

# The New REPUBLIC

**SARAH WILLIAMS GOLDHAGEN ON ARCHITECTURE**  
**American Collapse**

by Sarah Williams Goldhagen

Post date: 08.14.07

Issue date: 08.27.07

I.

WITHIN fourteen days of each other, two rush-hour calamities: a bridge collapse and a steam-pipe explosion. In Minneapolis, a forty-year-old bridge along highway I-35W suddenly dropped sixty feet into the Mississippi River, killing at least five people and injuring approximately one hundred more. The federal government had deemed the bridge structurally deficient in 1990, which the Minnesota Department of Transportation acknowledged in separate reports issued in 2005, 2006, and 2007, after inspecting the bridge. In seventeen years, federal and state agencies repeatedly reported significant problems with the fallen bridge and yet no meaningful repairs were made. In midtown Manhattan, meanwhile, an eighty-three-year-old asbestos-wrapped steam pipe exploded, killing one person and injuring dozens more. That pipe is owned by the private utility company Con Edison, whose crews had inspected it earlier the same day and deemed it safe.

Headlines screeching news of these two horrifying events have replaced, temporarily, the usual newspaper rhythm of weekly incantations announcing this or that city's plans for adorning itself with a new stadium, public park, or luminescent museum--announcements that often serve to distract the public's attention from the silent scourge afflicting this country's viscera. One pipe explosion and one bridge collapse just might be enough to rouse the public to the news that America's metropolitan regions are in serious trouble. Bridges, utilities, and flood-prevention systems, whether publicly or privately owned, are grossly neglected. Suburbs are sprawling like unchecked chickweed. Cars are stuck in ever-mounting hours of traffic. Cities are bleeding people. School buildings are overpopulated and crumbling. Waters are polluted. Shipping ports are decrepit.



*A view of the collapsed Interstate 35W bridge,  
August 4*

Typically, these matters are discussed piecemeal, as discrete problems beleaguering this or that city or suburb (Minneapolis, Manhattan) or this or that infrastructural element (bridges, utilities). Politicians, voters, and the professional stewards of our built environment--city planners, architects, landscape architects, urban designers, civil engineers--could let inertia run its course and continue to approach such problems, conceptually and politically, in this balkanized manner. If they do, the American media will continue to feast upon these tales of mismanagement and woe, and only marginal, localized improvements will occur. But these problems are not discrete or local. They are part of a larger single phenomenon: America's failure to manage the physical plant of its urban settlements, to maintain what it should while designing, funding, and building desperately needed new facilities.

This country's negligence of its physical plant, its extent and its far-reaching implications, becomes especially evident if we conceive of our urban settlements differently. Dispense with the categories of city, suburb, and exurb; dispense absolutely with the dichotomy of city versus suburb. Instead, consider the city-suburb-exurb nexus as the interwoven entity that it now is: a metropolitan region. This was a principal point of last year's Venice Architecture Biennale, "Cities, Architecture, and Society," a multimedia extravaganza about metropolitan regions around the globe, filled with colored maps and three-dimensional bar-graphs projecting global shifts from 2000 to 2050 in population, demography, literacy rates, and economic growth; exhibiting high-quality photographs documenting the current state of metropolitan regions; and displaying architectural, urban design, and urban planning projects addressing those changes. The related exhibition "Global Cities," curated by Richard Burdett, a professor of architecture and urbanism at the London School of Economics, opened in June in the Turbine Hall of the Tate Gallery in London. In the exhibition's eight-hundred-page catalogue, *Cities: People, Society, Architecture*, Burdett predicts that by 2050, 75 percent of the world's peoples will live in metropolitan regions. More than 80 percent of Americans already do.

Altering our view of the United States to that of a country composed of a collection of metropolitan regions helpfully relegates the local and particularistic qualities of these problems to the background and highlights their commonality instead. And what is that commonality? As Frances Halsband of Kliment & Halsband, a distinguished architect on the Architectural Review Board of the Federal Reserve Bank and the Architecture Advisory Board of the U.S. State Department, puts it in the Architectural League's recent exhibition "New New York: Fast Forward": "Infrastructure, infrastructure, infrastructure."

