Blueprint for American Prosperity
Unleashing the Potential of a Metropolitan Nation

MetroPolicy

Shaping a New Federal Partnership for a Metropolitan Nation

Metropolitan Policy Program
at BROOKINGS

About the Metropolitan Policy Program at Brookings

Created in 1996, the Metropolitan Policy Program provides decisionmakers with cutting-edge research and policy ideas for improving the health and prosperity of metropolitan areas including their component cities, suburbs, and rural areas. To learn more visit **www.brookings.edu/metro**

The Blueprint for American Prosperity

The Blueprint for American Prosperity is a multi-year initiative to promote an economic agenda for the nation that builds on the assets and centrality of America's metropolitan areas. Grounded in empirical research and analysis, the *Blueprint* offers an integrated policy agenda and specific federal reforms designed to give metropolitan areas the tools they need to generate economically productive growth, to build a strong and diverse middle class, and to grow in environmentally sustainable ways. Learn more at **www.blueprintprosperity.org**

The Metropolitan Policy Program Leadership Council

The *Blueprint* initiative is supported and informed by a network of leaders who strive every day to create the kind of healthy and vibrant communities that form the foundation of the U.S. economy. The Metropolitan Policy Program Leadership Council—a bipartisan network of individual, corporate, and philanthropic investors—comes from a broad array of metropolitan areas around the nation. Council members provide us financial support but, more importantly, are true intellectual and strategic partners in the *Blueprint*. While many of these leaders act globally, they retain a commitment to the vitality of their local and regional communities, a rare blend that makes their engagement even more valuable. To learn more about the members of our Leadership Council, please visit **www.blueprintprosperity.org**

Blueprint for American Prosperity
Unleashing the Potential of a Metropolitan Nation

MetroPolicy

Shaping a New Federal Partnership for a Metropolitan Nation

THE BROOKINGS INSTITUTION | METROPOLITAN POLICY PROGRAM © 2008

CONTENTS

EXECUTIVE SUMMARY

The 2008 U.S. presidential election and the 44th presidency that will follow it come at a remarkable juncture.

Not only will the new administration make a new start of sorts, since no incumbent president or vice president will assume the presidency, but the new government and Congress will take office facing a series of massive uncertainties.

Renewal will require unleashing the full creative power of the cities, suburbs, and metropolitan areas that are America's core sources of prosperity.

Iraq policy will need to be tended to. The nation's health care spending and entitlements crisis will need to be addressed. So, too, will key issues of world food supplies and nuclear proliferation require attention.

Yet just as critical will be another matter—the urgent but less-remarked-upon challenge of arresting the nation's widely perceived drift by unleashing the full economic, social, and environmental potential of the nation.

The ultimate aim of the *Blueprint for American Prosperity* of which this report is a part, this renewal matters intensely now and will require unleashing the full creative power of the cities, suburbs, and metropolitan areas that are America's core sources of prosperity.

Cities, suburbs, and metropolitan areas matter because U.S. metros—added up—are the nation, as argued "MetroNation," the initial "framing" paper in this initiative.

Metros contain and aggregate key "drivers" of local and national prosperity—factors such as local innovation capacity, a place's store of human capital, its basic infrastructure and quality of place. In that sense, cities and suburbs gather together what matters and—through their density and diversity—augment its value and impact.

And then come the results.

Metros are the economy, because while the 100 largest metropolitan areas alone represent just 12 percent of the nation's land area, this network of interlinked commercial hubs generates two-thirds of U.S. jobs and three-quarters of the nation's output.

Metros are society, because 65 percent of the population lives in those 100 largest of them, with 85 percent of the nation's immigrants and 77 percent of its minority population residing there.

And for that matter, metropolitan areas encompass both America's carbon problem and its best solutions, with the largest 100 accounting for 55 percent of U.S. carbon emissions but also including all of its most energy-efficient locations.

In that sense, metropolitan areas really *are* where the nation's future economic competitiveness, social health, and environmental sustainability will be decided. And so the nation needs to have in place a purposeful, supportive, and effective body of federal, state, and local policies and stances that can help unleash the full potential of America's 363 varied engines of prosperity.

And yet, here is the problem: Although America is more than ever a MetroNation it lacks a requisite body of "MetroPolicy," most notably in Washington, aimed at enabling local, regional, and private-sector leaders to meet the nation's greatest challenges and opportunities.

In too many domains, Washington's policy stances must be counted either as unhelpful to the nation's metropolitan problem-solving, or hostile to it.

Too rarely does federal policy sufficiently tend to the adequate provision nationwide of the "drivers" of national and local prosperity. Not often enough does Washington assist state and local leaders in their efforts to work out effective ways to collaborate across boundaries to compete for America's betterment.

What is more, confusion and disagreement about the appropriate nature of the "division of labor" between the nation and states and localities increasingly blurs relations between Washington, states, and metropolitan actors, holding back efforts to ensure metros amass the assets needed to drive prosperity. At the same time, few metropolitan innovators would call Washington a "high-performance organization." Instead, they complain about a federal apparatus that too often acts like a "legacy" government, a collection of largely outmoded agencies, many formed in the 1950s and 1960s to carry out programs forged in the 1970s and 1980s through means and mechanisms suited to a pre-Internet world.

Hence this report: The second "core" analysis of Brookings' *Blueprint,* "MetroPolicy"—a companion to "MetroNation"— assesses the present state of federal policy as it relates to U.S. metropolitan areas at a crucial moment and sketches the outlines of a new federal partnership with states, localities, and the private sector aimed at more fully unleashing cities' and suburbs' metropolitan potential.

More specifically, the report argues that the nation needs a new federal policy framework in which Washington *leads* where it must; *empowers* metropolitan, state, and local leaders to innovate; and otherwise *maximizes performance* across the whole federal-state-local system to support metropolitan problem-solving.

