

Community Stability and the Challenge of Climate Change

By Thad Williamson and Gar Alperovitz

The Democracy Collaborative at the University of Maryland

April 2010

Copyright © 2010 by The Democracy Collaborative

The Democracy Collaborative
1140-F Tydings Hall
University of Maryland
College Park, MD 20742

Published in the United States of America in 2010 by The Democracy Collaborative.
All rights reserved.

Community Stability and the Challenge of Climate Change
By Thad Williamson and Gar Alperovitz¹

An American Dilemma

Consider the following: In all likelihood there will be well over 400 million people living in the United States in 2050, and possibly as many as one billion people by the year 2100. Where will those people live? And *how* can we, at that size, live in a sustainable manner, given the fact that the United States already has a grotesquely disproportionate carbon footprint and has not made any serious progress over the past two decades towards reducing it?

Global warming will impact every society in the world, but no other country has precisely this dilemma. Compared to Europe or Japan, per capita carbon emissions are inordinately high, in large measure because of the sprawling way we organize our metropolitan areas and our high reliance on the automobile (Buehler et al, 2009). Further, unlike most of those societies, population in the United States continues to steadily grow, and there is little reason to think that this trend will subside.

Re-shaping our metropolitan areas for a low-carbon footprint over the next 40 years will require a comprehensive strategy to stabilize the economic basis of American cities. We must break with the past not only with respect to energy use and transportation, but also with the way we treat cities as disposable items that can be abandoned when market conditions change.

A community that is not economically sustainable cannot be ecologically sustainable. But a community that is at the mercy of the investment decisions made by corporations concerned only with their bottom line can neither be certain of its economic future nor self-confident enough to undertake aggressive sustainability initiatives at the local level.

There is a broad consensus in the scientific community that developed nations, especially the United States, must reduce our carbon footprint by at least 50 percent by 2030 and at least 80 percent (possibly 90 percent) by 2050. **Yet current projections suggest that we will have another 65 million people (totaling 373 million) by 2030, and another 130 million by 2050; some analysts (and also the current Census Bureau “high estimate”) suggest that population may rise to one billion by 2100** (Census Bureau, 2000, 2008).

This means we must plan not only to cut our per capita carbon footprint dramatically in a relatively short period of time; we also must develop a national strategy for how the new population growth is to be accommodated in a more sustainable metropolis.

How might this be possible? The United States simply cannot continue its historic pattern of sprawling, automobile-dependent development and have any hope of reducing our carbon footprint to the degree required. More Americans need to live in urban environments that are not so dependent on automobile travel. Densities must increase, and existing suburban places need to be “retrofitted” to accommodate pedestrian, bike, and transit travel. At the same time,

¹ This overview report draws on a comprehensive study to be released later this year.

aggressive programs to increase energy efficiency in existing buildings and establish tough new standards in new ones are required.

Such dramatic change will not be possible unless two structural challenges are addressed. The first is the general pattern of suburbs capturing a greater share of jobs and households in most metropolitan areas. The second is the tremendous economic instability faced by most American cities, whose economic futures are dependent on decisions made by mobile investors of capital and by market forces beyond their control.

Altering these dynamics will require major efforts to, first, improve the quality of life in cities and, second, stabilize the job base. ***The best laid sustainability plans cannot work if jobs and people leave the city.***

A comprehensive approach to building a sustainable metropolis needs to accomplish three goals: (1) preserve and strengthen existing cities, and increase the proportion of metropolitan residents living in pedestrian and transit-friendly neighborhoods; (2) reduce dramatically the need for long daily commutes by car, through development of new transit systems and retrofitting existing suburban places; and (3) funnel new residents systematically into denser, more sustainable places—some of which will need to be built from scratch as population increases.

Achieving those goals will require effective planning at the state, regional and national levels. More fundamentally, it will require that the central cities and older suburbs of each metropolitan area be well anchored economically by a stable job base.

Stable, community-anchoring jobs are those which cannot be easily relocated and moved. The most obvious examples of such jobs are those provided by universities, hospitals, and government operations. Other examples include firms that rely heavily on government contracts. Finally, there are locally owned and controlled business forms that are inherently anchored to their localities such as employee-owned firms, local public enterprise, and businesses owned by community organizations and other nonprofits with deep ties to the community. Cities with a large proportion of jobs in these sectors will be more stable over time and will have a politics less oriented towards accommodating the demands of private corporations.

How can such community-rooted enterprises be encouraged?

First, existing and new streams of public investment should be targeted with the explicit goal of building up stable, community-based enterprise. For instance, the billions of dollars now being invested in green jobs should be calibrated so as to benefit community-stabilizing organizations, rather than simply create new profit opportunities for large corporations (Jones, 2008).

Second, there is an urgent need for new public investment in infrastructure in cities and older suburbs. Particularly urgent are investments in public transportation, but also needed are investments in retrofitting older buildings, new energy distribution systems, and attention to aging schools, bridges, roads, and parks. Sharply increased investment in energy-saving technologies is another key priority.

Such spending can both benefit cities and suburbs directly, and often simultaneously create opportunities to reduce carbon footprints. It also creates an economic opportunity. Consider California, which in 2008 passed a \$10 billion state bond to help finance a high-speed rail

system. Currently high-speed rail engines and related equipment must be bought from abroad, as there is no domestic manufacturer of such equipment, making nations like China well positioned to receive the contracts (Bradsher, 2010). In our view, the United States can and should develop a domestic capacity to produce energy efficient, next-generation, state of the art vehicles in all modes of transportation—rail, subway, car. Existing manufacturing plants that General Motors and other failing companies plan to scrap or dissolve should be converted to such green manufacturing production, with the requirement that they must continue production in their current location. In many cases, joint ownership with employees will be appropriate, given the substantial public expenditures involved.

Third, existing anchor institutions such as hospitals and educational facilities can be leveraged to generate support for community-based enterprise. An important example is provided in Cleveland, Ohio, where the Cleveland Foundation has partnered with local institutions to establish a network of worker cooperatives in the Greater University Circle neighborhood. These cooperatives are initially providing services to local hospitals and universities. Rather than allowing streams of money to leak out of the community or be captured by distant corporations, existing local spending can be used to support place-based enterprise.

Public investments can help stabilize the economic basis of cities. There is a simple, though unfashionable, word that describes what needs to take place: planning. Stabilizing the economic basis of cities will require development of a systemic regional and national planning capacity. Such planning must aim to deliberately direct capital to localities and regions so as to balance out market trends and prevent communities from falling into steady decay or abandonment.

Emerging approaches to enhancing community stability point in the direction of a common model for stabilizing the economic core of old and new cities: 1) bolstering and nurturing community-rooted enterprises; 2) leveraging existing economic assets in support of community-rooted enterprises; 3) deploying public infrastructure investment to support a low-carbon economy; 4) using public procurement to build up domestic capacity in key green industries; and 5) systemically allocating public capital and investment to cities threatened by private disinvestment. Implementing a broad strategy that integrates these various elements would permit a dramatic break with the past practice of allowing cities to wither and decay as market forces ebb and flow. It would allow us to stop throwing away cities.

The remainder of this overview report fleshes out the connections between climate change, the need to strengthen and preserve cities, and the need to stabilize urban economies through a combination of public investment, traditional place-based policy tools, and new forms of place-based ownership.

A Collision Between Two Trends

The United States stands in the crosshairs of two contradictory imperatives: the need to re-shape the structure of our economy to dramatically increase energy efficiency and reduce carbon emissions, while *at the same time* accommodating population growth over the next four decades.

There is now widespread recognition of the imperative to weatherize homes, develop renewable energy, stop subsidies for fossil fuel industries, price carbon, increase fuel efficiency, build mass transit, and other steps designed to effect large-scale reductions in Americans' carbon footprint.