Infrastructure is one crucial point at which politics and architecture merge. A country's physical plant should be front and center in the policy agendas of its public officials, and it should be front and center in the intellectual and professional agendas of the professional stewards of its built environment. For many reasons, this is not the case in the United States. The very notion of infrastructure is financially, physically, and conceptually unwieldy: it encompasses highways, street systems, sidewalks, schools, bicycle paths, mass transportation systems, communication systems, utilities, sewage and water treatment plants, public parks, and complexes of institutional facilities serving

civic, cultural, or leisure activities. But infrastructure should be defined not by what it looks like, and not by who designs it or who pays for it, and not by who builds it or actually uses it. It should be defined by whom it is meant to serve. For all its seemingly disparate parts, infrastructure comprises those elements in a metropolitan region's physical landscape that are meant to serve the public--or rather, the sometimes competing, sometimes overlapping, and sometimes wholly discontinuous publics that populate today's American metropolitan areas and are critical to the growth of our country.

A quick survey of the infrastructural elements of the United States' metropolitan regions suggests that a few might be said to be doing tolerably well. The rest, which means those in most of the country, are in horrendous shape. Large swaths of our infrastructure--not just one bridge in Minneapolis, or even a bunch of bridges across the country, or a bunch of asbestos-wrapped steam pipes coursing under our cities' streets--have aged to the point of gross deterioration. To sense the magnitude of the problem, one need look no further than the sobering "Infrastructure Report Card" on the United States, which is published every few years by the country's leading professional organization in the field, the American Society of Civil Engineers. On the ASCE's most recent Report Card, from 2005, not a single one of fifteen categories received a grade higher than a C. Ten of the fifteen categories--including drinking water, waste-water management, navigable waterways, transit, and schools--received scores in the D range.

These grades are not subjective evaluations. Twenty-four of the nation's leading civil engineers analyzed hundreds of reports and studies and surveyed more than two thousand of their colleagues before assigning them. The grades are abundantly substantiated with statistics, the results of research studies, and estimates of the dollar figures necessary for remediation. The ASCE's report on the conditions in most American metropolitan regions reveals a shocking national indifference to the maintenance, upgrading, and creative re-conceptualization of our own infrastructure. The ASCE Report Cards from 2003, 2001, and 1998 do not look better.

But never mind grades. Consider facts and numbers. The explosion in Manhattan damaged a number of feeder cables for the city's electric system, closing more than one hundred businesses with an estimated loss of income of \$10 million to \$30 million, and leaving a crater nearly forty feet in diameter that will disrupt traffic for weeks in one of the city's busiest neighborhoods. The estimated figures for cleaning up the mess in Minneapolis and building a new bridge approach \$400 million. And these figures are only for the two most recent catastrophes. More than 160,000 of the nation's nearly 600,000 bridges are structurally deficient or functionally obsolete, with I-35W having been one of them. The National Priorities List currently includes 1,237 toxic waste sites, and the Environmental Protection Agency has identified more than 350,000 contaminated sites that need to be cleaned up within the next three decades. Americans spend 3.5 billion hours annually stuck in traffic. In 2000, the National Education Association reported that more than \$268 billion was needed to bring the nation's school facilities into good overall condition.

A quick survey of some of the ASCE's monetary estimates betrays this appalling indifference and the catastrophe that it portends. America faces an annual shortfall of \$11 billion to replace aging facilities in order to comply with safe drinking water regulations, and yet as of 2005, federal funding for drinking water remained at less than 10 percent of this total. The National Park Service estimates (and probably underestimates) a maintenance backlog of \$6.1 billion. In January dozens of beaches in California were closed when heavy rains caused overflow that dumped millions of gallons of raw sewage into the waters. The number of unsafe dams rose by 33 percent between 1998 and 2005. The number of non-federally-owned dams identified as unsafe is increasing at a faster rate than those being repaired. For all the non-federally-owned dams that pose a direct risk to human life if they should fail, the ASCE estimates that \$10.1 billion is needed over the next twelve years to make them safe. In sum, the ASCE estimates that the country would need to spend \$1.6 trillion in the next five years to bring the country's infrastructure to an acceptable minimum standard.