In this vein, "MetroPolicy" draws the following conclusions:

1. Metropolitan America remains the world's leading economic network, but many metro areas struggle to achieve key dimensions of prosperity. Taken together, America's metropolitan areas remain a critical source of national prosperity, by virtue of their special power to facilitate innovation, social interaction, and efficiency through proximity and exchange. However, U.S. metros as a group face substantial long-term productive, inclusive, and sustainable growth challenges:

- **Metro areas and the cities and suburbs that contain them remain a critical source of productive growth for the nation but signs of slippage have appeared.** Productivity growth has slowed. The production of scientists and engineers is stagnating. Research and development (R&D) investment as a share of GDP is faltering. And U.S. dominance of patenting is under challenge
- **Metro areas are falling short on indicators of inclusive growth.** Large and widening wage gaps separate top and bottom earners in the largest 100 metropolitan areas. The middle class is shrinking. Areas of concentrated metropolitan poverty appear to be re-emerging. And troubling achievement deficits and disparities continue to plague secondary education even as higher education performance remains spotty
- **Metro areas struggle with significant sustainability challenges.** On this front, low-density suburbanization is rapidly consuming metros' rural land reserves and widening the urban footprint. Job sprawl is alive and well. Miles traveled on roads are outpacing population growth and driving up congestion and carbon emissions, and major metros' transportation and infrastructure networks are frequently unbalanced, insufficient, and deteriorating

Aggregate trends, meanwhile, obscure another problem: America's metropolitan areas' performance on measures of productive, inclusive, and sustainable prosperity. The difference between the top quintile of the 100 largest metros and the bottom quintile on productivity growth is 3-to-1; on wage inequality, 1.3-to-1; and on carbon emissions, 2-to-1. Amidst all this variation, though, several major types of metropolitan areas can be discerned:

- **High-performance metros,** such as Boise, ID and Portland, OR, enjoy better than average rankings across all three indictors of prosperity—productivity growth, wage inequality, and carbon footprint—with particularly stellar performance in at least one category. Less than one in five large U.S. metros fall into this category
- **Low-performance metros,** which account for a quarter of the 100 largest metros, face exactly the opposite reality: These places, epitomized by Birmingham,

AL, post sub-par rankings across all three summary indicators and reside at or near the bottom of the pack in at least one category

- **Mixed-performance metros** account for the majority of metropolitan areas, and usually exhibit solid performance on one dimension of prosperity tempered by much weaker performance on another. Metropolitan New York, for instance, registers in the top 10 on sustainability, runs almost dead-last on inclusion, and turned in a middling performance on productivity growth in recent years

Along these lines, almost every sizable metropolitan area in America faces serious challenges on at least one or more dimensions of prosperity.

2. Metropolitan leaders are responding to change by developing the assets that drive prosperity, but they cannot "go it alone"—a reality other countries increasingly recognize. City and suburban leaders are experimenting and innovating. Working with frequent tenacity, many of these leaders are laboring in the face of massive, disruptive change to work out new ways to maximize their regions'—and their nations'—standing on the crucial "drivers" of productive, inclusive, and sustainable growth and the prosperity to which they contribute.

- Because ***innovation*** matters if locations are to compete globally, metropolitan leaders are taking steps to ramp up their regions' ability to invent and commercialize new products, processes, and business models
- Because ***human capital*** matters for innovation and household income, networks of metro leaders are working on ways to continuously enhance the levels of training and education marshaled by their regions' workforces
- Because ***infrastructure*** matters to move goods, people, and ideas quickly and efficiently, leaders are striving to construct state-of-the-art transportation, telecommunications, and energy distribution networks
- And because ***quality places*** matter, city and suburban stewards of their locales are working increasingly to amplify the inherent attractions of metropolitan places—their variety of spaces, their environmental assets, their distinctive neighborhoods, downtowns, and waterfronts

And yet, the home-grown ingenuity of local and regional leaders—constrained as it is by current jurisdictional and policy realities—cannot by itself carry metropolitan America or the nation far enough in advancing prosperity.

- Boosting innovation requires contending with the full force of global economic integration, for example …yet metro leaders' power to shape outcomes remains limited
- Elevating local human capital stores requires contending with enormous social and demographic trends…yet tools and resources for doing that at the local and regional level remain few
- It's the same with the other two drivers of prosperity: Developing world-class infrastructure and sustainable, high-quality places each require responding to deep-set problems of vast scope…yet metropolitan actors' fiscal, jurisdictional, and regulatory reach remains narrow
- And there is one more fundamental limit on metropolitan autonomy: the administrative reality of metro regions' institutional weakness. Not only do metropolitan-oriented leaders retain little or no specific constitutional or statutory standing, but they must work across boundaries in areas made up of over 9,000 general purpose governments in just the 100 largest metropolitan areas. Furthermore, one-third of those largest metros span state lines

It is no surprise, then, that around the world many countries—faced with these same conundrums—are engaging aggressively to nurture their city-regions and generate nationwide prosperity:

- In many quarters national governments are intervening to secure their countries' standing on the fundamental drivers of prosperity
- Many nations are seeking to facilitate the emergence of more cohesive, empowered regions
- Other nations are getting smarter about how they organize their own bureaucracies and operations, knowing that high-performance government is also a prerequisite for optimal national and regional outcomes

3. Unfortunately, current U.S. federal policy stances do not adequately support local and regional efforts to boost prosperity. Given the importance of its metropolitan areas, the nation requires federal policies that engage consistently, tactfully, and appropriately to boost the stock of prosperity driving assets—innovation inputs, human capital, infrastructure, quality places—that are concentrated there. What is more, federal policy also needs to empower actors who wish to solve problems across regional lines, and help them to develop ways to collaborate decisively. However, Washington has drifted in recent years, and slipped into a peculiar period of simultaneous inattention, intrusiveness, and obsolescence that finds it now far out-of-step with the best practices of leading private-sector firms and the smartest state and local governments.

Three significant criticisms of U.S. governance are unavoidable:

