middle-class families in the 1960s, we had only one car, which my dad drove to work. So we would buy our tickets at the village pharmacy, board the Big Dog, and barrel through miles of farms and sparsely developed land until we reached the highway. Nearing the final stretch, we had to endure the stench of the Solvay chemical works to our right, and the creepy mint green of polluted Onondaga Lake on our left. But we would disembark in Syracuse’s vibrant downtown, all glittering lights and vertical planes, filled with department stores, jewelry and candy shops, theaters and movie palaces, “ethnic” food, and people who were interestingly not like us.

Smaller American cities, places like Syracuse—and Decatur, New Bedford, Kalamazoo, Buffalo, Trenton, Erie, and Youngstown—were once bustling centers of industry and downtown commerce, with wealthy local patrons committed to civic improvements and the arts. In the ’70s they began a decline from which they have not recovered. Today, most are scented as doleful sites of low-paying service jobs, with shrinking tax bases and little appeal to young professionals or to what urban theorist Richard Florida calls the “creative class.” In Syracuse itself the center of gravity has shifted northward, toward Carousel Mall, leaving a ghostly downtown where Rite-Aid, now the largest store, presides over parking lots and abandoned buildings.

Historians and economic demographers generally attribute the decline of small-to-mid-size cities of 50,000 to 500,000 souls to deindustrialization, since many sit in the Midwestern Rust Belt or the Northeast. But the history of smaller-city decline is more complex than that. Smaller cities were also victims of post-war development policies better suited to large cities—or rather, that were painful, but less disastrous, for large metropolitan areas.

Extraordinary mid-twentieth century changes in transportation, zoning, housing construction, mortgage financing, and domestic taste facilitated the creation of wide swathes of “bourgeois utopias” that now ring our cities far out into the exurbs. They are the products of a radical transformation of land-use policy that extended supply chains with vast highway systems, further separating people from their workplaces, energy producers from consumers, and farmers from their markets. Large cities survived the changes and the resulting onslaught of suburban shopping malls—itsself a reaction to extended supply-chains—in the late ’70s. In smaller cities, malls decimated what was left of retail districts already damaged by massive downtown highway systems that choked off commercial centers from surrounding urban neighborhoods.

Neglect of the smaller city, as both place and idea, continued through the rest of the century. As large-metropolitan real estate values skyrocketed in the 1990s, big cities attracted millions of dollars in capital improvements and large-scale development. “New Urbanism” among designers and architects, though not in theory intended only for big cities, attracted funding for pedestrian-friendly thoroughfares, mixed-use building, open spaces, and the preservation of historic architecture that enhanced the metropolitan boom. Now, with the call for reducing the urban

carbon footprint, cosmopolitan living is going green. Two recent books proposing models for a low-carbon economy—Thomas Friedman’s *Hot, Flat, and Crowded*, and Jay Inslee and Bracken Hendricks’s *Apollo’s Fire*—speak throughout of “villages” and “large cities.” Not a word for the distinctive role smaller cities might play in a low-carbon world.

That is too bad. Smaller cities have idiosyncratic charms of their own—worthy of sustained attention and renewal. And, fortuitously, they have a distinctive and vital role to play in the work of the new century: smaller cities will be critical in the move to local agriculture and the development of renewable energy industries. These tasks will almost certainly require a dramatic rethinking of land-use policy, and smaller cities have assets that large cities lack. Their underused or vacant industrial space and surrounding tracts of farmland make them ideal sites for sustainable land-use policies, or “smart growth.”

Yet current urban planning models offer little guidance on how we might begin to make those changes. Nor, until recently, has there been a national forum that matches smaller-city renewal initiatives to national needs. The Revitalizing Older Cities Congressional Task Force, formed just last year, held its first national summit (organized by the Northeast-Midwest Institute) in mid-February. Local governments and advocates of eco-sustainability must build on this new conversation for they have a shared stake in the future.

**Sustainability advocates could be missing the large, strategic, regional and economic advantages smaller cities can offer a national policy over the long term.**

The Portland, Oregon-based Post Carbon Cities project offers one bold way to start thinking about national policy, with its call for the “relocalization” of cities, a form of decentralization grounded in local food systems and energy resources. An alternative to the traditional idea of “balancing” economic and environmental needs, relocalization aims to maximize both by dramatically reducing reliance on costly and environmentally damaging supply chains—long transportation routes geared to truck or air transportation—while increasing sustainable agriculture and energy security and creating local jobs that cannot be outsourced.

Taking energy security first, the smaller cities of the United States, with their large parcels of vacant, relatively low-value property and proximate surrounding land, could serve the alternative energy industry well. Smaller cities are not only more likely to be located near sources of clean energy—such as waterways, forests, and fields—but they can also generate more energy proportionate to their size.