AND THAT'S JUST getting what we already have back into shape. What about meeting the myriad needs of the reconfiguring world of the twenty-first century? The United States has a rapidly growing population, with certain regions, especially in the Sun Belt, requiring vast new infrastructure. Everywhere there continue to be shifts in population farther and farther from the core cities, making metropolitan regions all that much more far-flung and posing new infrastructural problems and demands. At the same time, we must cope with the phenomenon of "Shrinking Cities," the title of an exhibition at the KW Institute for Contemporary Art in Berlin in 2004 and of the indispensable three-volume catalogue that accompanied it. When a city's population significantly declines--which has happened in cities as different as New Orleans, the District of Columbia, Cleveland, Pittsburgh, and St. Louis, each of which has lost 30 to 50 percent of its inhabitants in the past half-century--large abandoned swaths of land are left behind. Do we leave de-populated cities to fend for themselves, with their boarded-up buildings deteriorating and HAZARD signs posted on building fronts, creating self-fulfilling prophecies of cities' deaths foretold? Do we neglect the opportunity to develop creative new uses for our nation's waterfronts, many of which are no longer adequate to serve as railway transit or shipping ports, and which currently sit as wastelands in sites as prominent as the west side of Manhattan? Do we ignore the thousands of brownfields--which the Environmental Protection Agency defines as "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant"--that defile our purple mountains' majesty? Do we just keep building highways and airports, and more highways and airports, when in truth we must begin to reconfigure America's physical landscape to better accommodate its citizens' changing demographic profile, social habits, and economic needs?

How did the United States devolve into this perilous condition? Why has the world's greatest economic and military power neglected what is arguably its most important asset after its people (also much neglected): the infrastructure that literally constitutes its cities and metropolitan regions? How are people choosing, or being shut out of choosing, the physical configuration of their metropolitan regions, from domicile to parkland to

sewage-treatment plant? The answers to these questions must come from politicians at the local, the state, and especially the federal levels; and from city planners and civil engineers; and from urban designers, architects, and landscape architects. Unless the problem is viewed with a wide-angle lens that reveals its many mutually reinforcing dimensions, it cannot be properly analyzed.

Visit metropolitan regions in many of the rapidly developing countries in Asia, and the gross inferiority of America's physical infrastructure is immediately apparent. Highways and roads in those countries are not pitted moonscapes. Public transportation, from trains to trolleys to buses, is plentiful, in good repair, and punctual. Public structures of all kinds--from governmental and civic buildings to public parks and urban plazas to "streetscape" elements such as pedestrian bridges and roadway lighting fixtures--are of immensely higher design quality and in immensely better shape. At every turn, a citizen moving through the built environment of these countries sees and uses physically embodied signs communicating to them that in their society, public life matters.

But forget, if you wish, the vast infrastructural building taking place across economically exploding Asia and the Middle East. Look no farther than Europe or Canada, areas in what used to be called the industrialized world, where metropolitan regions are facing the same problems of demographic shifts, higher labor costs, and aging infrastructure that we face in the United States. Again and again we find examples of metropolitan regions that have successfully risen to these challenges. Two of the most extraordinary recent success stories are Barcelona and Vancouver. Barcelona, in preparation for the Summer Olympics in 1992, remade itself by hiring world-class city planners, urban designers, architects, and civil engineers to rehabilitate its aged urban center, construct an Olympic Village that has become a new settlement in its metropolitan region, construct a new ring road, and reclaim its waterfront by transforming miles upon miles of beaches into parkland with bicycle paths, marinas, swimming areas, urban plazas, and high-quality residential fabric--all accessible by public transportation. And Vancouver's physical remaking in the past two decades has been so remarkable that it has become a phenomenon, a brand: the "Vancouver Miracle," a city that, twenty years ago, was an emptied-out downtown littered with disused industrial lots and is today a lively, high-density, twenty-four-hour city filled with attractively designed high-rise residential and office towers, well-preserved historic buildings, plentiful public parks, and vibrant cultural institutions. Vancouver is currently the fastest-growing residential downtown in North America.

INFRASTRUCTURE is an amorphous topic. Building it and maintaining it is staggeringly expensive. In the eyes of many voters, elected officials, and professional stewards of the built environment, maintaining it, trying to visualize what it should be or could be, is just plain boring. Re-orienting ourselves toward our infrastructure and bringing it up to date requires clearing away multiple political, social, and conceptual obstacles. As this past spring's exhibitions on Robert Moses in New York City made clear about the politics of American infrastructure, the nature of the American democratic system discourages the

long-term planning, the commitment to public investment, and the vertical coordination of federal, state, and local initiatives that most advanced industrial countries enjoy, which are fundamental to the establishment, maintenance, and upgrading of the existing infrastructure, not to mention the initiation of new projects.