- **Washington is often absent when it should be present.** A large and diverse country needs leadership from the center in critical areas, whether to provide a vision on innovation or infrastructure or to set basic standards or to address vast, diffuse problems that span local and state lines like greenhouse gas emissions. However, in recent years the federal government has frequently failed to lead in key instances to help leverage critical drivers of metropolitan success for the nation's benefit. On neither innovation nor infrastructure has Washington managed to set an explicit national vision for success, despite pressing need. On standard-setting, federal income-support programs have failed to significantly address the growing divide between workers' wages and the costs of life's daily necessities. And for that matter, Washington's failure to establish coherent legal or economic frameworks—or even uniform goals—on the two most critical boundary-transcending challenges of the era—reducing carbon emissions and supervising immigration—has created much uncertainty and left states and metropolitan areas scrambling. Similarly disappointing has been the ebbing of federal efforts to encourage cohesive regional and cross-jurisdictional problem-solving within metropolitan areas—an essential prerequisite for regions and the nation to make the most of their assets.
- **Washington is too often present when it ought to be absent.** At the same time, the federal government remains all too present when cities, suburbs, and states need more flexibility and room in which to innovate. The diversity of U.S. metros alone suggests that regions and localities need substantial autonomy to respond to distinctive local realities. And yet, the federal government frequently hobbles state and metropolitan problem-solving, and continues to deliver programs that don't match city or suburban realities, such as the shifting locations of low-income families and jobs. In this respect, federal programs often intrude Washington's policy biases into metropolitan areas' policymaking, as when federal transportation programs tilt towards automobiles and bus rapid transit, rather than deferring to regional preferences. Similarly, ill-considered federal involvement has generated significant unintended consequences, with the grimmest example being the way that federal low-income housing policy—with its heavy focus on housing the very poor in special units concentrated in isolated urban neighborhoods—has contributed to the concentration of poverty. And then, Washington too often actively discourages state, metro, and local problem-solving, whether by preventing states from enforcing predatory lending laws against national banks (a move that likely fueled the sub-prime mortgage crisis), or by blocking California and 16 other states from implementing laws limiting GHG emissions from cars and trucks.
- **Washington has failed to embrace the possibilities of 21st-century governance.** Finally, Washington has fallen behind the curve on organization reform. Very few federal agencies, in this respect, can be said to have fully transformed themselves into high-performance, 21st-century organizations by availing themselves of the appropriate tools, techniques, and stances that lead to optimized performance. Many of Washington's programs, policies, and functions were established decades ago to address earlier challenges and adhere now to obsolescent administrative approaches. Therefore, federal policies and programs are often overly rule-bound, intensely stovepiped, and lacking in their utilization of public- and private-sector partnerships. On top of this, Washington fails to acknowledge the primacy of metropolitan areas in U.S. affairs and largely ignores their centrality to the nation's economy.

In short, current federal policy structures and practices—accumulated over decades—no longer fit the realities of the Metropolitan Age and do not reflect the best practices of 21st-century governance. The result is that Washington's current combination of absence, presence, and backwardness fails to provide American cities, suburbs, and states the appropriate mix of leadership, flexibility, and effectiveness they need from a crucial partner at a moment of massive change.

4. And so America—a MetroNation—requires MetroPolicy. What is MetroPolicy? MetroPolicy is what the MetroNation lacks now, which is a purposeful, broadly supportive, and effective national policy framework that comports with the reality that U.S. prosperity emanates overwhelmingly from its metropolitan areas.

Such a new stance would seek to ensure the availability nationwide and in metros of the crucial assets that drive prosperity. Likewise, MetroPolicy seeks to strengthen the ability of metropolitan areas actors—such as mayors, county executives, regional business groups, universities, and non-profit and business leaders—to leverage, link, and align to maximum effect the assets they possess. Only in that way will the nation find ways to collaborate to compete against Shanghai and Mumbai and Frankfurt rather than competing with itself.

And so MetroPolicy calls at once for updating intergovernmental relations to better serve the needs of metropolitan areas and applying more of the practices of high-performance governance to Washington's own activities and to its partnerships.

Three essential principles inform MetroPolicy:

- **First, the federal government should *lead where it must* because of the need to match the scale and geographic reach of key current challenges.** Vast global currents of economic integration, migration, and global climate change mean that states and metropolitan areas cannot "go it alone." Consequently, the national government must intervene in fundamental arenas of domestic life to set a strategic vision for the country, establish basic standards of action, provide what no other level of government can or will, or address issues that naturally transcend state borders. In short, the forces affecting metros—globalization, wage stagnation, climate change—so transcend parochial borders that the national government must act in certain areas with vision, direction, and purpose. Such interventions will help to enhance the availability nationwide and within metros of those crucial assets that drive local and national success, or help metropolitan areas move toward more effective, region-scaled governance arrangements.
- **Second, the federal government must *empower metro areas where it should* to reflect the variety of metropolitan experiences and unleash the potential for innovation and experimentation that resides closest to the ground.** In this respect, MetroPolicy seeks to build in space and flexibility for varied local problem-solving in a varied, big country. Boston and Boise, Akron, Dallas, and San Francisco all contend with vastly different degrees and types of challenges, which naturally motivate different priorities in policy responses. In light of all this, federal programs and the nation as a whole will only be successful if national policies can be tailored to the distinct realities of disparate metros, and if the latent creativity of metropolitan, state, and local actors can be unleashed and added up. To that end, greater flexibility in program design must be diffused throughout the system. And then there is the fact that large areas of domestic policy—ranging from land use and zoning to routine law enforcement—remain largely managed by states and the local governments they create. In these areas, too, the real question for the federal government must become how best to support and further smart action below.
- **Third, the federal government *must maximize performance* and fundamentally alter the way it does business in a changing world.** Finally, a decentralized system such as MetroNation necessitates a special sort of effectiveness on the part of the center if it is to function at the highest level. In keeping with that, MetroPolicy calls for rearranging federal roles and stances in keeping with the imperatives of the emerging organizational model of highly networked, simultaneously "loose" and "tight," high-performance government. Specifically, Washington needs to: Keep the needs of metropolitan areas top-of-mind; provide incentives for and reward problem-solving that crosses disciplines and "joins up" solutions; move beyond rule-driven administration to smarter, more flexible interactions with states and localities that combine more local discretion with strong performance management; embrace partnerships; employ data to measure performance; and set up a robust, national system for identifying and diffusing best innovations. In short, "smart governance" diffused from the center is not an oxymoron but rather a necessity.

As to specific applications of MetroPolicy, the *Blueprint* Policy Series has begun to delineate a series of detailed, legislatable examples of the new metro-literate stance, with a series of proposals that, "added up," would improve metropolitan America's standing on key drivers of prosperity—innovation capacity, human capital, infrastructure, and quality of place—as well as foster more cohesive metropolitan governance.

In this fashion, adding up the *Blueprint's* current ideas across these policy domains reveals the broad outlines of a renovated federal policy stance. (For more information on the *Blueprint* Policy Series please visit www.blueprintprosperity.org.)

Blueprint recommendations for federal *leadership* and *vision,* for example, address (because no other level of government sufficiently can) key matters of national concern like metropolitan areas' innovation capacity, intermodal transportation, workforce quality, climate change, and regional governance. These recommendations are broad in scope and respond to market or government failures with lean, strategic interventions such as the creation of a new National Innovation Foundation (NIF); a Strategic Transportation Investments Commission and National Infrastructure Corporation; and a refocused Office of Innovation within the Department of Education.

