Americans face a unique challenge in solving the climate crisis. Unlike other Western countries and Japan, where population is projected to be relatively constant, the U.S. population is set to grow by at least 100 million—and likely 150 million—people by 2050. Where and under what conditions these people live present serious challenges to sustainability planning. American cities today are so spatially and economically unstable that anything beyond superficial sustainability planning is impossible.

Alternatively, we can radically change existing community and regional planning strategies to more sustainably house and serve the growing population. Fortunately, emerging approaches are capable of helping with this shift. One involves building local economies that anchor capital in place through community, worker, or public forms of ownership—so-called green community wealth strategies. By linking such stabilizing forms of economic organization to democratic forms of local, regional, and national planning, cities can regain the capacity to target jobs and investment to specific locations.

Beyond Throwaway Cities
A good starting point is a clear understanding of America’s “throwaway city” habit. Simply put, as jobs move in and out of cities in uncontrolled ways we literally throw away housing, roads, schools, hospitals, and public facilities—only to have to build the same facilities elsewhere at great financial, energy, and carbon costs. All the while, the instability makes it impossible to carry out coherent transportation and high-density housing planning.

The most dramatic examples are places like Detroit and Cleveland, where the devastated landscape in many areas looks like bombed-out World War II cities. But these cases are not exceptional. Of the 112 largest U.S. cities in 1950 with populations over 100,000, 56—fully half of them—had experienced population decline by 2008. The people moved elsewhere, where all the usual facilities had to be built anew to serve them—and, built under conditions that were inherently likely to be subject to future instability and disruption.

Cities in general, of course, have gained population since 1990, but the long-term trend of instability is dominant. Between 1990 and 2008, 35 of 111 cities lost more than 5,000 people, including such cities as Pittsburgh, Cincinnati, Syracuse, Birmingham, Norfolk, and New Orleans (which had been losing population even prior to Hurricane Katrina in 2005).

Central to the climate change problem is that, at present, 39 percent of U.S. carbon emissions come from buildings, 33 percent from

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In Brief

There will be at least 100 million more Americans by 2050, and likely 150 million more. Yet the cities that will house them are so spatially and economically unstable that it is impossible to do much beyond superficial sustainability planning. One solution is to anchor and recycle wealth in communities, using locally owned businesses as bulwarks against uncontrolled economic forces that have decimated regions like the U.S. Rust Belt. Cities built to last, as a community wealth building effort in Cleveland suggests, can offer a sustainable home for America’s population boom and point the way to a greener economy.
transportation, and the remainder from industry. So the built environment and transportation are critical to climate change mitigation efforts.

Nancy McGuckin, in *Transportation Management and Engineering Magazine,* reports that carbon emissions in communities with very high densities (5,000–9,999 households per square mile) have half the per capita carbon emissions of rural residents (0–50 households per square mile). And a report by the International Institute for Environment and Development found that New York City had a per capita average of 7.10 metric tons of carbon emitted per resident, compared to 23.92 metric tons nationwide; likewise, London residents emitted 6.18 metric tons of carbon each, compared to a British national average of 11.19 metric tons.

While, in theory, rural development could be highly sustainable, as McGuckin notes, in the United States today rural families “own twice as many vehicles as households in high density areas—and these are likely to be less efficient.” Moreover, average vehicle miles traveled for rural households exceed those of metropolitan households by roughly 7,000 a year (28,238 vs. 21,187).

There is no question that reducing carbon emissions will require public policy support. But achieving serious reductions requires focused attention on the questions of how our communities are developed. Given that the economic fate of most cities is dependent on decisions made by mobile investors of capital, this will require major efforts, first, to improve quality of life within cities; second, to reduce gaping social disparities within cities (a major cause of “urban decline”); and third, and critically, to stabilize the economic underpinnings of cities—that is, the job base. As we shall see, the solutions to problems in existing cities intersect with strategies needed to deal with the unique U.S. problem noted at the outset—namely, America’s unusual population growth.

One solution involves fostering “green community wealth building”—that is, linking green development to institutions that inherently increase stability. This kind of wealth building can take a variety of forms, including employee ownership, nonprofit ownership, public ownership, and locally based private ownership. Most vibrant cities already have a substantial number of institutions that are inherently far more anchored than ordinary business firms. Among these, for instance, are universities, government agencies, and hospitals.

The goal of green community wealth building is to increase the proportion of capital held by actors with a long term commitment to a given locality or region. In publicly traded firms, the central objective is to maximize profit for shareholders, whether it involves moving from one city to another or not. Green community wealth, on the other hand, is tied to place. Public enterprises, employee-owned firms, neighborhood-owned enterprises, and nonprofits all are rooted in particular communities. Communities with a higher proportion of such capital are better positioned to achieve economic stability and plan effectively for a low-carbon future.