American citizens know that they and their children need safe bridges, clean drinking water, public school buildings that do not force classes to convene in hallways or leak or cause sick building syndrome, and clean and healthy parks so that playing children are not forced onto city streets or toxic waste sites. Yet voters are exquisitely prone to sticker shock, and large-scale infrastructural projects--a new mass-transit line, a new park or waterway system, a bridge--cost an extraordinary amount of money. Indeed, the projected dollar amounts themselves are often enough to cause the political equivalent of what psychologists of trauma call dissociation. (Did you say \$14.6 *billion* for Boston's Central Artery project?) Even smaller-scale projects--a new public school, a waterfront park (such as Pittsburgh's \$22 million Allegheny Riverfront Park, or the recently completed \$85 million Olympic Sculpture Park in Seattle), an urban public plaza (such as the \$650 million retooling of Lincoln Center in New York City to make it more user-friendly and accessible to the public)--seem fantastically expensive to anyone who has no experience of planning and managing costs for any major construction project--in other words, to nearly everyone, including nearly every one of our voting citizens.

When a proposed tax or budget item can be specifically linked to the officials whom voters elect to their own state or local offices, the political disincentives to address a metropolitan region's infrastructural needs are enormous. Funding maintenance for existing infrastructure is doubly challenging because there is not even the political reward of a shining new public amenity. If Madame Governor proposes a good or necessary infrastructure project, should she keep trying to push the project through when the bidding process is complete and her constituents balk at its projected cost? Should she do so if the ultimate cost is her job? Should she do so with the knowledge that, at any point along the way, from conception to design to construction, determined and vocal detractors can point to the mounting dollar signs, and portray that project as a sinkhole for taxpayer money, and derail it?

Even in the heyday of American infrastructure-building, from 1930 to 1970, it took an imperious wheeler-dealer such as Robert Moses to take maximal advantage of the funds that the federal government was making available to American cities: owing to Moses, for example, New York City received more than twice the Title I funds for slum clearance of any other city in the country. Robert Caro, Moses's biographer, who was simultaneously fascinated and revolted by Moses's labyrinthine anti-democratic conception of his calling, conceded in *The Power Broker* that "the problem of constructing large-scale public works in a crowded urban setting, where such works impinge upon the lives of or displace thousands of voters, is one that democracy has not yet solved." American democracy, that is.

The neglect of infrastructure has dramatically worsened since the 1970s, for two reasons. First, the country has undergone a structural transformation from city-suburb-exurb-

farmland, a constellation that does not necessarily conflict with the tripartite local-state-federal structure of our government, into metropolitan regions, a constellation that does conflict with that structure. We are stuck with the existing political, legal, and institutional structures of states (usually bigger than metropolitan areas) and municipalities (smaller and self-interested) through which almost everything must be organized and funneled. Neither is the right kind of entity for managing a metropolitan region, but together they inevitably organize our thinking and, more important, our policy planning, which turns out to be too unfocused (in the case of states) or too hyper-focused (in the case of municipalities).

Second, the federal government has increasingly fobbed off the responsibility for maintaining and upgrading the country's infrastructure onto state and local governments, which bear the legal obligation to attend to their regions' infrastructure but are systemically constituted in such a manner that only rarely can they command the financial resources adequate to accomplish the necessary tasks. A Congressional Budget Office study reveals that an immediate and steady decline in federal spending on infrastructure as a percentage of GDP began with Reagan's first budget and continues straight downhill, with the average annual amount in 1982-1998 being 29 percent less than in 1965-1981. While in the earlier period the average was .93 percent of GDP, in the last year of the CBO's study the downward trend had brought spending all the way down to .57 percent of GDP--a drop of almost 40 percent. Federal spending on infrastructure as a percentage of all federal spending between these two periods, which include Republican and Democratic administrations, declined even more, by 33 percent. And states and municipalities have not picked up the slack: state and local spending throughout these years has hovered around a little less than 2 percent of GDP. Max Sawicky of the Economic Policy Institute uses somewhat different measurements, though his figures for public net investment in physical capital come up to 2006: he estimates that for the ten years between 1959 and 1969, public net investment in physical capital was about 2.6 percent of GDP; but for the last ten years it has been about 1.1 percent.