One large obstacle for the clean-energy industry and its advocates is that the current energy infrastructure disadvantages them in competition with coal, natural gas, and oil, which together provide about 70 percent of electrical power in the United States. Achieving “grid parity”—the point at which renewable energy is as cheap as or cheaper than power from prevailing sources—is extremely difficult. The grid, built decades ago for local utility monopolies and now used by a deregulated national energy industry, is in a terrible state of disrepair. More immediately, it is oriented toward large “base loads” traveling over long distances to major population centers, a strain that threatens the fragile system. The United States’s “third-world grid,” as many are now calling it, is particularly unsuited to storing or transferring small, supplementary loads of electricity—the kind of loads produced by renewable energy sources in their current form.

Moreover, keeping energy more local has the advantage of limiting grid transmission loss, which can run as high as 10 percent.

If smaller cities are to reap the benefits of renewable energy development, the transmission and distribution network must be both modernized and decentralized—changes that electrical energy experts agree are necessary anyway. Local contributions to a first-world energy grid would then vary, depending on terrain and natural resources. Hydrokinetic power harvested from underwater ocean currents shows promise in coastal areas. Hydropower from rivers would generate the most electricity in the West and Midwest, where the drop is higher and the water rush more forceful than in other parts of the country. Solar power on a large scale works best in sunny climates, and wind power on the coasts and in the Great Plains. And, according to a Washington Post report, geothermal energy tapped from the thirteen Western states that sit within the trans-Pacific “Ring of Fire” could provide up to half of the nation’s current level of electricity output.

But smaller contributions from alternative energy sources should not be overlooked. Small hydropower, defined as producing up to ten megawatts of electricity (enough to support 10,000 homes), is underdeveloped in the United States, lagging far behind Canada, Australia, New Zealand, parts of Asia, and the European Union, where it is found mostly in its fast-developing smaller cities. In New England, a number of projects are under way that will generate three megawatts or less, enough to power a hospital, large shopping center, or small factory.

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Alternative energy technologies are in various stages of development, but one thing is already clear: if they work, they will require space that dense metropolitan areas cannot provide. Solar power, which among alternative energies has come closest to achieving grid parity, can make use of rooftops and awnings in big cities, but offers far greater potential when staged on ground mounts on polluted brownfields, suburban greyfields, or open land. One of the world’s largest solar farms, sitting on more than one thousand acres in Kramer Junction in California’s Mojave Desert, consists of row upon row of solar panels, which power generating stations at the facility. According to the company that operates it, at capacity, it produces enough power (150 megawatts) to support 150,000 homes. A good rule of thumb, at this point, is that one megawatt of solar-generated power requires about eight acres of land.

Wind power, unless sited offshore, also requires large tracts of land. And, by definition, biomass and biogas technologies require farm and forest land to generate the raw resources required, as well as space for the physical plant that conducts the conversion. This year BioEnergy Solutions announced a partnership with Vintage Dairy, of Riverdale, California (just outside Fresno) to convert manure from its 5,000 cows into methane by flushing animal waste into an anaerobic-digester, a covered lagoon “equal in size to the area of nearly five football fields and over three stories deep.”

As ideal sites for new energy industries, smaller cities would in turn gain from job creation. A 2007 American Solar Energy Society report claimed that renewable energy and energy-efficient industries had already created nearly 8.5 million jobs in the United States, a little more than half in indirectly related fields such as accounting, information technology, and trucking. Many are blue-collar jobs in maintenance and manufacturing. A September 2008 proposal from the Apollo

Alliance estimates that its New Apollo Program—a renewable energy proposal on a scale akin to that of the Kennedy administration’s space program—could create five million “high-quality” green-collar jobs over the next decade. Indeed, many have pointed out that bold low-carbon policy initiatives could launch the next Industrial Revolution. Happily, the American Recovery and Reinvestment Act, signed by President Obama in February, is consistent with Apollo’s aims and suggested funding levels. Smaller American cities could participate creatively in this emerging world. In the past, jurisdictional disputes over land use have plagued urban development in smaller cities, so federal investment in regional transportation and energy infrastructure must include pressure to resolve squabbles.