The case for dramatic action is overwhelming. Currently the atmosphere contains carbon dioxide (CO₂) equivalent levels of about 386 parts per million (ppm), up from 280 parts per million a century ago. Findings of the Intergovernmental Panel on Climate Change's 2007 report suggest that CO₂ equivalent levels must stabilize at 450 ppm to contain global warming to a "manageable" two degrees Celsius (3.6 degrees Fahrenheit). (Emissions already released guarantee that the climate will warm by at least 1.4 degrees Celsius.) Stabilizing at 450 ppm will require that global emissions peak no later than 2020 and begin declining sharply afterward (Archer, 2009; Mann and Kump, 2008; Maslin, 2009).

It is generally accepted that achieving stabilization at the 450 ppm level—a level that itself may be too risky—will require worldwide emission cuts of 60 percent by 2050, including some 80 percent in the developed world. That goal is achievable if the United States and other G-8 countries begin cutting emissions two percent a year beginning in 2010, with large developing countries such as India and China beginning their own cuts a decade later (Kasibhatla and Chamiedes, 2007). Most researchers believe that achieving cuts at a faster rate than two percent a year is unrealistic; hence it is important to begin the process as soon as possible.

Yet serious political progress on global warming in the United States is unlikely so long as it is framed simply as a "cost" or "sacrifice" undertaken by the present generation for the benefit of the future (Nordhaus and Shellenberger, 2007). It is, simply put, naïve to believe Americans will favor very large-scale changes in their way of life solely for the sake of future generations.

Fortunately, progress on global warming can be linked to several other important goals that will provide tangible, short-term benefits for those now alive—such as green jobs, less dependence on foreign oil, more transportation options, more stable urban communities, and improved quality of life. Efforts to reduce carbon emissions will not be politically sustainable in the long term if not married to the provision of these positive goods.

*

Less attention has been paid to the other horn of the dilemma: the fact that this dramatic movement towards an ecologically sustainable, climate-stabilizing economy must take place in the context of continued population growth.

New population can be accommodated in one of three ways over the coming decades: through population growth (and in some cases re-settlement) in our central cities and older suburbs; by building new suburbs on the outer rings of our metropolitan areas (i.e. via "sprawl"); or by building entirely new communities designed as new *cities* (i.e. high density places acting as independent centers of economic activity).

Continuing to sprawl outward is a recipe for perpetuating high reliance on the automobile and large per-capita carbon emissions (Ewing et al, 2008; Glaeser and Kahn, 2009; Owen, 2009; Sarzynski, Brown and Southworth, 2008).

But simply stating we must reverse sprawl will not make it so. The economic, social and political forces driving suburbanization in the United States are powerful and will not be easily reversed. For the most part, U.S. suburbs remain more affluent. They have better schools, less crime, less noise, less air pollution, and a generally higher quality of life than high-density central cities. Many Americans view the suburban life as the good life, and not without some justification (Williamson, 2010).

Consequently, any strategy aimed at steering new population into central cities and older suburbs must dramatically improve the quality of urban life. Getting serious about making cities more attractive and livable means getting serious about stabilizing their economies. We must aim to build a full employment economy that extends to not just every central city but to every neighborhood within each central city.

That ambitious goal, in turn, runs headlong into another central feature of our political economy: the fact that the fates of our urban economies and the destiny of urban residents are so often decided not by residents themselves or even their public officials, but by the actions of private corporations who have no particular loyalty to any particular place. If a corporation closes a plant in search of lower labor costs or more pliant regulations elsewhere, or if simple management incompetence causes a large employer to go under, local economies and their residents are left to suffer.

Many popular commentators on cities and the economy in general—in particular local media outlets who view promoting local firms as a civic obligation—regard this state of affairs as a necessary fact of life.

We strongly disagree. Vibrant *and* stable local economies can be built and sustained over the long term by combining traditional urban policies (i.e. targeted tax incentives, community development assistance, job training and human capital initiatives) with explicit attention to the fundamental question of *ownership*. A community whose residents own their own capital—whether in the form of small locally based businesses, cooperatives, worker-owned firms, nonprofits (small and large), public enterprise, or public holdings in private firms—has much greater control over its economic health. To the degree that ownership is localized, such communities are at much less risk of being abandoned by distant owners who see the community and its workers and residents in purely instrumental terms. And to the degree that such economies are not only locally owned but internally diverse (not dependent on any single firm) and have a strong anchor in economic activities with long-term staying power (such as education and health care), such communities will be more resilient to the inevitable ebbs and flows that come with good and bad economic times.

Such economic stability is essential to ecological sustainability. The best-laid plans to turn a city green will fall apart if social and economic pressures cause residents to leave for the sprawling suburbs or perhaps to a fast-growing metropolitan area in another region.

Community economic stability and prospects for serious movement towards carbon reduction and climate stability are thus locked at the hip, in at least three ways:

First, creating greener local economies will require generating green jobs. Doing the work that needs to be done to restructure the American economy will create new employment possibilities

for skilled and unskilled workers alike. But the positive impact of a green jobs wave will be exponentially higher if linked explicitly to strategies for stabilizing *communities* and creating new possibilities for *ownership* by local residents.

Second, making central cities and older suburbs the focus of future population growth over the next 40 years is very unlikely to succeed unless the costs and benefits of living in a city start to much more evenly balance the costs and benefits of living in suburbs. Rising gas prices may increase the costs of suburban life, but progress needs to be made at the other end as well: by improving the quality of life of cities, not just for the affluent but for all residents. This will require a sustained effort to bring full employment, economic stability, and poverty reduction (or elimination) to our urban neighborhoods.

Third, the prospects of serious movement towards more ecologically sustainable cities and efforts to bolster the long-term economic health of cities are, in political terms, inextricably linked. Support for green programs will be weak unless working-class people see economic benefits. The long-term commitment of public officials to reducing their cities' carbon footprints is likely to waver if the city itself is dying or plagued by urgent economic problems.

The Need for a Comprehensive Strategy

There is no question that reducing carbon emissions will require a coordinated set of national policies. Pricing carbon, setting firm caps on carbon emissions, and rapidly ratcheting up energy efficiency standards are widely regarded as crucial elements of a comprehensive strategy (Cleatus, Clemmer, and Friedman, 2009). Equally, if not more important, will be large-scale public investments in renewable energy (Shellenberger et al, 2008).

But achieving serious reductions in carbon emissions will also require paying attention to the questions of where we live, how we get around, and how our communities are developed. Achieving the required level of reduction will be impossible if development patterns continue to be based on the premise that all or nearly all adults will own their own cars and drive to work (Ewing et al, 2008).

Yet despite the continuing accumulation of evidence that a higher density, less automobile-oriented built environment is an essential (though not sufficient) part of a comprehensive strategy to address global warming, to date there has been little systemic effort by environmentalists or others to specify what a city-preserving political economy would look like.

This overview report describes how cities can stabilize their local economies over the long term to meet the dual challenge of dramatically reducing carbon dioxide emissions while accommodating more people. In the process we highlight two core ideas that we believe are essential parts of a comprehensive strategy.

The first idea is that of *green community wealth building*. While “green development” refers to forms of economic activity that aim to reduce or mitigate environmental harms, and “green jobs” refers to jobs in these sectors that are remunerative enough to support families, “green community wealth building” refers to a bundle of ownership mechanisms that anchor income,

wealth, and jobs in local communities and thus provide the community economic stability *necessary* to enable needed green investments to be made.

Our use of this term is thus a deliberate attempt to broaden understanding of what kinds of economic enterprise contribute to the goal of creating ecologically sustainable metropolitan areas. It is also a deliberate effort to highlight the question of who will benefit from the coming investments in green technology and other large-scale public investments in coming years.

Green community wealth-building can take a variety of forms. These include public ownership, employee ownership, ownership by local nonprofit agencies, ownership by community development organizations, locally based private ownership, and hybrid forms which combine multiple kinds of ownership. Most vibrant and stable cities already have a substantial portion of jobs under this ownership category, such as universities, government agencies, and many hospitals. The common criterion is that they are anchored for the long-term in the cities in which they are located, and cannot be outsourced or moved by non-local private owners (Williamson, Imbroscio, and Alperovitz, 2002).