Without a large federal role, infrastructural needs cannot be effectively addressed, in part because the American political system has always made it difficult for state and local governments to do so, and in part because metropolitan regions cut across municipal and sometimes even state lines. This is one of those tasks that only the federal government can accomplish. A dramatic example of why state and local governments cannot go it alone on infrastructure building comes from New Mexico, which has recently completed a new four-lane highway: when that new highway reaches the Colorado state border, it dies into two lanes, because the state of Colorado has not coughed up the funds to continue it. Owing to the disincentives to address the country's infrastructure that are built into the American democratic system--and to the rightward shove of our governance in the last twenty years, which has militated against even discussing, let alone addressing, large-scale public needs--the political obstacles to taking America's infrastructural problems seriously are enormous. Shouldn't we think about our country's physical plant in terms not that different from our legal and regulatory systems in general--as a necessary foundation for the social and economic health and growth of this country,

requiring substantial federal leadership and funding? We need a national infrastructure for infrastructure.

## II.

THOSE ARE NOT the only reasons for this American crisis. There is also a cultural obstacle: the public's lack of faith in expertise when it comes to the planning and the construction of our physical environment. This is truly bizarre. When you have legal needs, you go to a person trained to deal with them, to a lawyer. For medical needs, to a doctor. For electrical needs, to an electrician; for investment needs, to a financial expert. But for the needs of infrastructure and urban planning and design, the politicians and the public are leery if not downright dismissive of the experts trained to deal with such problems: city planners, urban designers, architects, landscape architects, and civil engineers.

There are many reasons for the low esteem in which the public currently holds these experts in the built environment. Some are justified, others are not. It began with the widely publicized failures of the federally funded slum clearance and urban renewal programs of the 1960s, which nurtured a crude morality tale of the consequences of governmental intervention in the country's physical plant, a David-and-Goliath melodrama played out in the standoff between a feisty little lady named Jane Jacobs and an outsize predatory "expert" named Robert Moses. An overly simplistic and misleading fable was born, according to which government should keep its grubby hands off our cities. Nearly half a century later, this legend continues to dominate public thinking about how our country's infrastructure should be managed.

Today's city planners are seen as clueless and well-meaning bureaucrats at best, and as anti-democratic elitists at worst. Architects, landscape architects, and urban designers (including the many who do not merit the slander) are depicted as divas who care more about fancy forms than about the people who live in their buildings or the clients who build them. Expertise in the built environment is often held in public ridicule. As a result, folk wisdom has it that it is up to the public-spirited citizen--the community board activist, the local environmental review agency, the historic preservation commission--to stop them: thus unwittingly validating a salient quotation that was prominently displayed in one of the Moses exhibitions. "The critics," he once said, "build nothing."

Sadly, the public's mistrust of the experts who should be advising politicians on how to address the multifarious problems of the American infrastructure is not wholly misplaced. To be sure, there are many talented public officials, city planners, urban designers, and architects who are committed to working in the interest of the public good. Yet there are also many professionals who have resigned themselves to working within the ever-narrowing constraints that the public assigns to them of designing mainly signature projects. The most self-damning example of this was the architecture and design community's befuddled and largely negative reaction to Burdett's call-to-arms "Global Cities" exhibition. The maps, the bar graphs, and the statistics confounded them. The exhibition was roundly condemned as "boring." Such reactions are all too common. As a

result, American architects sometimes run the risk of appearing to be little more than glorified shoe designers.

When evaluating the professional practice of American designers, we need to consider their substantial contribution to the current infrastructural morass. American design professionals have failed to conceptualize, or to communicate effectively, theoretical and practical visions of how the American infrastructural landscape might be reconfigured to address the challenges of the new century. In the architecture and urban design community, for example, only two visions--both glaringly inadequate--currently dominate the discourse about the future of urban life: one propounded by the Congress for New Urbanism, founded largely by Andreas Duany and Elizabeth Plater-Zyberk, and another put forth by the Office for Metropolitan Architecture, founded by Rem Koolhaas.

The CNU, inspired by the ideas in Jacobs's *The Death and Life of American Cities*, promotes a more or less sensible set of principles for urban development that are now commonly accepted: zoning should nurture a mix of commercial, retail, and residential uses; density is preferable to sprawl; nodal communities are preferable to bedroom suburbs; infrastructural planning should prioritize mass transit over the automobile; and so on. Yet the problem with the New Urbanism (with the exception of some excellent work being done in California by Peter Calthorpe and others) is that for all Duany's rhetorical bluster and for all the CNU's talk of heterogeneity, actually executed New Urbanist plans tend to be excessively legislated, code-bound, and architecturally reactionary. The two most famous New Urbanist projects are unbearably homogeneous, socially and architecturally: Seaside, in Florida, the set for the movie *The Truman Show*; and Celebration, also in Florida, built by the Disney Corporation and as fanatically controlled as any of that company's other products.