Other recommendations aimed at *empowering* states, localities, and public-private partnerships suggest ways for Washington to catalyze much more robust, self-organized metropolitan problem-solving. Whether in the form of an industry cluster innovation program within NIF aimed at fostering local industry networks, a METRO program to stabilize and streamline support for MPOs, or a Sustainability Challenge to entice states and metropolitan

To help metropolitan America amass key prosperity drivers—and align them with cohesive regional governance—Washington must lead, empower, and maximize performance

	LEAD	EMPOWER	MAXIMIZE PERFORMANCE
Innovation	• Create a National Innovation Foundation (NIF)	• Establish a cluster-development grant program to support industry cluster initiative programs	• Create a Cluster Information Center to house cluster data, track cluster initiatives and programs, and collect and disseminate best practices
Human capital	• Redirect the Department of Education's Office of Innovation and Improvement to stimulate innovation and focus on results • Expand and modernize the Earned Income Tax Credit	• Make guaranteed access to higher education a centerpiece of community regeneration and encourage such efforts through a national competitive demonstration	• Assess student performance across all education levels • Invest in next-generation assessment, data, and accountability models
Infrastructure	• Establish a national vision for 21st-century infrastructure • Authorize a permanent Strategic Transportation Investments Commission (STIC) • Create a National Infrastructure Corporation (NIC)	• Offer more discretionary funding to metropolitan planning organizations • Require modally neutral treatment of highway and transit proposals	• Launch a TransStat 21st-century data and analysis initiative • Create an incentive pool to reward high-performing states and metros • Utilize market mechanisms
Sustainable, quality places	• Price carbon • Increase energy R&D through multidisciplinary discovery-innovation institutes • Catalyze the green retrofit market through "on-bill financing"	• Create Sustainability Challenge Grants to catalyze metro efforts to integrate housing, land use, transportation, and environmental policies • Initiate a Smart Transportation Partnership to help metro areas leverage the real estate potential around transit stations	• Collect and disseminate emissions data and best practices • Require energy information in real estate transactions through the Real Estate Settlement Procedures Act (RESPA)
Regional governance	• Apply a "regionalism steer" to essentially all federal policies through incentives that promote regional collaboration	• Create a Governance Challenge grant to reward regional coordination on any array of program areas	• Rebuild the nation's government statistics infrastructure • Develop a Metro Innovations Network to collect, disseminate, and promote best practices in regional governance

areas to devise inventive means of reducing carbon emissions, these recommendations call for a "bottom up" and demand-driven approach to policymaking. A separate Governance Challenge would reward deep-going, path-breaking experiments in metropolitan governance.

And then, a third set of policy recommendations aims to *maximize the performance* of government at all levels through a sophisticated array of metrics and performance standards. These recommendations range from a Cluster Information Center to track and monitor cluster performance data to real time pricing mechanisms to regulate energy usage to a TransStat initiative that would create a platform of data, metrics, analytic tools and spatial planning techniques to guide decisionmaking on transportation. This set of ideas also proposes the creation of a MetroExchange network for identifying and diffusing the best innovations in cross-boundary problem-solving.

Along these lines, MetroPolicy represents no single plan, no single rigid agenda, but instead a general style of problem-solving, a general approach to policymaking that aims not at some final "sorting out" of responsibility for metropolitan America but instead to maximize the effectiveness of the whole intermingled system of *shared* responsibility.

* * *

In sum, MetroPolicy holds out hope of providing the nation what it badly needs but now lacks: a focused, flexible, and enterprising partnership aimed at unleashing the full potential of the varied, dynamic, and interrelated localities that—added up—*are* the nation.

America is a metropolitan nation. It's time to start acting like one.

I. INTRODUCTION

The 2008 U.S. presidential election and the 44th presidency that will follow it come at a remarkable juncture.

Not only will the new administration make a new start of sorts, since no incumbent president or vice president will assume the presidency, but the new government and Congress will take office facing a series of massive uncertainties.

A litany of familiar concerns will top the list.

Iraq policy will need to be continuously tended to. The lingering fall out, financial and human, from the sub-prime mortgage crisis will have to be contained. And a number of long-term fiscal challenges posed by the nation's large and growing fiscal imbalances will need to be addressed.

Metropolitan areas are where the nation's future economic competitiveness, social health, and environmental sustainability will be decided.

Yet equally critical will be another challenge—the broader yet equally urgent challenge of arresting the nation's widely perceived drift, reclaiming a vision of a renewed prosperity, and responding to the often-troubling realities of an increasingly metropolitan nation in which economic vitality is uneven, income inequality is spreading, and global climate change is a fact.

Achieving such a renewal matters intensely and represents the ultimate goal of the *Blueprint for American Prosperity,* of which this report is a part.

Broad forces in the world are radically shifting the dynamics out of which prosperity must be wrung and altering the calculus of what matters in promoting it, threatening to leave the country out of position.

The forces in play are massive and test America's ability to compete economically, build a strong and diverse middle class, and grow in environmentally sustainable ways, as reported "MetroNation," the initial "framing" report in this series:[1]

- Expanded global competition, especially from China, is contesting the location of all sorts of economic activity, altering both what Americans do and for how much pay

- Demographic, educational, and labor market trends are exacerbating economic polarization and posing future workforce challenges
- Rapid world and national population growth and new environmental imperatives call into question the feasibility of growing in traditional ways

At the same time, as "MetroNation" further stressed, the intense concentration in large metropolitan areas of crucial factors of prosperity—innovation inputs, human capital, critical infrastructure, quality places—means that the nation's overall prosperity depends more than ever on the success of its 363 distinct but linked metropolitan areas.

Metros matter—inordinately. Chances are, metropolitan areas are where you work or attend school, make a living and a life, wrestle with traffic and think about your electricity bill. From Chicago and New York to Akron, Charleston, and Los Angeles, metropolitan areas large and small bind into common destiny the nation's major cities, its older and newer suburbs, and even nearby exurban and rural areas by virtue of their interwoven labor and housing markets.

But more than that, U.S. metros—added up—*are* the nation. This is the mathematics of "MetroNation."

Metros are the economy, because while the 100 largest metropolitan areas alone represent just 12 percent of the nation's land area, this network of interlinked commercial hubs generates two-thirds of U.S. jobs and three-quarters of the nation's output.

Metros are society, because 65 percent of the population lives in the 100 largest of them, with 85 percent of the nation's immigrants and 77 percent of its minority population residing there.