The proximity of abundant, relatively cheap land also gives smaller cities a structural advantage in meeting the growing demand for local, sustainable agriculture. As Michael Pollan demonstrates in his best-selling *The Omnivore’s Dilemma*, agribusiness puts down an enormous carbon footprint. Sustainable agriculture and animal husbandry not only produce more nutritious food and less cruelty to animals, they are also far less dependent on petroleum for long-distance transportation, fertilizer, and neurotoxic pesticides (not to mention antibiotics). Building on the work of organic farmers and environmental activists since the ’70s, Pollan’s call for relocalizing agriculture coincides with rising alarm about the perils of climate change and dependence on foreign oil. Even the United Nations, which has long embraced agribusiness as the key to famine prevention, is beginning to recognize the role of sustainable, localized practices in food security. The change in public perceptions has created a critical mass of “locavores,” most living in big cities far from the heart of agribusiness, who are driving a growing market for organic products.

Farmers’ markets, community-supported agriculture, community gardens, and green roofs have become increasingly popular, forcing big supermarket chains to offer local, organic produce. New York City alone went from two farmers’ markets in 1979 to more than 45 in 2008. Meanwhile, the appeal of farming, on a smaller, more diversified, independent model, is growing among young adults and mid-life professionals. The number of organic farms in New York State almost doubled between 2003 and 2007, from 404 farms to 735. And the number of people aged 45—54 operating farms of under fifty acres shot up by 70 percent. Increasingly, urban professionals are investing in farmland and taking on agricultural work as a second vocation.

If urban farming—growing food within city limits or on nearby small-scale market farms—and sustainable agriculture in general are to succeed, however, they must be integrated with the larger workforce and with urban and regional planning. Detroit, home to one of the country’s first urban farms, pioneered this work. Today eighty acres throughout the city have been appropriated for agriculture and are under cultivation through the Detroit Garden Resource Program Collaborative. Its member organizations provide training in soil management and crop cultivation, bee-keeping, orchard building, composting, and the like through various faith communities and the local schools, and provide on-the-job training and summer employment to teens and adults. The yield for 2007 was 120 tons of food and promises to grow much higher. The county treasurer’s office allowed the nonprofit Urban Farming to grow produce on twenty tax-foreclosed vacant properties in 2008.

To some extent, the urban agriculture movement is primarily a big-city phenomenon, not least because large cities have received disproportionate publicity and funding. The W. K. Kellogg Foundation sponsors one of the larger and more daring philanthropic initiatives. Its Food and Fitness program provided planning grants to nine community-based projects that emphasize

access to local food and physical exercise among disadvantaged families. Six of them are located in big cities (including Detroit), two in rural areas, and only one in a smaller city—Holyoke, Massachusetts.

Funding and advocacy organizations have nothing against smaller city initiatives. Far from it. Kellogg's Ricardo Salvador notes that "the metaphor of sustainability itself is lots of small communities, whether they are city neighborhoods in densely populated areas or small rural communities." As Daniel Lerch, of Post Carbon Cities puts it: "This is not just an issue of scale. Very soon we'll see cities of any size going down the path of sustainability with regard to food and watershed."

By minimizing the importance of scale, however, sustainability advocates could be missing the large, strategic regional and economic advantages smaller cities can offer a national policy over the long term. Martin Bailkey, coauthor of a 2000 Lincoln Institute of Land Policy working paper on the history and viability of entrepreneurial "farming inside cities" says "it shouldn't matter whether farms are fifty or sixty miles from, say, New York City, or ten miles from a smaller city like Madison, Wisconsin." But he notes that post-industrial cities with declining populations, particularly in the Midwest, are better positioned to shift urban land-use policy toward farming.

Even more intriguing, he says, is the notion that the "mosaic" of smaller cities located in the heartland could one day anchor a regional agricultural shift from industrial monoculture to more localized biodiversity. Large farms now used for federally subsidized commodity crops—mainly corn and soy—could over time be made available in smaller parcels for market farming on a scale that cannot be undertaken within city limits.

The Land Connection, based in Evanston, Illinois, is working to do just that. One program helps heirs to farmland put agricultural easements on their property, and its training and transition programs assist farmers who want to replace monoculture with sustainable, organic practices. Founder Terra Brockman says that some of the newer farmers, who may be first-timers or returning to the family business, "are making the decision to sell in smaller cities . . . where the demand didn't exist fifteen years ago." What they need, says Brockman, "is really quite simple: land, trained farmers, local processing facilities (which disappeared in the sixties), and logistical transportation."

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Developing an effective transportation infrastructure is critical to making smaller cities hubs in a relocalized, agricultural economy. As Kellogg's Gail Imig suggests, it might be easier for smaller cities "to work out local distribution systems for transporting food" than for big cities. Still, federal leadership will be crucial. Gayle Peterson of The Headwaters Group Philanthropic Services—consultants for foundations ranging from Kellogg, Mott, and Weyerhouser to community foundations—says: "There is a huge movement among foundations supporting regional food systems uniting networks of cities and towns in a large agricultural food basket . . . but there are as yet no group initiatives that cut across the issues." Her colleague, John Sherman,

adds: “If anything significant is to take place, the thrust will have to come from economic development agencies” that can provide government funding and coordinated policy leadership.