The only serious high-profile competitor to the CNU as a vision for the twenty-first century has been trumpeted by Koolhaas and his many far-flung acolytes; but Koolhaas's "everything is funky, let it be" attitude amounts to little more than developer-friendly urbanism and is no more satisfactory. I know of only one promising new vision on the horizon, from James Corner of Field Operations in New York City. Field Operations is committed to an interdisciplinary approach to the infrastructural, ecological, and social problems facing metropolitan regions, and it draws from landscape architecture, architecture, urban design, and civil engineering in celebrated (but as yet unexecuted) projects, including prize-winning designs for the University of Puerto Rico and for the 2,200-acre Fresh Kills landfill in Staten Island.

SO WHAT, IF anything, is being done for the infrastructure of our metropolitan regions today? Answering this question properly requires discipline. One must keep one's eye on the concrete. One must consider--and, when appropriate, applaud--well-meaning, carefully conceived, often highly publicized *plans*, such as Mayor Michael Bloomberg's 2030 plan for New York City, and Mayor Richard Daley's Central Area Plan for Chicago, which includes an initiative to make the Windy City "the greenest in America." And then

one must turn away from what is on paper to examine what is taking place on the ground. And what is taking place? Well, not much, as the two recent catastrophes and the figures of neglect, decrepitude, and financial shortfalls tell us. And much of what *is* being done is pernicious.

Since city and even state governments can rarely undertake such large-scale initiatives on their own, the maintenance and the upgrading of our metropolitan regions' infrastructures is falling ever more into private hands. *Business Week* recently reported that dollar-starved city and state governments are selling off parts of their public infrastructures to the highest private bidder. Morgan Stanley, Merrill Lynch, Goldman Sachs, and other firms have started negotiating the purchase of, or have already bought up, a myriad of what once were and should properly be public facilities: roadways (pieces of the Pennsylvania Turnpike, the Colorado Northwest Parkway, the Chicago Skyway, and the Indiana Toll Road have already been sold), water systems (the city of Atlanta), and so on. The sales of the Tappan Zee Bridge, Chicago's Midway Airport, and Philadelphia International Airport have been explored.

In isolated instances, the privatization of the infrastructure of our metropolitan regions can have happy results. One example is the recently completed Olympic Sculpture Park in Seattle, a project designed by Weiss/Manfredi of New York that truly does serve the public and successfully manages many of the issues faced by many American metropolitan regions. The Olympic Sculpture Park reconnects downtown Seattle to its waterfront with V-shaped geometries that create a meandering, multilevel path beginning at the city's edge, straddling the linear gashes of a superhighway and active railroad tracks, and leading to a newly rehabilitated waterfront with a well-designed public esplanade. But the Olympic Sculpture Park, though a public amenity, was funded almost entirely through private philanthropic donations raised by the Seattle Art Museum, which abuts the site. It can hardly serve as a reproducible model for other cities and states looking for ways to manage the infrastructure of their downtowns or metropolitan regions.

More typical are the so-called public-private partnerships to which desperate cities across the country have been increasingly turning since the 1970s. One such project is Atlantic Yards in Brooklyn. Headlines on this project have predictably run this way: Brooklyn teams up with the developer Bruce Ratner to create a major new project that will contain private residences (which will profit the developer) and new public amenities. This project will jump-start the economic revitalization of downtown Brooklyn. Then a few years go by. New headlines: New York City has granted Atlantic Yards developer Bruce Ratner X, Y, and Z additional zoning, or land use, or other concessions. These concessions threaten to severely limit public access to the project. Yet if the concessions are not granted, the developer may pull out, to the economic detriment of the city. If Atlantic Yards is built as it is now envisioned, its public spaces are likely to suffer the same fate as those "privately owned public spaces" in Manhattan that Jerold Kayden meticulously documented in his book *Privately Owned Public Space: The New York City Experience*. Kayden studied the "public spaces" built by private developers from the 1960s onward in exchange for various land and air rights bonuses. He discovered that,

T

absent vigorous oversight from municipal authorities, many of those spaces had been locked up, hidden away with plantings or other design elements, or so ill-maintained that one would have to completely redefine the meaning of "public" for them to qualify.