And for that matter, metropolitan areas encompass both America's carbon problem and its best carbon solutions, with the largest 100 accounting for 55 percent of U.S. carbon emissions but also including its most energy-efficient locations.

In that sense, metropolitan areas really are where the nation's future economic competitiveness, social health, and environmental sustainability will be decided.

- Metros are where workers, companies, universities, research institutions, industry associations, and governments will respond to and master global competition from Europe, China, and India—or not
- They are the arenas in which the nation's promise of inclusion and social mobility will be made good on—or not
- And they are in large part the sites where America's sustainability (and quality of life) will be improved (or not), and where the nation will surmount its traffic congestion, energy consumption, and land-use challenges—or not

Which is to say: The United States—like its competitors around the world—has become a full-fledged MetroNation whose future prosperity will be largely determined by the ingenuity, social health, and progress toward sustainability of its metropolitan areas.

And yet, here is the crux: Although America is more than ever a MetroNation it lacks a requisite body of public policy that might be called "MetroPolicy."

Washington debates and policymakers too often ignore

Why Metros Matter

American prosperity represents the sum of the fortunes of the nation's metropolitan areas. But what are these places and why are they so crucial for national success? "MetroNation," the first publication in Brookings' *Blueprint for American Prosperity* series and a companion to this one, provided some answers.

Metro areas, in the most literal accounting, join cities, their suburbs, and adjacent exurban or even rural areas together to delineate local economies that by virtue of their interwoven labor and housing markets share common economic destinies. In the U.S., these areas are defined by the Office of Management and Budget and consist of a densely populated core of at least 50,000 people—typically a city—along with all counties that exhibit strong commuting ties with that core. The nation's 363 metro areas are located in every state, in numbers that range from as few as one in Hawaii to as many as 25 in Texas. This report focuses primarily on the 100 largest metropolitan areas (by employment) in the U.S., which in 2005 had populations of roughly half a million people or more.

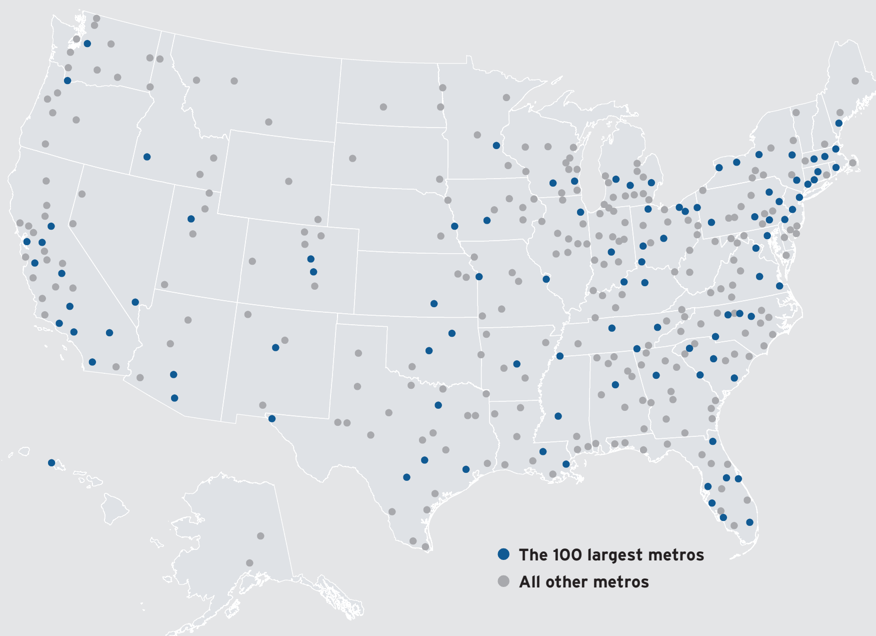
But that misses the power and true significance of these living, breathing, working centers of American life.

Metropolitan areas, as "MetroNation" demonstrated, contain and aggregate key "drivers" of the nation's prosperity—factors such as local innovation capacity, a place's store of human capital, and its basic infrastructure. In that sense, metros gather what matters. What is more, metros—through their density and diversity—augment the power of these drivers and so synergistically maximize the nation's prosperity, which is here held to consist not just of employment or output growth, but of a more balanced sort of success that aspires all at once to high-productivity economic performance, social inclusion, and environmental sustainability.[2]

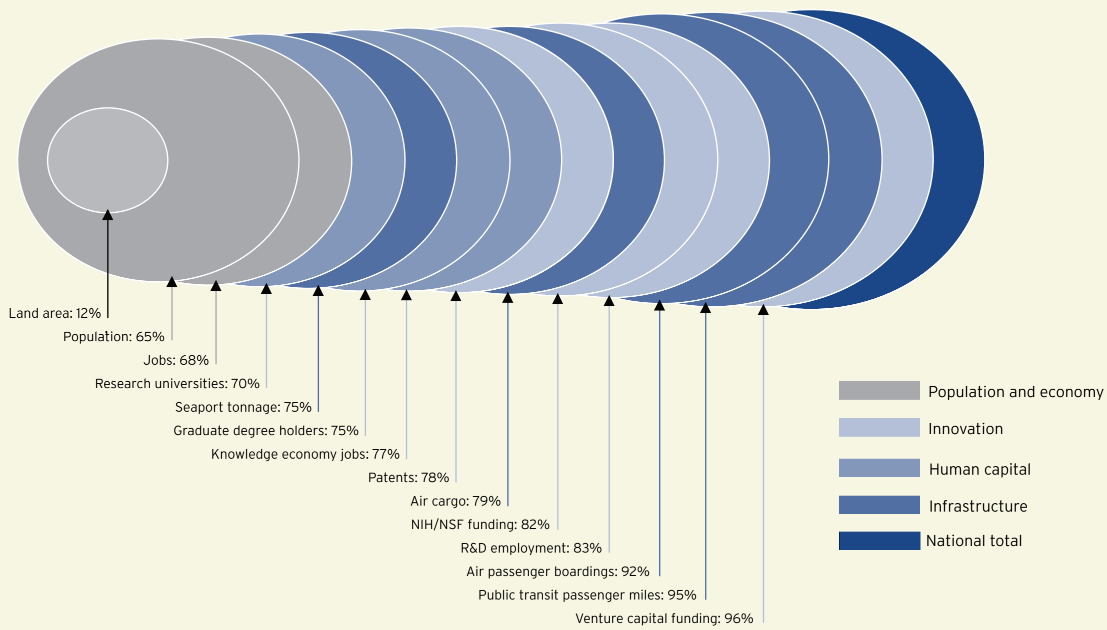
Along these lines, metros pack together the inputs of prosperity and generate it with special efficiency. In doing so, the metros represent not isolated subsections of the nation's economy, but instead comprise an interconnected network of economic regions whose impact as a whole is more than the sum of its parts.[3]