A dramatic illustration of the new approach has been developed in Cleveland, historically one of the leading cities of American capitalism. Home to John D. Rockefeller, Cleveland was known as the world’s “nuts and bolts” capital. At one time it was second only to New York City in headquartering Fortune 500 companies. In 1950, Cleveland’s population exceeded 914,000.

Times have changed. By the 2010 U.S. census, Cleveland’s population had fallen below 400,000. But the legacy institutions remain—namely, the city’s leading hospitals and universities. Daily, more than 50,000 people commute to the Cleveland Clinic, University Hospitals, Case Western Reserve University, and the other so-called anchor institutions (“eds,” “meds,” and other place-based, mainly public or nonprofit, institutions) within the University Circle, a small business district located roughly four miles (6.4 kilometers) northeast of downtown Cleveland. The purchasing power of these institutions (in addition to salaries and construction) exceeds $3 billion a year. But surrounding the University Circle are low-income neighborhoods with 43,000 residents, whose median household income is only $18,500.
Can this pattern be changed? Its economic consequences in low-income neighborhoods are devastating, and the pattern is equally damaging from an environmental standpoint. Cleveland also exhibits a classic pattern of sprawl. A new strategy spearheaded by the Cleveland Foundation, and involving neighborhood groups, major hospitals and universities, as well as city government, aims to reverse both the economic and environmental devastation. (The Democracy Collaborative, home to two of this article’s authors, was involved in the planning.)

In what has come to be called the Cleveland model, the goal is to leverage the city’s existing anchors—in this case, hospitals and universities—to provide a long-term market for new worker-owned cooperatives while providing living-wage jobs and access to business ownership to employee-owners situated in surrounding low-income, largely African American communities. The first point is to recycle purchasing power to achieve greater stability. The second—and critical—point is to target firms owned by people who live in the community and create an ongoing stabilizing effect.

The first of Cleveland’s planned network of cooperatives opened its doors for business in September 2009. The co-op industrial-scale laundry is a state-of-the-art, ecologically green commercial facility capable of handling ten million pounds of health-care linen a year. Its sophisticated business plan provides all employee-owners a living wage and health benefits. After seven years on the job, if current projections are realized, each employee will have a $65,000 equity stake in the enterprise.

In October 2009, a second employee-owned, community-based company began large-scale installations of solar panels for the city’s largest nonprofit health, education, and municipal buildings. (The company also provides home weatherization services.) Another business scheduled to start operations within six months is a year-round hydroponic greenhouse capable of producing three million heads of lettuce and approximately 300,000 pounds of basil and other herbs a year. Many other enterprises are in the planning stage.

Each business focuses on the specific procurement needs of hospitals and universities as well as the local market. Local foundations, anchor institutions, banks, and city government have all committed resources to stimulate business growth. A cooperative development fund, currently capitalized by a $3 million grant from the Cleveland Foundation, expects to raise an additional $30–40 million to support a growing network of cooperatives.

New Forms of Planning
The Cleveland model is important not only for its own sake but because it points in the direction of community-based economic planning for long-term, stable jobs. (Related efforts are being discussed in other cities, including Amarillo, Texas; Atlanta, Georgia; Pittsburgh, Pennsylvania; and Washington, DC.) The relatively informal...
arrangements of the Cleveland model, in which nonprofits cooperate with public institutions and private employers, also indicates that “planning” need not mean remote government officials drawing up a blueprint and then imposing it. Rather, community economic planning can be collaborative, with multiple institutional actors involved—indeed, if such planning is going to succeed, it will need to be.

In general, green community wealth building strategies are also an important tool in neighborhood revitalization that benefits existing residents and reduces poverty (rather than moving poor people around).

Reducing poverty improves the quality of life in both central city and older suburban neighborhoods, making them more attractive options for residents and thereby helping in a second way to achieve stability.

The overall economic impact of place-based community wealth building strategies has become increasingly important in recent years. More than ten million employees, for instance, own all or part of 10,900 companies through employee stock ownership plans (ESOPs)—firms that employees finance and increasingly own through pension contributions. These ESOPs have so far generated equity benefits of $869 billion for their employee-owners. Cooperatives, according to a 2009 University of Wisconsin study, now operate 73,000 places of business throughout the United States, own $3 trillion in assets, employ 857,000 people, and generate over $500 billion in revenue for their member-owners.

Because such efforts spread business profits among a large number of owners, green community wealth strategies also bring equity benefits—an important additional element in the strategy. Economic security of individuals is essential to building political support for a sustained green transition. If low-income and minority constituencies fail to
embrace the green economy, urban politicians will continue to place other priorities higher.