The second major new tool involves regional and national planning. The government is already involved extensively in economic planning through an array of procurement, regulatory, and incentive programs, as well as the provision of public infrastructure and public facilities. A comprehensive agenda to stabilize the economic basis of America's urban areas will require that government draw on those existing policy instruments in a coordinated manner.

In the absence of a coherent national strategy, many local governments in cities like Austin and Pittsburgh have launched their own initiatives aimed at creating green jobs and/or reducing the carbon footprint (Moore, 2007; Fitzgerald, 2010).

The capacity of such local initiatives to achieve serious, lasting results will be quite limited in the absence of coherent and supportive regional and federal policies. The urgency of such larger-order policies comes into view when we consider that the goal of policy must be *not* simply to create a few standout "emerald cities," but to achieve a major and lasting reduction in the carbon footprint of *every* American metropolitan area over the next quarter century.

Achieving that goal will require paying attention both to explicitly ecological criteria *and* to securing the economic bases that makes cities—the most ecologically efficient form of human settlement—stable and viable over the long term.

Defining the Sustainable Metropolis

A sustainable metropolis must be one that continually endeavors to minimize its carbon footprint to the lowest possible level while also maintaining full employment and a politically acceptable level of consumption for residents. Reducing the carbon footprint by 80 percent or more cannot

be done all at once, but will require a series of coordinated steps undertaken over a period of decades. Specifically, six essential steps must be taken in *each* metropolitan area.²

First, **energy efficiency must be dramatically improved in buildings** of all kinds: residential, private nonresidential, and public buildings.

Second, there must be **dramatically improved efficiencies in local industrial production** with respect to both carbon emissions and to more conventional pollutants.

Third, there must be **improved efficiencies in vehicle travel** (fewer carbon emissions/mile traveled), to be achieved both by improvements in the vehicles themselves (i.e. mile efficiency) and by shifting from high carbon output per passenger modes such as solo-driven cars to bus and rail.

Fourth, **total vehicle miles traveled must be stabilized**. Improved efficiencies in vehicle travel will not lead to an overall reduction in carbon emissions if they are matched (or even outpaced) by increases in overall vehicle miles traveled.

Fifth, **land use patterns must shift** so that new development is both a) higher density and b) is oriented towards “infill” of vacant properties in or near the center(s) of the metropolitan area.

Sixth, cities must ensure that channeling development back into the city **does not displace long-term residents through gentrification** processes. Simply replacing poor citizens with rich ones in the city’s center will not reduce the ecological burdens on the metropolis.

Movement towards the low-carbon metropolis will require a number of specific steps to reduce carbon emissions in transportation, residential, and industrial sectors and shape land use patterns. No account of how to create a sustainable metropolis can ignore the question of how to generate the fiscal resources and political will needed to make and sustain specific ecological changes.

Our position, consequently, is two pronged. First, we contend that long-term economic stability can make an important contribution to the *direct* steps cities and their suburbs need to make to reduce their carbon footprint. Second, such stability, we argue, is essential if metro areas are to secure the fiscal resources and political will needed to sustain their ecological efforts over time.

Long-term economic stability is a prerequisite for achieving each of the ecological goals described above. In some case, the link is direct. If major employers continue to move to green-field locations, that will induce increases, not reductions, in total vehicle miles traveled. Such job sprawl in turn induces further residential development in suburbs. Stabilizing existing central city jobs and developing new ones is essential if long-term trends towards outward sprawl and increased automobile reliance are to be reversed.

In other cases, the link is indirect. Achieving these ecological objectives will require fiscal and political resources. There must be sufficient funding available for localities to finance needed,

² The following analysis draws on several recent discussions of sustainable urban communities, including Dunham-Jones and Williamson (2008), Ewing et al (2008), Farr (2008), Newman, Beatley and Boyer (2009), and Register (2006).

ongoing investments in weatherization, energy efficiency, mass transit and the like. There must be sufficient political resources to hold producers to tough standards on carbon emissions and pollution more generally, and to create and implement long-term plans to make the city more sustainable. There must be fiscal and political resources available to prevent involuntary displacement of long-term residents.

None of this is possible if the very economic foundation of a given metropolitan area is at risk of decline or disappearance. To take a simple example, investments intended to dramatically increase the number of metropolitan residents using bus or rail ridership must draw on planning projections of how many people need to be moved and by what routes. Simply put, one requirement of a more sustainable future is higher densities in the developed portions of our metropolitan areas. But this cannot happen if employment opportunities are insufficient or if such opportunities vanish in a few years.

Equally important, economic stability provides the political basis for establishing and sustaining ecological commitment at the local level. In most American cities most of the time, local leaders do not have (what they would regard as) the luxury to make ecological concerns their top priority. Instead, their top priorities are keeping and attracting business investment and thereby maintaining prosperity. This in turn tilts public policy in the direction of the business groups who can supply such investment, and away from broader public goals.

If the core industries undergirding metropolitan economies decline and disappear, then the best laid plans to green the metropolis will fail. Green jobs and in-fill development alone do not guarantee sustainability if such investments disappear due to capital flight.

The logic of our argument thus run as follows: serious movement towards dramatic reductions in the carbon footprint of every metropolitan area requires that each area have sufficient fiscal and political resources to undertake the needed investments to develop and implement region-specific plans for achieving such reductions. This in turn requires that the economic basis of each metropolitan area be stable, and not undercut by the threat of capital disappearing.

Achieving that goal, however, means we must squarely confront long-standing trends in the American political economy, which have systematically undercut community economic stability.

Hollowing Out: Long Term Trends Undermining Communities

At present, the American political-economic system systematically undercuts urban economic stability and hence undermines the possibility of achieving sustainability in *every* metropolitan area.

Consider the case of Kenosha, Wisconsin. Kenosha is relatively small city (population 96,000 in 2008) that has been synonymous for decades with both automobile production and the United Auto Workers. The shutdown of a major facility formerly owned by American Motors Corporation in 1988 (after it had been acquired by Chrysler) laid-off some 5,500 workers. Now the city faces a further blow as a result of the recent closure of its remaining Chrysler plant, formerly employing 850 people. The job losses mean that the city tax base will decline, city budgets will be strained, and workers and their families will eventually look for work in other

communities—with no guarantees that jobs comparable to the ones that were lost will be available, anywhere. After the AMC closings in 1988, Kenosha began remaking itself into a bedroom community for persons with jobs in Chicago and Milwaukee, and hence the city is better positioned than many to adjust to the latest closing. But it will no longer be a community in which working-class people can work, live, and raise children—without having to make long commutes to other communities. The official unemployment rate in the city as of February 2010 stood at 13.1 percent (Nichols, 2009; *Kenosha News*, 2010).

The fundamental issue is that to greater and lesser degrees, the economic stability of any given locality or region in the United States is (with a few exceptions) dependent on the decisions of controllers of capital to locate investment in a particular place. If a corporate employer leaves or cuts back employment in a city, that decision will negatively impact the locality. This fact has important consequences for state and local politics; at the top of the agenda for almost all elected officials is “economic development.” Elected officials at the state and local level believe that attracting and keeping corporate investment is part of their job.

That reality in turn has two consequences. First, if “economic development” is at the top of the agenda, and successful economic development means subsidies and other assistance to mobile corporate employers, then ecological sustainability will generally take a back seat.

Second, there are winners and losers in this process.

Localities in the United States are in competition at three different levels. First, metropolitan regions (and states) compete with one another to attract jobs and investment. Second, within metropolitan regions, specific localities compete with one another. Third, American metropolitan areas as a whole compete with the rest of the world to attract and keep investment. This system of competition for scarce private investment is directly responsible for the long-run trend that has led many cities to experience remarkable population declines, even in a context of overall population growth.

Since 1950, American cities have experienced substantial population instability. In some cities, populations peaked in 1950 or 1960 and have declined ever since (in a few cases by truly massive amounts). In other cases, city populations have fallen for a time and subsequently added population to offset partially the earlier losses. And in numerous Sun Belt cities, population has exploded.