One nonprofit, the Michigan Land Use Institute (MLUI), is emerging as a model of state and regional planning. One of the projects it supports, The Grand Vision, aims to integrate economic opportunities into a working rural landscape and provide land–use experts to help grassroots groups organize and manage their campaigns.

Located in the area around Traverse City, a large town of 14,532 that anchors a “micropolitan statistical area”—a term established in 2003 denoting a new federal census standard—with a population of 131,342, The Grand Vision emerged in 2006 when plans for a highway bypass and bridge around Traverse City met with community protest. With the cooperation of Senators Debbie Stabinow and Carl Levin and U.S. Representative Dave Camp, federal highway funding was diverted to a two–year community–planning process. The process was coordinated by consultants with the full involvement of local citizens, municipal bodies, businesses, environmental groups, and social services agencies, all organized into “charrettes.” The final results will be unveiled in May.

One of MLUI’s highly successful programs is Farm to School, which is part of a growing nationwide movement that connects local farm products with school cafeterias. MLUI links the program to a larger state initiative based on a study showing that helping farmers sell to local supermarkets and farmers’ markets could increase net farm income in Michigan by nearly 16 percent and generate up to 1,889 new jobs.

Smaller cities might also be better able than large ones to recover for market–farming purposes land lost to suburban sprawl. Filmmaker Nancy Rosin—who produced a documentary on the history of Rochester, New York’s farmers’ market—explains that before the rise of grocery store chains after World War I, small–market farming appealed to working people, particularly immigrants from Italy and Eastern Europe, who brought their horticultural skills with them. They grew food on city lots where they lived and, over time, grew much larger quantities in the adjacent suburbs—or what we would now call suburbs—in particular, Irondequoit, less than ten miles from Rochester’s downtown market. A sizeable number, she says, held full–time jobs with companies such as Kodak and became known as “Kodak farmers.” By mid–century Irondequoit “had the largest square footage of greenhouse glass in the world to support the demand for food in a climate with long, cold winters.” A fifty–something Irondequoit native who blogs for the Rochester Democrat and Chronicle brings that world to life:

I grew up in the Flats, on St. Joseph Street. My dad was born there in the old homestead, his parents farmers. My siblings and I were raised there. Although it had changed from when my dad was growing up, I still remember all the farming that went on down there. The greenhouses, the tractors, listening to the frogs on a hot summer night . . . it was like living in the country. A drive through the Flats today shows quite a different story. The farms are gone. There are no tractors going up and down the street with trailers bobbing behind them. The greenhouses are gone. Most of the ‘old timers’ have passed. There are houses where there were fields and wetlands. There has been a lot of change.

By the early 1960s Irondequoit was fast being paved over, making way for homes, highways, and strip malls. In 1963 the once–powerful Irondequoit Grange closed and later became the

House of Guitars. The gigantic Irondequoit Mall opened in 1990, and, today, after only eighteen years in business, it is considered officially “dead,” with less than 50 percent retail occupancy and an uncertain future. What should become of such worn-out retail outlets, which were multiplying by the thousands across the country even before the current economic downturn?

A happier future for a smaller city like Rochester, where Kodak alone shed some 45,000 jobs over the past twenty-five years, may involve the restoration and growth of sustainable food systems. One of Kellogg’s earliest Food and Fitness pilot programs tried to do just that on several acres where a small vineyard tended by an Italian family years ago still grows. (The program is currently languishing due to conflicts among the community organizations that originally established it.) A series of community “Vision Plans” similar to those in Traverse City called for continuing an existing program of riverfront development, as well as more affordable housing, mixed-use buildings, and pedestrian-friendly streets—all familiar New Urbanism strategies. One recent charrette also called for tearing down part of the Inner Loop freeway, built in 1965, that circles the downtown business district. Here is another idea: why not turn the roof and vast parking lot of Irondequoit Mall into a solar “brightfield,” and the indoor space into hydroponic market farms? Why not rebuild those greenhouses? And why not introduce green job-training programs in Rochester, a city that has one of the highest high-school dropout rates in the nation?