Finally, community ownership of green jobs appears all but certain to yield more long-term employment than traditional corporate strategies. Traditional employers have an incentive to keep labor costs low and hence will use workers only for as long as they are needed on a particular job (such as weatherizing homes). Community enterprises, in contrast, aim to maximize employment over the long term. Instead of treating employees as disposable, such employers commonly seek ways to find new work for their workforce.

Important policy-support efforts have also been developing in different regions of the nation. An example is the Ohio Employee Ownership Center (OEOC), which has used a relatively modest amount of state funding (less than $1 million annually) to facilitate worker takeovers of firms whose owners are retiring or that are threatened with closure. Such firms, owned by workers, are city (and tax base) stabilizers: they do not get up and move. The OEOC has created enormous economic returns—retaining jobs at a cost of less than $800 per job and helping stabilize thousands of jobs in Ohio cities.

Another strategy aimed at stabilizing communities and furthering sustainability goals involves new forms of regional and national planning—indeed, given the continental scale of the United States, regional planning will be particularly important. Economic planning takes place today through government procurement, regulatory, and incentive programs, as well as through the provision of public infrastructure. A comprehensive agenda to stabilize America’s urban areas will require drawing on these existing policy instruments in a coordinated manner.

The key principle of regional planning must be the preservation and stability of existing communities and their productive capacities. We need policy that assures the continued use of productive capacities and provides assistance where conversion to a different product is required. Most often this will mean adopting some form of joint venture, including community, public, or worker ownership.

**Population Growth and Sprawl**

Stabilizing population centers—whether old or new—is also a first step to building the high-density, well connected hubs that will house the next 100 million Americans in a low-carbon future. The current pattern of American suburbanization has created a social pattern—one in which poverty and social problems
are dramatically concentrated in central cities—that is itself a major impediment to the needed inside-out revitalization of metropolitan America. Current trends are not encouraging: A 2010 study of residential construction in the 50 largest U.S. metropolitan areas in two periods (1990–1995 and 2003–2008) found that while the central-city share of residential construction showed some increases in the latter period, suburban areas still accounted for the majority of new construction in every metropolitan area except New York—indeed, over 85 percent of new construction in nearly half the areas.9 (This analysis excludes metropolitan areas that underwent significant expansion of central city boundaries via annexation during this time period or where the central city and surrounding county have consolidated.)

Instead of simply allowing the next 100 million Americans to add to sprawl, the dual strategy of creating anchored community wealth building institutions on the one hand, and using an overarching community-stabilizing approach in regional planning on the other, could help concentrate and support the population in old cities, in new areas, and around small existing towns viewed as “nodes” of new city development. The result could be the capacity to achieve sufficient stability to allow sustainability planning in both old and new areas.

Traditional means, of course, can also achieve benefits in the realm of sustainability. Portland, Oregon, has used urban growth boundaries, reinforced by an elected metropolitan regional government, to redirect development toward the city center, putting a firm limit on the extent of outward development. Montgomery County, Maryland, and Seattle, Washington, have used “transfer of development rights” programs to encourage infill development.10

The Power of Regional Planning for Transportation Policy

To gain perspective on a possible direction for sustainability planning, consider this dimension of the transition to a low-carbon future: Many industries that have had prominent roles in the American economy must shrink. In some cases, such industries might ultimately disappear altogether. Two obvious examples are coal and automobiles, both of which have powerful political lobbies.

An essential task for sustainability advocates is to develop a strategy that enables affected communities to accept and even embrace a new kind of economy. That can only happen if the downsizing of the automobile industry does not, for instance, mean the extinction of cities like Detroit (or the next car manufacturing center!); or if the demise of coal production does not mean the death of coal communities like those of southwest Virginia.

In the first half of 2009, the crisis of the American automobile industry became one of the most visible challenges of this kind facing the nation. Federal funds were committed to bail out Chrysler and General Motors, with the government taking significant ownership stakes in both companies. At the same time, the Obama administration used its extraordinary leverage over the industry to push through an increase in fuel-efficiency standards, which will reach 36 miles per gallon by 2016. But fuel efficiency is not the only environmentally relevant issue involved in the auto bailout. Also relevant is what will happen to places like Kenosha, Flint, and Detroit. The first policy priority in the future could (and should) be to avoid the carbon and human costs of “throwing away” these cities. The second priority should be maintaining a healthy domestic industry. And a third priority should be maintaining the viability of GM or a successor entity as an ongoing economic institution—not necessarily as an automobile corporation in perpetuity.