On the input side of the equation, the 100 largest metropolitan areas contain just 12 percent of the

The 100 largest metros are located in every region of the country



Major metros aggregate fundamental drivers of national prosperity



nation's land area and 65 percent of its population but account by themselves for 74 percent of the nation's college graduates, 76 percent of all good-paying "knowledge jobs," 78 percent of all patent activity, 79 percent of the nation's air cargo, and 94 percent of its venture capital funding.[4]

As a result, the largest 100 metros alone produce a massive 75 percent of the nation's gross domestic product.

Thirty-five of America's metros—if treated as nations—would rank among the world's largest 100 economies.[5]

In this sense, metropolitan areas—by definition, function, and impact—are literally not just a part of the economy. They *are* the economy.

The bottom line: America is a metropolitan nation.

the fact that cities and suburbs—metropolitan places—compose the real economies of America, the real locations of social striving and environmental progress.

At the same time, metropolitan leaders frequently find that Washington is failing to acquit its responsibility to help the nation secure the crucial determinants of both national and metropolitan success.[6]

And likewise, Washington has done too little in recent years to help local and regional leaders improve their ability to aggregate and align their shares of these assets with cohesive, decisive regional action. Instead, notwithstanding its interest in the success of metropolitan America, the federal government has actually complicated local problem-solving with intrusive rules, reinforced local jurisdictional fragmentation with stovepiped program delivery, and frustrated regional creativity through poor information, benchmarking, and best-practice exchange.

As a result, the levels of prosperity being generated for America in its metropolitan areas—while substantial—remain lower and more uneven than they could be, depressed by unexploited economic possibilities, dissipated human potential, and infrastructure and development failings that have embroiled many metropolitan areas in wasteful congestion and profligate energy consumption.

The upshot: The nation needs to aim a new round of domestic policy reform at releasing more of the unfulfilled potential of metropolitan America.

Hence this report: The second "core" report of the *Blueprint for American Prosperity*—and a companion to "MetroNation"—"MetroPolicy" assesses the present state of federal policy as it relates to U.S. metropolitan areas at a crucial moment and sketches the outlines of a new federal partnership among states, localities, and the private sector to strengthen metropolitan economies, build a strong and diverse middle class, and grow in environmentally sustainable ways.

Informed by the experiences of numerous metropolitan area leaders, "MetroPolicy" insists that the realities of a MetroNation make policy reform in its image a national imperative.

To that end, the following two chapters of "MetroPolicy" review the performance of the nation's 100 largest metropolitan areas on an array of prosperity indicators and survey the growing array of increasingly creative local efforts to advance metropolitan prosperity. These chapters document much vitality across metropolitan America. However, they more broadly observe significant untapped potential, as well as the bite of serious policy-related limitations on metropolitan-scale self-help. A scan of competitor nations' interventions to boost their standing across key drivers of prosperity underscores the urgency of maximizing metros' performance.

Subsequent chapters move on to policy critique and reform. Chapter 4 criticizes Washington's lag behind changing times in a metropolitan world, and concludes that Washington's drift has materially impeded metropolitan areas' (and so the nation's) ability to leverage key assets to maximum effect.

The realities of a MetroNation make policy reform in its image a national imperative.

Chapter 5 suggests the outlines of a new, metro-alert policy stance for the federal government, one that might unlock more of the potential for prosperity that lies untapped in U.S. metropolitan areas. In outline, this stance will clearly require revisiting both *what* the federal government does in a federalist system and *how* it does it, with the emphasis falling on ensuring all places can secure the basic drivers of prosperity while making sure that metropolitan areas specifically can act decisively to make the most of those drivers. In terms of specifics, the chapter illustrates what MetroPolicy might look like by providing concrete examples of the sort of reform proposals emerging from the in-depth papers of the *Blueprint* Policy Series, a companion policy-development effort. These specific proposals—which can be accessed in greater depth as the papers appear—give a more textured feel for how Washington might lead, empower, and maximize performance in helping the nation improve its standing on key drivers of prosperity and its metros in more forcefully deploying them.

And yet, for all that, it bears stressing as a final note that these pages do not pretend to advance a complete policy reform plan, or to resolve the nation's overarching fiscal challenge, or to take on such related but more general issues as entitlement reform or the state of the nation's health care system. Instead, the report seeks mainly to outline a new paradigm for policymaking and advance some suggestive applications, all with an eye to producing greater national prosperity.

Along those lines, it is also worth emphasizing a few final clarifications about what the report does and does not call for.

What it does *not* call for, for example, is special treatment for metropolitan areas, or a massive transfer of resources to them, or—in most cases—expensive investments at a moment of fiscal constraint. Though some might argue for that, these pages do not.

America is a MetroNation. It requires a federal government that can fully unleash its metropolitan potential.

At the same time, what this agenda *does* call for is a pervasive and deep-going rearrangement of federal policy in keeping with the compelling recognition that America is more than ever a metropolitan nation.

In that sense, the nation must act on what recent years have shown. The United States is a MetroNation. It requires a federal government that can fully unleash its metropolitan potential.

II. WHAT THE TRENDS SAY: THE STATE OF AMERICA'S 100 LARGEST METRO AREAS

For America to maintain its prosperity, its largest metropolitan areas—the main source and location of its vitality—must perform to their fullest potential, both in good times and during downturns.

To assure that they do, metros will need to adapt to rapid change and grow in increasingly productive, inclusive, and sustainable ways.

To examine their progress, this chapter assesses the standing and performance of America's 100 largest metropolitan areas (by employment) in terms of a collection of key indicators of prosperity reflecting its constituent dimensions—economic, social, and environmental. Where possible, the metros' competitive standing is considered in a global context. In addition, their performance is assessed relative to one another.

What do these assessments find? On balance, these pages conclude that while America's 100 largest metropolitan areas continue to represent—in aggregate—a competitive economic network, their collective dominance is no longer unchallenged on that score even as they continue to face troubling social and environmental challenges.