Why do these trends matter?

First, increasing the proportion of citizens who live in urban environments must be a major strategic objective for advocates of a more sustainable metropolis. Second, undertaking and sustaining a systematic local agenda and long-term plan to reduce a region’s carbon footprint while meeting economic needs requires that metropolitan areas and in particular central cities have adequate fiscal and political resources to tackle the challenge. That will be difficult, if not impossible, if city leaders are primarily worried about losing their tax base.

Long-standing trends of urban population fluctuations provide a stark reminder of the challenge we face. Consider data on how the populations of medium and large-sized cities have altered between 1950 and 2008. Table 1 shows changes over time in the absolute numbers as well as the proportion of the U.S. population living in one of the 112 cities or boroughs with a 1950 population of over

100,000.³ These 112 cities include many declining industrial cities, but also many cities (especially in Texas and California) that have seen strong growth over this time period.

Table 1. Total Population Living in Cities Above 100,000 People in 1950 (*Thousands of people*)

	Big City Population	Total U.S. Population	Big City Share of Population
1940	39,252	132,122	29.7%
1950	44,511	150,697	29.5%
1960	47,504	179,323	26.5%
1970	49,571	203,305	24.4%
1980	46,804	226,542	20.7%
1990	48,514	248,709	19.5%
2000	51,225	281,425	18.2%
2008	53,695	304,060	17.7%

Based on 112 cities and boroughs with 1950 population above 99,500.

Source: *County and City Data Book*, U.S. Census; 1952, 1967, 1977, 1994, and 2007 editions; 2008 Census Population Estimates available at www.census.gov.

Total population in these cities grew impressively in the 1940s. That growth continued in absolute terms in the 1950s and 1960s, but the share of national population in these urban centers began to decline markedly. In the 1970s, these cities experienced an absolute decline in population, a decline only partially made up by the slow growth of the 1980s. Since 1990 total population in these cities has increased at a steady clip, but the portion of the total population living in these well-established cities has continued to decline, albeit less rapidly during the 2000s.

Moreover, as Table 2 shows, population density within these central cities has declined markedly since 1950. In short, *even leaving aside the large proportion of metropolitan growth taking place in suburban areas over this time period*, the heart of American cities has become substantially less dense compared to mid-century. In fact, average population densities in these larger city centers fell by roughly one-third between 1950 and 2005, whether we consider a raw average (counting each city equally) or an average weighted by city size (counting larger cities more, according to their relative population). This observation suggests that there is room in most central cities to accommodate more people and a higher level of density than currently observed.

³ New York City is treated here as five separate cities; while the City's total population has slightly grown in the period since 1950, three of the five boroughs have had substantial population losses over that time period.

Table 2. Population Density in America’s Largest Cities, 1950 and 2005 (persons/sq. mile)

	1950	2005
Central City Density, Unweighted Average	9,397	6,464
Central City Density, Weighted by City Size	16,085	10,420

Based on 112 cities and boroughs with 1950 population above 99,500. Source: County and City Data Book, U.S. Census; 1952 and 2007 editions.

The more important part of the story, however, is that trends in city population growth are very unbalanced. Some cities such as Phoenix and Houston have experienced phenomenal growth. But many other cities have seen their population fall for over half a century. In fact, in 2008, 68 of the 112 cities had population *below* their peak (since 1940), and in 62 of the cities, 2008 population was at least 10,000 below their peak. In 56 of the cities—one-half the sample—population in 2008 was lower than it was in 1950.

While cities on aggregate have been gaining population since 1990, it is important to recognize that the long-term trend of instability remains in place. Just since 1990, 44 of these 111 cities (excluding Louisville, which merged with its neighboring county in the 1990s) have lost population; in 36 of these cities, population losses in the recent period exceed 5,000 people. Hardest hit have been cities in Ohio, New York, and Pennsylvania, but significant population loss also has taken place in cities like Birmingham, Norfolk, Richmond, and (pre-Katrina) New Orleans. In short, the pattern of a large proportion of our major population centers continuing to shed people has not been arrested, despite recent aggregate gains for larger cities as a whole.

Table 3 lists cities by the size of their decline in 2008 from their peak point.

Table 3. Population Losses in America’s Large Cities, 1940-2008

Gap between 2008 Population and Peak Population for a Given City since 1940 among Cities with Population Greater than 99,500 in 1950

(Cities with Decline from Peak of less than 10,000 People Excluded)

Loss of 10,000-50,000	Loss of 50,000-150,000	Loss of 150,000-500,000	Loss of > 500,000
(29)	(19)	(10)	(4)
Mobile, AL	Birmingham, AL	Washington, DC	Chicago, IL
Berkeley, CA	Hartford, CT	Baltimore, MD	Detroit, MI
Bridgeport, CT	Gary, IN	Boston, MA	St. Louis, MO
New Haven, CT	New Orleans, LA (2005)	Buffalo, NY	Philadelphia, PA
Wilmington, DE	Flint, MI	Brooklyn, NY	
Savannah, GA	Minneapolis, MN	Manhattan, NY	
Peoria, IL	Kansas City, MO	Cleveland, OH	
Evansville, IN	Jersey City, NJ	Pittsburgh, PA	
South Bend, IN	Bronx, NY	Cincinnati, OH	
Des Moines, IA	Rochester, NY	Newark, NJ	
Kansas City, KS	Syracuse, NY		
Baton Rouge, LA	Akron, OH		
Cambridge, MA	Dayton, OH		
Fall River, MA	Toledo, OH		
Lynn, MA	Youngstown, OH		
New Bedford, MA	Scranton, PA		
Somerville, MA	Providence, RI		
Springfield, MA	Norfolk, VA		
Worcester, MA	Milwaukee, WI		
Duluth, MA			
St. Paul, MN			
Camden, NJ			
Trenton, NJ			
Albany, NY			
Utica, NY			
Canton, OH			
Erie, PA			
Reading, PA			
Richmond, VA			

Cumulatively, if all 68 of the cities operating below their peak population levels in 2008 had retained their peak level populations, an additional 8.3 million people would have been living in these cities in 2008. Table 4 shows what the 2005 population of these 112 cities might have been in several alternative scenarios: if these cities had retained the same share of the national population as in 1950; if they had maintained the same (weighted) population density as in 1950; if (weighted) population density had declined only half as quickly, to an average of 8,000 people/square mile; and if each city in 2008 had population matching its peak level over the 1940-2008 period.

Table 4. Projected 2008 Big City Population Under Alternative Scenarios
Aggregate Population of 112 Cities and Boroughs With 1950 Population Above 99,500

Projected Big City Population (thousands)

Actual 2008 Population	53,695
Maintaining Same % of National Population (29.7%) as 1950	90,306
Maintaining 1950 Density (16, 085 people/square mile)	82,887
Slower Density Decrease (13,000 people/square mile)	66,990
Each City at Peak Population Level (Since 1940)	62,016

This data indicates that, at a minimum, these 112 larger cities are capable of accommodating between 8.5 and 13 million additional people above their present population rather comfortably (with just a modest increase in population density), and as many as 29 million additional people (roughly nine percent of the total population) if central city densities were restored to their 1950 levels. Put another way, it's reasonable to conclude that existing older cities *as they are*—that is, even without significant retrofitting or major rebuilding of the existing infrastructure to accommodate higher densities—are capable of housing an additional 10-20 million people. That in and of itself would be a significant ecological gain.

If many older cities lost population between 1950 and 2008, where did those people go? From an ecological point of view, the most important part of the answer to that question is noting where they did *not* go; they did not go to newly established, higher density cities. Rather, they went overwhelmingly either to suburbs or to fast-growing central cities in the Sunbelt. Either way, those who left established cities became more likely to adopt an automobile-oriented, energy-intensive way of life, relative to remaining in the higher-density locations.