There is no question that the infrastructure of large metropolitan areas can and must be redesigned and retrofitted for energy efficiency. And not surprisingly, that is where green urban planners have been focusing their efforts: after all, big cities contribute the largest share of the world’s carbon output. But focusing on big cities may also reflect what urban historian James J. Connolly calls “metropolitan bias.” Even those who have written about smaller urban areas, he argues, have “made little effort to distinguish large and smaller cities from each other,” treating them as “essentially interchangeable case studies of developments that unfolded on a national and even an international scale.” That model, established by sociologist Louis Wirth’s influential 1938 essay “Urbanism as a Way of Life,” assumes continued modernization, growth, and centralization of political and economic power in big cities. The idea of the “metropolis as the quintessential urban form” was further reinforced by the postmodern cultural turn, which saw global cities as “sites” for the formation of “transnational” identities; by implication, smaller places are repositories of more provincial, outmoded, and “destructive nationalisms.”

If we temper the metropolitan bias that pervades the sustainable cities movement, green advantages and opportunities distinctive to smaller cities come into focus. But we first must abandon the perpetual-growth paradigm and, when appropriate, embrace shrinkage, not as decline but as a framework for creative reinvention. Several American cities are taking a cue from Europe’s Shrinking Cities project, spurred by radical population decline particularly in the former East German Republic. Youngstown, Ohio, the population of which dropped from 170,000 to 82,000 with the decline of the steel industry, was the first American city to make downsizing a matter of formal policy. The Youngstown 2010 initiative has spent upward of \$3 million to date to demolish vacant houses and buildings; open access to the Mahoning River; cut back sewage, plowing, and other costly services; further concentrate the population; and open green space for parks and agriculture. According to the city’s chief planner, Anthony Kobak, urban-farming incentives are not yet under consideration.

Other so-called weak-market cities have launched similar efforts, with greater emphasis on environmental sustainability. In 2008 nearby Cleveland's Neighborhood Progress, Inc. announced a major project, supported by a grant from the Surdna Foundation, exploring the possibility of turning vacant city lots into agricultural and renewable energy sites. Similar plans are under way in Flint, Michigan, which now owns 10 percent of the city's vacant property through the Genesee County Land Bank.

Meanwhile, we need to revisit the cultural mythology about smaller places. Sociologist Kenneth Johnson's 2006 study, which tracked demographic changes in rural America, found that since 2001 rural population gains have swung modestly upward in an "uneven" pattern. "Gains have been greatest," he writes, "in the fringes of metropolitan areas and in rural areas that are proximate to metropolitan areas that include smaller cities and that contain natural and recreational amenities." Johnson's study also contradicts two seemingly intractable stereotypes. Immigrants, particularly Latinos, "are dispersing more widely" and account for much of this small metro growth, thus belying the notion that large urban areas are the exclusive preserve of "transnational" pluralism. And rural does not necessarily equal farming. Johnson shows that "the proportion of the rural workforce employed in manufacturing is nearly double that in agriculture," while "many rural areas have also now become thriving centers of recreation and retirement."

A new literature is taking shape that recognizes the distinctive characteristics and potential of smaller cities. From the *Journal of Urbanism*, launched in March 2008, to recent studies by the Brookings Institution's Jennifer S. Vey, to PolicyLink's 2008 report *To Be Strong Again: Renewing the Promise in Smaller Industrial Cities*, to the work of Ball State University's Center for Middletown Studies, small cities are gradually being taken seriously again. That quiet shift reflects changes in the rest of the world. A 2008 UN population study predicted that, by the end of that year and for the first time in history, half the world would live in urban centers and that the trend toward cities would continue, with most of the growth taking place in cities of less than half a million. China alone is planning to build 400 small cities by 2020, to accommodate its shifting rural population. All of this is attracting attention from urban planners and architects. But the growing interest in smaller cities also reflects an imaginative resizing, a spiritually overdue compression of the gigantic, "unsustainable" ambitions of economic-bubble culture.

When it comes to the urban-rural divide, small-to-intermediate-size cities may offer the best of both worlds. For all the rural romanticism of the '70s-era homesteading movement—or for that matter, the vaunted folksiness of "small-town values,"—urban life has its allure. Smaller cities are large enough to offer the diversity, anonymity, and vibrancy of urban culture, as well as levels of density that offer efficiencies of scale. They are also small enough to maintain proximity to sustainable food production and renewable energy resources.

An inversion is at work here: placing smaller cities at the center of analysis leads to an imaginative template that is decentralized, deconcentrated, relocalized. One of the Obama campaign's strokes of genius was bypassing big-city power centers, where self-appointed national leaders claim to speak for minorities, and working directly with the decentralized grid of smaller-city community organizations across the land. As policymakers rethink the American agricultural economy and invest in renewable energy, they, too, should be looking at smaller cities. Local and municipal leaders also have much to gain in the twenty-first century if they have the eyes to see it.