At the same time, a look beyond the metros' aggregate standing locates cause for both confidence and concern. Most notably, tremendous variability of performance characterizes American metropolitan areas. True, many metros rank among the most productive places in the world. However, virtually all metros face challenges on one or another dimension of prosperity, and the lag of many behind the leaders underscores at once the competitive challenges facing the entire interlinked system of metros

(and therefore the nation) and the significant productive potential waiting to be released.

As to the relevance of these readings based on statistics that largely predate the current U.S. economic downturn, it likely persists, as the basic story reported here reflects underlying determinants that do not change quickly. In fact, the present economic slowdown only underscores the urgent need to understand the real sources of the nation's prosperity and develop better policies built on those understandings.

Virtually all metros face challenges on one or another dimension of prosperity.

In this vein, then, this chapter draws two major conclusions:

- **As a group, large metropolitan areas remain the world's leading economic network but face serious social and sustainability challenges**

- **Looking closer, individual metros' performance on key indices of prosperity is highly uneven, though not random**

The Three Dimensions of American Prosperity

The *Blueprint* asserts that true prosperity is based on achieving three types of growth:

- **Productive growth** that boosts innovation, generates quality jobs and rising incomes, and helps the United States maintain its economic leadership

- **Inclusive growth** that expands educational and employment opportunities, reduces poverty, and fosters a strong and diverse middle class

- **Sustainable growth** that strengthens existing cities and communities, conserves natural resources, and advances U.S. efforts to address climate change and achieve energy independence

To be sure, productive, inclusive, and sustainable growth are each important in their own right. But in several ways, these dimensions of prosperity are interdependent and actually can reinforce one another.

Productive growth and inclusive growth are interrelated, as tighter labor markets characteristic of robust, productive economic growth help to lift wages and reduce poverty rates. Productive growth and sustainable growth are interrelated, as increased productivity sparks innovations that improve environmental sustainability while rising incomes generate government resources and a public mandate to protect air, water, and land. And sustainable growth and inclusive growth are interrelated, as metro areas with greater population density—one indicator of greater sustainability—tend to exhibit greater wage equality among their workers.

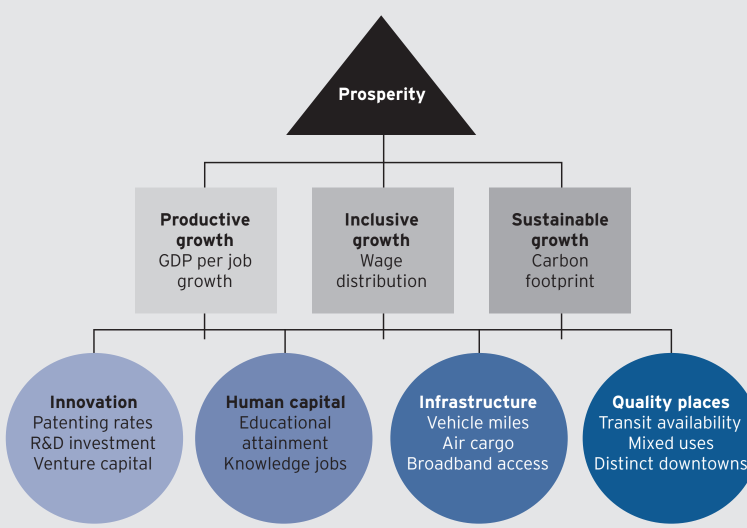
Productive, inclusive, and sustainable growth, and the prosperity to which they contribute, reflect a desired outcome for America's future. But achieving these growth goals requires that the nation strategically invest in the institutions, people, and places that can produce those outcomes.

Four sorts of assets in particular play crucial roles in driving prosperity:

- ***Innovation***—or the ability to conceive and develop new products, new services, new technologies, new ways of organizing work, and new business models—is crucial to sustaining national economic advantage, generating and retaining high-quality jobs, and responding to the challenges and opportunities presented by climate change
- ***Human capital***—both educated and skilled labor—drives innovation but is also a prerequisite for income growth, upward mobility, and access to opportunity
- ***Infrastructure***—ranging from roads, transit, and ports to telecommunications networks—can determine how efficiently and rapidly goods, people, and information move within and across markets and can also help improve air quality, conserve land and natural resources, and reduce consumption of gas and electricity
- ***Quality places***—dense, distinctive cities and suburbs that are rich in amenities and transportation and housing choices—are essential to attracting and retaining innovative firms and talented workers, promoting energy security, and growing in environmentally sustainable ways

Strategic investment in the above drivers is necessary if the nation is to pursue a truly prosperous future. Achieving such prosperity through productive, inclusive, and sustainable growth is vital, as America cannot grow for growth's sake alone.

Innovation, human capital, infrastructure, and quality places are crucial drivers of a multi-dimensional brand of American prosperity



1. AS A GROUP, LARGE METROPOLITAN AREAS REMAIN THE WORLD'S LEADING ECONOMIC NETWORK BUT FACE SERIOUS SOCIAL AND SUSTAINABILITY CHALLENGES

Taken together, America's major metropolitan areas remain a critical source of national economic prosperity, by virtue of their special power to facilitate innovation and commerce through proximity and exchange.

Solid economic growth and significant gains in productivity in many American metro areas have generated substantial wealth in recent years. Notwithstanding the current downturn, metropolitan areas remain the driving force of America's economy and its core contributors to productive growth.

And yet, economic strength has not been matched by equal levels of social inclusivity or sustainability. In fact, a look at the nation's 100 largest metropolitan areas as a single interdependent group suggests, to the contrary, that while the metros' aggregate economic performance has remained mostly solid in recent years, the network's performance on other dimensions of prosperity has been deteriorating.