Going forward, if over the next fifty years roughly half of existing population centers lose population, prospects for ecological stability will be seriously harmed. Contrary to the complacent view which argues that “competition” for people and investment between cities is healthy, an ecological view recognizes that we cannot afford to continue throwing away or under-utilizing our established urban environments.

Instead, we need to ensure both that *each* major settlement is economically stabilized, and that population densities in cities reverse their historic downward trend. Achieving such stabilization would have the further economic benefit of conserving and keeping in use existing infrastructure, rather than abandoning existing buildings and related infrastructure at the same time that new development takes place elsewhere.

We now turn to the future by examining several alternative scenarios for how future demographic growth and transportation use might proceed.

Consider some trends. From 2000 through 2008, suburbs in the nation's largest metropolitan areas (with population greater than 1,000,000) grew at roughly 1.25 percent a year, compared to roughly 0.7 percent growth for cities in that same time period (Frey, 2009). Scenario A projects those trends all the way from 2000 to 2050 (for all metropolitan areas). In this scenario (as in the

others), it is assumed the number of rural residents in the United States will remain roughly constant at about 55 million people, that net population growth will be absorbed in either existing metropolitan areas or the incorporation of existing rural counties into existing or new metropolitan areas, and that (consistent with Census estimates) total population in 2050 will reach approximately 438 million (Hobbs and Stoops, 2002).⁴ Projections for 2030 and 2050 are rounded to the nearest million; proportion calculations are based on the exact figures.

Scenario A: Continuation of Current Trend: Suburbs Growing Faster Than Central Cities

	2000	2030	2050
Central City Population	85.3 million	105 million	121 million
Suburban Population	140.7 million	204 million	262 million
City Share of Total	37.7%	34.0%	31.6%

Scenario A—a straightforward projection of trends from 2000 to 2008—depicts a future in which the central city share of the metropolitan population continues to fall and the number of people living in suburbia increases by about 45 percent by 2030 and about 86 percent by 2050. In this scenario, suburbs would capture over three-quarters of the population increase in metropolitan areas. A demographic pattern of this kind would put maximum stress on our carbon footprint.

Note also that in Scenario A, while overall central city population would continue to increase, it is likely that *many specific places and cities would stagnate or further decline and that growth would be limited to a minority of cities*. This is a recipe, in other words, for continued community economic instability, a fact with severely negative ecological consequences.

In Scenario B, we look at what would happen if growth trends in the most recent years—since 2005—continued. Since 2005, the gap in the growth rate between cities and suburbs has narrowed. This scenario projects out annual growth of just over one percent (1.06%) for both cities and suburbs.

Scenario B: Cities and Suburbs Grow at Same Annual Rate

	2000	2030	2050
Central City Population	85.3 million	117 million	145 million
Suburban Population	140.7 million	193 million	238 million
City Share of Total	37.7%	37.7%	37.7%

In this development pattern, the ratio between city and suburban population remains constant over the entire time period. However, in absolute terms, suburbs would gain over 50 million

⁴ Unlike the earlier analysis focusing on the 112 cities and boroughs with the largest population in 1950, the following analysis pertains to residents of *all* Census-designated central cities (over 400 in 2000), many of which have population well below 100,000. In 2000, roughly 34 million people lived in central cities other than the 112 cities and boroughs discussed in Tables 1-4. Current Census projections suggest that U.S. population will reach 438 in spring 2050.

residents by 2030 and nearly 100 million by 2050. Under this scenario, suburbs would capture about 63 percent of the increase in metropolitan residents between 2000 and 2050.

Scenario C considers what would happen if central cities began to grow at a significantly faster rate than their suburbs. In this projection, central cities grow between 2000 and 2050 at an impressive clip of 1.6 percent a year, while suburban growth slows to 0.625 percent a year.

Scenario C: Cities Growing at Faster Rate than Suburbs

	2000	2030	2050
Central City Population	85.3 million	137 million	189 million
Suburban Population	140.7 million	170 million	192 million
City Share of Total	37.7%	44.7%	49.5%

Scenario C produces radically different consequences. Under this scenario, central city population would more than double by 2050, and most of the current gap between central city and suburban populations would disappear, though a majority of metro residents would still live in the suburbs. Central cities would capture about two-thirds of the growth in metro population over the entire 2000 to 2050 period.

Even this scenario, however, would put substantial stress on our carbon footprint. Over 50 million new people would live in the suburbs. Further, density would necessarily increase very sharply in many central cities, which would require re-design and upgrading of urban infrastructures.

Scenario C would, nonetheless, be far more conducive to achieving a rapid reduction in our carbon footprint than either Scenario A or B. Achieving something like Scenario C would require a powerful change of policy direction. It is inconceivable that cities will be able to capture a majority of future population growth if quality of life and quality of public goods do not improve sharply and if cities do not have a strong, robust, and secure employment base.

To be sure, the central city-suburb dichotomy provides only a rough first cut. Reliance on the automobile and overall carbon emissions must decrease dramatically in both central cities and suburbs. Increasing density in itself does not guarantee this will happen. What increased density does is facilitate land use and transportation patterns that minimize the number of miles people travel on a daily basis and make it possible to travel those miles in a more carbon-efficient manner.

For truly sustainable metropolises to evolve over the next forty years, metropolitan growth patterns must have the following four features:

1. The existing centers of metropolitan areas should have stable and in many cases growing populations.
2. Cities which now are seriously under-utilized should be revitalized and grow in size.
3. Overall densities in metropolitan areas must increase. This is to be accomplished by increasing the proportion living in central cities, retrofitting some suburban places to accommodate greater density, and limiting low-density growth on the perimeter (sprawl).

4. Such increases in density must be accompanied by and contribute to large-scale shifts in our urban transportation patterns which will make serious reductions of our carbon footprint feasible.

None of these aims—not even the minimal first goal—will be achievable without a deliberate effort to secure the economic stability of our urban economies and reduce the dependence of cities on the economic location decisions of mobile capital.

A Toolbox for Promoting Long-Term Economic Sustainability

How can we reverse a half-century of urban economic instability and begin shaping much more balanced patterns of metropolitan development over the next generation?

To achieve the twin goals of securing economic stability and implementing a transition to a low carbon footprint economy in every metropolitan area, new tools are required. The old rules of metropolitan economic life, in which cities' economic health is dependent on the choices (and market performance) of private investors who live elsewhere and see the community as merely a profit location, cannot produce economically and ecological sustainable communities. In fact, the old rules pit communities against one another—both within and across metropolitan areas—as businesses aggressively seek the most favorable tax breaks and subsidies possible before making major investments.

Existing Policy Approaches

Federal policy over the past half-century has encouraged suburbanization and sprawl. The Obama Administration has promised a new approach to federal urban policy, starting with the creation of a White House Office of Urban Affairs. A major theme to date has been encouraging regional cooperation at the metropolitan level. But the policy shifts now underway will be much more effective and powerful over the long term if they are oriented explicitly towards the goal of achieving long-term economic stability in *each* urban community in the United States.

This section focuses on direct strategies that local, state, and federal governments can employ to stabilize the economic basis of communities. The first involves intelligent targeting of resources already available to government; the second involves encouragement of “green ownership”—various forms of ownership that stabilize capital effectively in a community.

Targeting Existing Government Resources

A comprehensive strategy for stabilizing the economic underpinnings of sustainable metropolises should begin by making concerted use of existing government tools to steer and stabilize investment in particular areas.

Most straightforwardly, **procurement** policies are a potent tool for encouraging the development of specific geographic communities. On a small-and-modest scale, governments can give preferences on bids (commonly of 5-10 percent) to local firms, thus directing more government business to particular regions. Alternatively, governments might begin factoring in the total social costs (including pollution generated by long-distance transport) into bid solicitations. In certain large-scale cases, government demand for new equipment or products can create new industrial centers. There are many examples of this with respect to military spending and military contracting (such as Colorado Springs, Colorado). The government might similarly act to create or expand communities based on the promise of long-term government contracts to acquire new and advanced ecologically oriented products and technologies. There are many precedents for using procurement set-asides to advance important public purposes, such as promoting minority and women-owned businesses and small businesses in general (McCrudden, 2008).