THE PRIVATIZATION of the country's infrastructure is the current trend. In the short term it spells social disaster, and in the long term it spells economic disaster. The short term: will the private companies buying up our highways or airports be committed to maintaining free access and mobility to financially disadvantaged customers? Not likely. Will they even pretend to maintain--much less to upgrade--the infrastructure they own if it becomes financially more advantageous for them to put their resources toward some other enterprise instead? Not likely, as Con Ed's engineers inadvertently demonstrated with their inspection of the steam pipe the very morning of the day it exploded. Will private companies devise plans that will accommodate large social changes when they must be answerable to shareholders focused on annual reports? Not likely. And the long term: the piecemeal privatization of the nation's infrastructure will not, almost by definition, be effectively coordinated to create the continuous and continuously functional system on which this country's economic growth depends.

Even strict free marketeers should take pause at the less immediate but certainly inevitable economic consequences of this trend. Here is Adam Smith in *The Wealth of Nations*: it is the "duty of the sovereign or commonwealth" to erect and to maintain "public institutions and those public works, which, though they may be in the highest degree advantageous to a great society, are, however, of such a nature that the profit could never repay the expense to any individual or small number of individuals, and which it therefore cannot be expected that any individual or small number of individuals should erect or maintain." Infrastructure is the classic public good that the free market does not and cannot provide. On the scale that is necessary, only the federal government can make the difference.

Other advanced industrial countries (Canada, Spain, Germany, Japan, Korea--the list goes on) point the way to very successful and economically more viable paths toward addressing the infrastructural crisis. Policymakers at all levels of government and this country's design professionals must begin to accept that we are now a country of metropolitan regions. Then they must work in concert for change. Government officials at all levels, especially at the federal level, must take it upon themselves to address the maintenance, upgrading, and re-conceptualization of the nation's infrastructure. We are well beyond the point of needing a congressional commission to assess the state of the nation's infrastructure (though any action is better than none). We need a National Infrastructure Agency to plan, provide expertise for, fund, and coordinate long-term initiatives for infrastructural maintenance and improvement. At the very least Congress should establish a federal line-item capital budget, as most other developed countries have, which would help to reduce the perpetual scanting of long-term budgetary needs in favor of short-term ones. State officials should demand federal assistance to address their infrastructural needs. Municipal officials should find the legal and political mechanisms (such as metropolitan district authorities of broad scope) that would allow them to work in concert with, rather than in competition with, their counterparts in neighboring

communities. Leading design professionals should refuse to be merely producers of high-end cultural icons and luxury housing, and make themselves relevant to every part of the infrastructure challenge, and work to re-instate the public's trust in their authority.

When infrastructural needs large and small have been addressed in the past twenty years, it has been because leaders decided to take action, and then refused to sleep or eat until their pet project was completed, or close to completion. How did Millennium Park in Chicago happen? Daley decided that it should happen and then persuaded people that he was right. How did Boston's Central Artery project happen? Fred Salvucci, then transportation secretary of Massachusetts, lived and breathed that project for nearly two decades, persuading local government officials, state authorities, federal representatives, and community boards that he was right. Why has the pathetically ill-conceived design for the twenty-seven-acre swath of reclaimed land created by burying Boston's Central Artery (I-93), ironically named the Rose Fitzgerald Kennedy Greenway, been hung out to dry? Because nobody stepped into Salvucci's shoes.

Surely ordinary Americans can recognize this crisis: they drive on it, cursing the traffic, every day. The ribbon of concrete and steel washing into the Mississippi River; the chasm on West 41st Street in New York (or the larger one--very different in origin, to be sure--that remains at New York City's Ground Zero); the boarded-up acres of urban disaster in New Orleans that Hurricane Katrina left behind; the billions of gallons of raw sewage released into our waterways every year; the stupendously mediocre Rose Kennedy Greenway; the bridges and the highways closed because of some spectacular failure or the need for emergency repairs--all these disasters are only the most publicly visible evidence of what happens, or does not happen, when policymakers and design professionals fail to effectively use their power for the oldest and best purpose of all, America's public good.

**SARAH WILLIAMS GOLDHAGEN** is *The New Republic's* architecture critic.