Stating matters this way does not mean keeping all existing car plants open. The crucial question is whether, once such facilities stop making cars, the plants will be left idle while former employees join the unemployment rolls or the ranks of low-wage service workers. The auto industry’s troubles allow for a thoughtful reconsideration of how we might preserve communities and establish a new precedent and principle. For instance, there is widespread consensus that both inter- and intra-city rail must greatly expand. This means that transit systems must make massive infrastructure investments and acquire new equipment. With proper national and regional policy support, such equipment could be intentionally targeted to maintain (and increase) the stability of auto-production cities like Kenosha, Flint, and Detroit.

What would a serious commitment to a national high-speed rail system look like? Authors Richard Gilbert and Anthony Perl13 have proposed that the United States build some 25,000 kilometers (15,500 miles) of dual track devoted to high-speed rail between now and 2025. They estimate that $2 trillion in investment (roughly $140 billion a year for 15 years) in infrastructure and equipment will be needed. Such a project, while not politically popular at this time, is clearly feasible. China, for instance, is planning to lay 30,000 kilometers (18,600 miles) of high-speed rail track by the middle of the next decade.14 At present, one major challenge in the United States is manufacturing capacity: although the country builds buses and assembles some mass-transit and rail equipment, it has virtually no capacity to build what would be required for a major shift to high-speed rail. It currently must buy from foreign suppliers.

How might America establish a domestic capacity to supply public-transit authorities with needed subway and rail cars—and at the same time focus such production on stabilizing communities so that effective sustainability planning can take place? One possibility is to create a public-private partnership in which a new firm is guaranteed long-term contracts and the government takes an ownership stake in exchange. Another possibility is to restructure an existing firm, such as GM, and offer long-term contracts and assistance in transitioning assembly lines in exchange for public equity. Employee ownership also could be part of an equation that aims to anchor facilities and jobs in local communities.
International examples are another guide. High-density suburbs linked to a central city and one another by mass transportation could serve as an update to Ebenezer Howard’s vision of planned decentralization (in his influential 1898 text Garden Cities of To-Morrow). Howard’s vision helped spur Britain’s New Towns movement, which led to the construction of over two dozen new towns in the first half of the twentieth century and is widely credited with reduced sprawl.\(^{11}\) Vauban, Germany (outside Freiburg) provides a more contemporary example, creating a “carless suburb” based on the assumption that residents will not own cars.\(^{12}\)

At the micro level, bike-friendly, transit-oriented Dutch cities—such as Amsterdam, but also provincial cities—provide a model for truly multimodal cities in which cars are present but decidedly secondary. A range of other European policies that raise the effective cost of driving, combined with ample public support for transit, have largely succeeded in making it possible for middle-class and working-class urban residents to have full access to the city and its opportunities without depending on a car. Distant as it may seem, that is the goal American cities must aim to achieve over the coming generation if they hope to meet the larger sustainability challenge.

A serious strategy must obviously “walk on two legs”: We need to do whatever can be done through traditional reforms. And at the same time we need to develop new green wealth strategies to anchor jobs and new national and regional strategies to increase community stability now—and as new populations continue to challenge planning at all levels.

**Building a Road Map for a New Politics of Sustainability**

Most promising in all this is rapidly growing interest in and awareness of the connection between healthy urban America and climate change: Americans are increasingly concerned with how to build a sustainable metropolis, and advocates are working in parallel to find new ways to create green jobs.

There are obvious links between these two agendas, but more is required. Neither sustainable urbanism nor green-jobs advocates have fully faced up to the need to secure the long-term economic stability of cities as a precondition for achieving sustainability, nor to the fact that our existing practices militate against just that outcome.

In this article we have identified two strategies for stabilizing jobs and capital in existing urban areas: (1) developing forms of green community wealth building that are inherently rooted in specific places; and (2) tapping into resource flows generated by public spending as well as quasi-public institutions to support place-based ownership. Numerous green development policies can be incorporated in both approaches—policies that place top priority on preserving communities and their productive capacities.

The beginning points for such far-reaching community-stabilizing approaches are within reach—including strategies that both provide ongoing jobs to older cities and help stabilize the new communities built for the growing U.S. population.

Creating sustainable metropolitan areas in the United States is a massive challenge, one similar to that facing other nations and yet unique in several respects. For America, there are two “elephants” in the room—highly unstable local economic patterns and population growth—that must be acknowledged. A major national effort to stabilize the economic basis of our communities is not only a moral or economic imperative; in the era of global warming, it is an ecological necessity—and one that needs to be taken on using every available policy tool. \(^{\S}\)

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A commuter train station in Vauban, Germany, a suburb of Freiburg recently constructed on the assumption that residents will not own cars. This kind of concerted policy effort will be critical if the U.S. hopes to move away from sprawling “throwaway” cities.

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