Public facility **siting** practices are another mechanism. The idea is simply that when new public facilities are constructed, they should be located in existing neighborhoods to promote compact development. In some cases, public facilities can also play a helpful role in contributing to suburban “retrofits.”

Deposits, Loans, and Venture Capital

Governments control an enormous amount of financial resources, more of which could be used to stabilize urban communities. Funds deposited in community-based financial institutions, for instance, strengthen the financial position of those institutions and enable them to undertake more lending in local communities.

Governments can also establish revolving loan programs aimed at making more resources available to local enterprises in a geographically targeted area.

Many states and localities have also established venture capital funds in which the state provides start-up capital to promising new firms in exchange for an equity stake. In some cases these funds have produced dramatic financial returns for investing localities. From a stability point of view, geographically targeted venture capital funds can help create new jobs in specific regions.

Public Pension Funds

Teacher and government employee pension funds represent a standing source of capital, which also could be more deliberately used to target investments to particular places. Two statewide funds with a long track record of steering investment to either their home state or particular places within that state are Retirement Systems of Alabama and the California Public Employee Retirement System (CALPERS). Rather than simply seek the highest market-rate return, these funds have contributed to the health of their states’ economy by aggressive investment in businesses that will employ workers in their respective states.

Infrastructure Spending

As with the siting of government buildings, infrastructure projects by state and federal government have an enormous potential to shape the American metropolis. Federal government spending on highways contributed to suburbanization and the development of car-dependent metropolitan landscapes across the country.

Such spending could and should instead be directed towards strengthening urban centers, primarily by shifting priorities from roads to rail. The \$13 billion already committed by the Obama Administration to high-speed rail is a step in this direction.

Targeted Tax Breaks

The federal government has offered a variety of programs aimed at giving tax incentives to employers who operate business and hire employees from high-poverty area. The most well developed version of this, the Empowerment Zone/Enterprise Community program initiated by the Clinton Administration in the 1990s, combined incentives with targeted job training funds and related support. Tax incentives are a rather weak tool for promoting community stability, but when tied to accountability provisions may have a role to play in re-balancing metropolitan areas.

Community Development Spending

Federal and state governments spend money directly on community development in urban areas, though federal spending was sharply cut during the 1980s. Specific federal programs include the Community Development Block Grant (federal grants used by localities to design and implement development projects) and the Community Development Financial Institutions Fund (which helps capitalize financial institutions serving high-poverty areas). The 2009 Obama stimulus package increased CDBG spending by \$1 billion and also increased spending on a variety of housing-related programs.

In addition, there are a variety of existing streams of government spending and activity that could and in some cases already have been directed towards stabilizing cities economically. New spending streams from the federal government as well as existing public pension funds represent particularly large pools of money that could make a significant impact on community stability.

Building Green Community Wealth

A central premise of contemporary federal urban policy is that proactive steps can make urban communities more attractive investment sites. Even when this approach is successful, however, the communities concerned remain fundamentally dependent on the investment decisions of outside parties, whose concern is profit-making, not community well being.

There is enormous potential, however, for government to re-focus economic development spending so that it benefits enterprises permanently located in the community. One important example is the Ohio Employee Ownership Center, which uses a relatively modest amount of state funding (less than \$1 million annually) to leverage and facilitate worker takeovers of firms whose owners are retiring or which have been closed by private owners. The OEOC has created enormous economic returns based on the state's investment, especially compared to conventional forms of economic development, and has helped stabilize thousands of jobs in Ohio.

Efforts to direct resources to particular places will be much more effective when they are targeted towards institutions and firms with long-term roots in the community—that is, when they are used to build ***green community wealth***.

The object of green community wealth building is to increase the proportion of capital held by actors with a long-term, ideally permanent commitment to a given locality or region. In some cases, smaller, privately held companies can fit this description, when the owners have for personal or historical reasons extremely strong ties to a particular location. In publicly traded firms, however, the central objective is to maximize profit for shareholders. Consequently, such firms inevitably must treat particular communities instrumentally. They will invest in the most profitable feasible location, for as long as it remains the most profitable feasible location.

In contrast, green community wealth is inherently tied to place. Local, state, and regional public enterprises, employee-owned and controlled firms, neighborhood-owned enterprises, and nonprofits (large and small) all, in contrast, are inherently rooted in particular communities, and in many cases defined by those communities. Communities with a higher proportion of such capital with long-term staying power are better positioned to achieve economic stability and plan effectively for the future, including for the transition to a low carbon future.

Green community wealth also brings equity benefits. This is critical, because providing a basis of economic security to both communities and *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.

Green community wealth building strategies are thus 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 central city and older suburban neighborhoods, making them more attractive options for residents. Most of the place-based, green community wealth building forms discussed here (small privately held firms are the exception) offer the prospect of helping to “spread the wealth around” in a quite literal sense.

Moreover, community ownership of green jobs is likely to yield more long-term employment in urban communities than a traditional corporate-driven strategy. 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 workers, such employers will seek ways to find new work for its work force.

Community ownership can take a variety of forms, including public ownership, ownership by community development corporations or nonprofit organizations, and employee ownership.

Even in the largely inhospitable policy climate of the 2000s, numerous models of green sector, community-based ownership have emerged around the country. The website *community-wealth.org* has documented many of the best examples. For instance:

DC Greenworks runs a group of nonprofit social enterprises that train and employ local "at-risk" youth in the nation's capital. D.C. TreeKeepers assists local neighborhoods that are interested in initiating a community greening project. D.C. RainKeepers provides rain barrels and training to households interested in disconnecting one or more rain downspouts from the storm sewer system. D.C. Greenwork's Green Collar Job Training Program reaches out to the city's low-income, ethnically diverse population to foster new job opportunities and training in the urban forestry, nursery, and landscaping industries. And D.C. Greenworks' Low-Impact Development program offers installation services to local businesses and households, such as greenroofs and rain gardens.

EBO Group in Sharon, Ohio is an engineering firm with 55 employee-owners and \$20 million in annual sales. The company, founded in 1978, originally developed custom- designed clutches and brakes, but in recent years has shifted focus to developing more energy-efficient batteries for plug-in hybrid vehicles and other storage devices that use recyclable sources of power, such as solar energy.

Green Worker Cooperatives is a South Bronx-based organization dedicated to incubating worker-owned and environmentally friendly cooperatives in the South Bronx. The group is currently developing its first cooperative, ReBuilders Source, which will be a retail warehouse for surplus and salvaged building materials recovered from construction & demolition jobs.

Pioneer Valley Photovoltaics Cooperative ("PV Squared") in Greenfield, MA is a worker-owned business providing turnkey renewable energy system installations at homes, businesses, municipalities, and institutions. PV Squared custom designs and installs solar electric and hot water systems, small wind turbine technologies, and micro-hydroelectric facilities.

The **Richmond Solar Affordable Housing Project** installs residential solar electric systems for low-income Richmond (California) homeowners, including families, seniors and people with disabilities. All installation services will be provided free of charge to the homeowners through installation teams of Youth Works construction trainees and other community members. The project encourages the use of solar energy throughout the city, helps low-income homeowners reduce their utility bills, and provides Richmond residents with professional skills in solar technology.

Founded in 2001 by South Bronx resident Majora Carter, **Sustainable South Bronx** promotes innovative, economically sustainable projects that are informed by community needs. This work includes "green roof" installation and maintenance, as well as its Bronx Environmental Stewardship Training program, a ten-week green collar job training and placement program that has had an 85-percent job placement success rate.

The Cleveland Model: Building on What Cities Already Have

Such initiatives offer important precedents. But for community-based ownership to bolster community stability, it must be scaled up. The challenge is to develop a flow of resources capable of sustaining comprehensive initiatives. Perhaps the most impressive effort to do just that is now taking place in Cleveland, Ohio, where the Cleveland Foundation is leading a multi-partner effort to build a network of cooperatives based on the highly successful Mondragón model, with particular focus on six neighborhoods surrounding Cleveland's "University Circle."

The Cleveland approach aims to leverage the city's existing "anchors"—in this case, hospitals and universities—so as to provide a long-term market for the new cooperatives. This innovation is crucial. Although many cities, including Cleveland, are under severe economic stress, most cities do have long-term stable institutions with large amounts of buying power. These include government operations, universities, and medical facilities. These relatively stable institutions already help anchor neighborhood and cities economically. The Cleveland model aims to take it a step further and use the economic power of anchoring institutions to generate new community-based enterprises (Alperovitz, Howard, and Williamson, 2010).

The first of Cleveland's planned network of "Evergreen Cooperatives" opened its doors for business in September 2009. The **Evergreen Cooperative Laundry** is a state-of-the-art, ecologically 'green,' commercial facility capable of handling 10 million pounds of health care bed linen a year. It has significant scale contracts with major hospitals and clinics in University Circle, but will also serve the city's larger commercial nursing home market. The laundry's newly refurbished 13,000 square foot operating facility cost \$6 million. Its sophisticated business plan provides all Evergreen employee-owners a living wage and health benefits. After seven years on the job, if business plan projections are realized, each employee will have a \$65,000 equity stake in the enterprise.

In October 2009 a second employee-owned, community-based energy company – **Ohio Cooperative Solar** – began large-scale installations of solar panels for the city's largest nonprofit health, education, and municipal buildings. Another business in development is **Green City Growers**, which will build and operate a year-round hydroponic food production greenhouse in the midst of urban Cleveland that will be capable of producing more than three million heads of fresh lettuce and nearly a million pounds of basil and other herbs a year. Many other community- or worker-owned enterprises are in the planning stage—including firms oriented to energy, food, janitorial services, related laundry services and records retention.

In each case, like the initial enterprises, the co-op businesses are focusing both on the specific procurement needs of the large hospital and university anchor institutions in the area as well as the local market in general. Local foundations, anchor institutions, banks, and the municipal government have all committed resources to stimulate the growth of the overall complex of firms. "The **Evergreen Cooperative Development Fund**," currently capitalized by a \$3 million grant from The Cleveland Foundation expects to raise another \$10-12 million--which in turn will leverage up to an additional \$30 - \$40 million in investment funds.

The Cleveland model is important for its own sake and because it points in the direction of community-based economic planning for long-term stable jobs. As we have noted, the new resources being directed towards developing a green industrial sector in the United States offers

an opportunity to expand economic stability. But also crucial are more effective use of existing public resource flows and existing economic anchors within cities.

The relatively informal arrangements of the Cleveland model, in which nonprofits are cooperating with public institutions and private employers, indicates that “planning” need not connote remote government officials drawing up a blueprint and then imposing it. Rather community economic planning can be collaborative, with multiple institutional actors involved; and if it is to draw fully on the resources available in typical urban areas, it will need to be.

Indeed, one of the most crucial roles government and policy can play in this process is simply leveraging its huge and growing expenditures in health care and education (meds and eds) to support shared ownership enterprise and help stabilize urban communities. To a very substantial extent, the American economy is already “planned,” and the importance of planning will only increase as the resources devoted to health care, education, and the green sector increases. Communities should capitalize on those resource flows to assure that they benefit and help nurture truly community-based enterprises.

Towards a Green Industrial Policy

The lessons of Cleveland have broader application. Making cities more sustainable, reducing the carbon footprint, and providing more lasting forms of economic stability to individuals and communities are inter-connected, mutually reinforcing goals.

Consider now another dimension of the transition to a low-carbon future: many industries that have had prominent roles in the American economy for generations must shrink in relative size and output. In some cases, such industries must disappear altogether. Two large, obvious examples are coal and automobiles, both of which have powerful lobbies.

An essential task for sustainability advocates is to develop a strategy that will allow those communities most directly affected by the declines in these industries to accept and even embrace a new kind of economy. That can only happen if the decline and downsizing of the automobile industry does not, for instance, mean the extinction of the Detroit metropolitan region, or if the decline and demise of coal production does not mean the extinction of the communities in southwest Virginia and elsewhere where coal is produced.

Community Stability and Green Industrial Policy

Effective national planning to preserve particular places often can be married successfully to green industrial policies—that is, policies aimed at building and sustaining markets and production capacities for green forms of energy and technology. Support for the creation of a domestic capacity to produce state-of-the-art mass transit equipment is one example. Another is increasing domestic capacity to produce solar, wind, and other alternative sources of power.

Connecting the Dots in Detroit: Building A Long-Term Strategy

In the first half of 2009, the crisis of the American automobile industry became one of the most visible challenges facing the Obama Administration and 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 took advantage of 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 with the “auto bailout.” Also relevant is what will happen to places like Kenosha, Flint, and Detroit itself. The first policy priority should be to secure the economic viability of existing communities by keeping productive facilities in use. The second priority should be maintaining a healthy domestic automobile industry that can move from being a world laggard to a world leader in fuel efficiency and vehicle design for a post-carbon world. The last priority should be maintaining the viability of General Motors as a corporation.

Stating matters this way does not mean that policy should be predicated in keeping all existing car plants open. Some plants will need to stop making cars. The crucial question is whether once they stop making cars, those plants will simply be left idle while its former employees join the unemployment rolls or the ranks of low-wage service workers.

In fact, the current crisis facing the auto industry represents an important opportunity both to preserve communities and to establish a powerful new precedent and principle. There is widespread consensus that both inter-city and intra-city rail in the United States must expand very substantially over the next twenty years. This means that transit systems must make massive infrastructure investments and acquire large quantities of new equipment.

What would a serious commitment to a national high-speed rail system look like? Authors Richard Gilbert and Anthony Perl (2008) have proposed that the United States build some 25,000 km (15,500 miles) in dual track devoted to new high-speed rail service between now and 2025, as well additional, incremental upgrades of existing rail lines to facilitate increased and faster service. Gilbert and Perl estimate that a total of \$2 trillion in investment (roughly \$140 billion for 15 years) in infrastructure and equipment will be needed to meet transportation needs while shifting to a transportation system based on electricity-powered rather than gasoline-powered vehicles. Nor is such a project far-fetched. In China, the government plans to spend up to Rmb4Trillion (\$586 billion US) to lay 30,000km (18,750 miles) of high-speed rail track by the middle of the next decade; in 2010 alone, China is adding 1,200 miles of track to its network.

How might policymakers go about establishing a domestic capacity to supply America’s public transit authorities with needed subway and rail cars? One possibility is to create an entirely new 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 again offer long-term contracts and assistance in transitioning assembly lines to produce the new vehicles in exchange for public equity. Employee ownership also could be part of the equation.

The key principle underlying a community-supporting green industrial policy must be the preservation of existing communities and their productive capacities. A deal which gives General Motors public funds that are used to re-locate production abroad makes no sense from this perspective. Likewise, other deals that keep factories open for a time but allow private owners to close them according to their convenience do not merit public support. What is required is a policy that assures productive capacities stay in use and provides assistance as necessary in cases where conversion to a different product is required. Most often this will mean adopting some form of community, public or worker ownership in the enterprise.

Summing Up

There is growing interest and awareness in the connection between the health of urban America and climate change, from two directions. On the one hand are those concerned with how to build a sustainable metropolis. On the other hand are advocates of creating green jobs.

There are obvious links between those 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 political-economic system militates against just that outcome.

Cities are now in competition with one another and with their suburbs for jobs and population. That fact is bad in itself—it creates an unbalanced growth pattern. It is also bad because of the political priorities the competition creates; public officials at the local level see their primary job as “economic development,” with sustainability usually taking a distant back seat. Finally, long-term plans to build transit and otherwise retrofit our metropolitan areas will fall apart for both technical and political reasons if the communities being planned hemorrhage jobs and population. If the goal is to reduce the carbon footprint of *every* metropolitan area, that outcome cannot be accepted.

These considerations point to the need to develop comprehensive strategies aimed at stabilizing jobs and capital in existing urban areas, and, where appropriate, also applying those strategies to the development of new urban communities.⁵ Herein we have identified three primary strategies for achieving that end: developing place-based forms of “green community wealth building” that are inherently rooted in the community; tapping into resource flows generated by public spending as well as quasi-public institutions (meds and eds) to nurture and support place-based ownership; and larger-order green development policies which place top priority on preserving communities and their productive capacities. The urgent need to expand green jobs and the green industrial sector, as well as the likelihood of increased public spending on health care in coming years, present a particular opportunity to not only “create jobs” in urban areas but to create lasting forms of community-based ownership that assure that these jobs have staying power and that communities capture the full benefits of the new economic activity.

Reshaping America’s metropolitan areas into ecologically sustainable metropolises over the next generation—while at the same time accommodating a larger population—represents a massive

⁵ For further detailed discussion of community-stabilizing policy strategies, see Williamson, Imbroscio and Alperovitz (2002).

policy challenge. What is required are not simply policy fixes, but a systemic effort to redress two structural failings of metropolitan area: the large gap between central city and suburban quality-of-life which has helped drive suburbanization, and the economic dependence of cities on the investment decisions of private corporations, decisions which are made according a logic of corporate profit, not sustaining places and communities.

These are extremely difficult issues to address, and it is not surprising that many environmentalist and advocates have avoided taking them on. But a clear look at both the basic requirements of a sustainable, low-carbon metropolis and of the kind of political economy that will be needed to achieve sustainability shows that we can no longer avoid tackling the toughest issues. A major national effort to stabilize the economic basis of our communities is not just a moral or economic imperative—it's an ecological necessity, and one that needs to be taken up using every available policy tool, as soon as possible.

Sources Cited:

Gar Alperovitz, Ted Howard, and Thad Williamson. "The Cleveland Model." *The Nation*. March 1, 2010.

David Archer. *The Long Thaw: How Humans Are Changing the Next 100,000 Years of Earth's Climate*. Princeton: Princeton University Press, 2009.

Keith Bradsher. "China Offers High-Speed Rail to California," *The New York Times*. April 10, 2010.

Ralph Buehler, John Pucher, and Uwe Kunert. "Making Transportation Sustainable: Learning from Germany." Washington: The Brookings Institution, April 2009.

Rachel Cleetus, Steven Clemmer, and David Friedman. "Climate 2030: A National Blueprint for a Clean Energy Economy." Union of Concerned Scientists, May 2009.

Ellen Dunham-Jones and June Williamson. *Retrofitting Suburbia*. Hoboken: Wiley & Sons, 2009.

Reid Ewing, Keith Bartholomew, Stephen Winkler, Jerry Walters and Don Chen. *Growing Cooler*. Washington: Urban Institute Press, 2008.

Douglas Farr. *Sustainable Urbanism: Urban Design With Nature*. Hoboken: Wiley & Sons, 2008.

Joan Fitzgerald. *Emerald Cities: Urban Sustainability and Economic Development*. New York: Oxford University Press, 2010.

William Frey. "Big City Populations Survive the Housing Crunch." Washington: Brookings Institution, July 1, 2009. Figure 1.

Richard Gilbert and Anthony Perl. *Transport Revolutions: Moving People and Freight Without Oil*. London: Earthscan, 2008.

Edward Glaeser and Matthew Kahn. "Green Cities, Brown Suburbs." *City*. Winter 2009.

Frank Hobbs and Nicole Stoops. "Demographic Trends in the Twentieth Century." Washington: Census Bureau, 2002.

Van Jones, *The Green Collar Economy*. New York: Harper, 2008.

Prasad Kasibhatla and William Chaimedes. "G-8 Leadership is Critical to Reducing Energy-Related CO2 Emissions." Durham: Duke University, Nicholas Institute, September 2007.

"Mixed Signals From the Economy." *Kenosha News*. March 31, 2010.

Michael Mann and Lee Kump. *Dire Predictions: Understanding Global Warming*. New York: Dorling Kindersley, 2008.

Mark Maslin. *Global Warming: A Very Short Introduction*, 2nd Edition. New York: Oxford University Press, 2009.

Christopher McCrudden. *Buying Social Justice: Equality, Government Procurement and Legal Change*. New York: Oxford University Press, 2008.

Steven A. Moore. *Alternative Routes to the Sustainable City: Austin, Curitiba, and Frankfurt*. Lanham, MD: Lexington Books, 2007.

Peter Newman, Timothy Beatley, and Heather Boyer. *Resilient Cities: Responding to Peak Oil and Climate Change*. Washington: Island Press, 2009.

John Nichols. "The Case for Kenosha." *The Nation*. May 13, 2009.

Ted Nordhaus and Michael Shellenberger. *Break through: From the Death of Environmentalism to the Politics of Possibility*. Boston: Houghton Mifflin, 2007.

David Owen. *Green Metropolis: Why Living Smaller, Living Closer, and Driving Less are the Keys to Sustainability*. New York: Penguin, 2009.

Richard Register. *EcoCities: Rebuilding Cities in Balance With Nature*. Gabriola Island, Canada: New Society Publishers, 2006.

Andrea Sarzynski, Marilyn Brown, and Frank Southworth. *Shrinking the Carbon Footprint of Metropolitan America*. Washington: Brookings Institution, May 2008.

Michael Shellenberger, Ted Nordhaus, Jeff Navin, Teryn Norris and Aden Van Noppen, "Fast Clean, & Cheap: Cutting Global Warming's Gordian Knot," *Harvard Law & Policy Review*. 2008.

United States Census Bureau, "Projections of the Population and Components of Change for the United States: 2010 to 2050." Table 1. Released August 14, 2008.

United States Census Bureau, "Annual Projections of the Total Resident Population as of July 1: Middle, Lowest, Highest, and Zero International Migration Series, 1999 to 2100." Released January 13, 2000, revised February 14, 2000.

Thad Williamson, David Imbroscio, and Gar Alperovitz. *Making a Place for Community: Local Democracy in a Global Era*. New York: Routledge, 2002.

Thad Williamson. *Sprawl, Justice and Citizenship: The Civic Consequences of the American Way of Life*. New York: Oxford, 2010.

About the authors:

Thad Williamson is a Research Fellow of the Democracy Collaborative, Assistant Professor of Leadership Studies at the University of Richmond, and the author of *Sprawl, Justice and Citizenship: The Civic Costs of the American Way of Life* (Oxford, 2010). Gar Alperovitz is Founding Principal of the Democracy Collaborative, the Lionel R. Bauman Professor of Political Economy at the University of Maryland and author of many books including *America Beyond Capitalism* (Wiley, 2004) and (with Lew Daly) *Unjust Deserts* (New Press, 2008). Williamson and Alperovitz previously co-authored (with David Imbroscio) *Making a Place for Community: Local Democracy in a Global Era* (Routledge, 2002).

We wish to acknowledge the financial support of the Nathan Cummings Foundation, whose support made possible both the research and distribution of this overview report.

We also acknowledge the exceptional research and editing support provided by Steve Dubb, Research Director of The Democracy Collaborative. We also gratefully acknowledge the outstanding research produced by Democracy Collaborative Research Assistant Weite Zhang on the development of high-speed rail networks in China.

We are also very grateful for the helpful critical feedback provided on a longer version of this report by a number of readers: Larry Bangs, Noreen Beatley, Joe Guinan, Jeffrey Lowe, Katharine Nelson, Robert Pollin, Bonnie Richley, Carl Rist, Terry Schwarz, Philip Thompson, Rich Weaver, Brian Yeoman, and Sam Zimbabwe. While it is not possible to address the wealth of feedback these readers provided, particularly in this condensed version, we hope our reviewers appreciate how their suggestions influenced this work. All responsibility for errors and omissions, of course, remains our own.