Large American metros remain a critical source of productive growth for the nation although signs of slippage have appeared

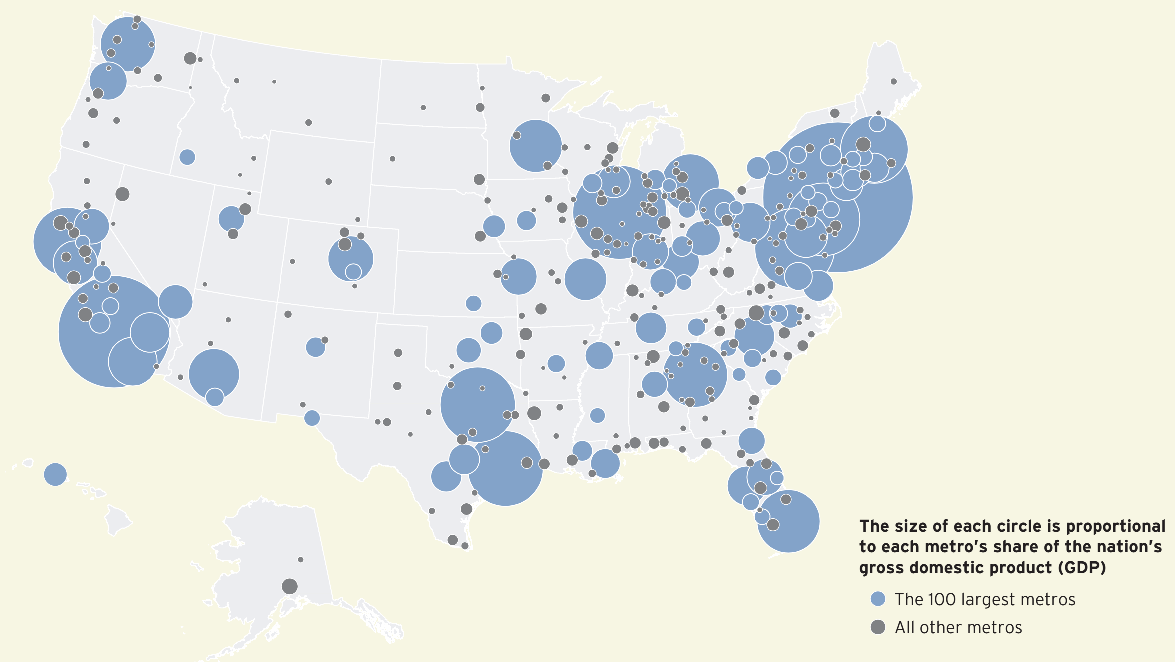
Large U.S. metropolitan areas, to begin with, constitute an unparalleled lineup of economic competitors—though their dominance is no longer unchallenged.

Measures of productive growth show that the 100 largest U.S. metros continue to lead the world on key indicators. The trends are impressive:

U.S. metros produce high standards of living

The most basic measure of the living standards produced by an economy is its gross output per capita, measured by its GDP per capita, and U.S. metropolitan areas have improved significantly on this in recent years.[1] On this measure, the 100 largest metropolitan areas have boosted their real standard of living 1.5 percent a year since 2001, contributing to similar increases for the nation. That has meant that the U.S.—propelled by its metros—has increased its standard of living faster than almost all large advanced countries, including Austria, Denmark, France, Germany, Italy, Japan, and the Netherlands. Meanwhile, the prosperity levels of developing countries like China and India—while rising

The 100 largest U.S. metros generate 75 percent of the nation's annual GDP



Source: Brookings analysis of Bureau of Economic Analysis data.

About the Analysis

"MetroNation" revealed how the interlinked, interdependent network of metropolitan areas that is metropolitan America uniquely aggregates the nation's store of key prosperity-producing assets.

These assets—including key innovation inputs, concentrations of human capital, critical infrastructure, and quality places—accumulate at high densities within metro areas and represent the key drivers of productive, inclusive, and sustainable prosperity, not just for metropolitan areas, but for the nation as a whole. As such, metros function as crucial nodes of exchange along the nation's inextricably linked-up circuit of economic, social, and environmental flows.

So how are the metros doing in achieving true prosperity? This report seeks to answer that question by assessing the state of metropolitan America through the lens of a particular geographical slice and by way of a series of indicators of prosperity as it arises from the constituent dimensions—economic, social, and environmental—deemed crucial by the *Blueprint*.

Geography

This report takes as its central concern the performance of the 100 largest metropolitan areas in the United States. These 100 metros—also referred to throughout the report as the "100 largest metros"—were selected based on their level of employment in the year 2005. The enormous relative contribution of these 100 metros to national outcomes, combined with their geographic, economic, and demographic diversity, enables an examination of the health of their aggregate performance and also the variability of their performance on key prosperity measures.

Data

Where "MetroNation" organized its statistical analysis around the four drivers of prosperity, "MetroPolicy" focuses its trend information on nearly 30 indicators of metropolitan performance on the three dimensions of progressive prosperity—productive growth, inclusive growth, and sustainable growth.

Numerous international, federal, and private datasets were employed in assessing performance and benchmarking it. While the most recent data were sought, geographic coverage and comparability across and among geographies were the principle criteria for selection. This allowed for analysis of both aggregate strength and variable performance. However, in some cases the need for coverage forced the use of data as many as three years old.

At any rate, though, data illuminating important indices of performance on the three dimensions of prosperity were located, aggregated, and organized in the present chapter of "MetroPolicy."

To assess how metropolitan America is doing on generating productive growth that boosts innovation, creates quality jobs and rising incomes, and drives economic competitiveness, indicators examined include:

- Metropolitan areas' contribution to gross domestic product
- Production of a highly-educated, highly-skilled workforce
- Development of high-value industry clusters

To measure performance on achieving inclusive growth that expands education and employment opportunities, reduces poverty, and builds a strong middle class, indicators examined include:

- Wage growth and inequality
- Educational attainment by race and ethnicity
- Changes in the size of the middle class over time
- Poverty rates and the spatial concentration of subsidized housing

And to assess progress in attaining sustainable growth that conserves resources, increases energy-efficiency, and advances efforts to address climate change, indicators examined include:

- Development patterns and the consumption of rural land
- Transportation trends
- Metropolitan carbon footprints

To bring it all together, this chapter of "MetroPolicy" concludes by grouping the 100 metros based on their performance across summary indicators for each of the three categories of prosperity: growth in GDP per job for productive growth; wage inequality for inclusive growth; and carbon emissions per capita for sustainable growth. This composite analysis begins to provide an assessment of metros' performance not on the elements of prosperity, but on prosperity itself.

Ultimately, the data demonstrate that despite the intense concentration of prosperity assets within metropolitan America, the performance of large U.S. metropolitan areas remains mixed. At the same time, while all metros face varying sets of challenges and opportunities, no metro confronts them alone.

fast—remain far below America's. As a result, the nation's per capita GDP of almost $42,000 in 2005—supported by the metros' figure of more than $48,000—continued to exceed that of all nations but tiny Luxembourg.[2]

Many individual U.S. metros out-perform even their most vibrant counterparts in the world on per capita GDP

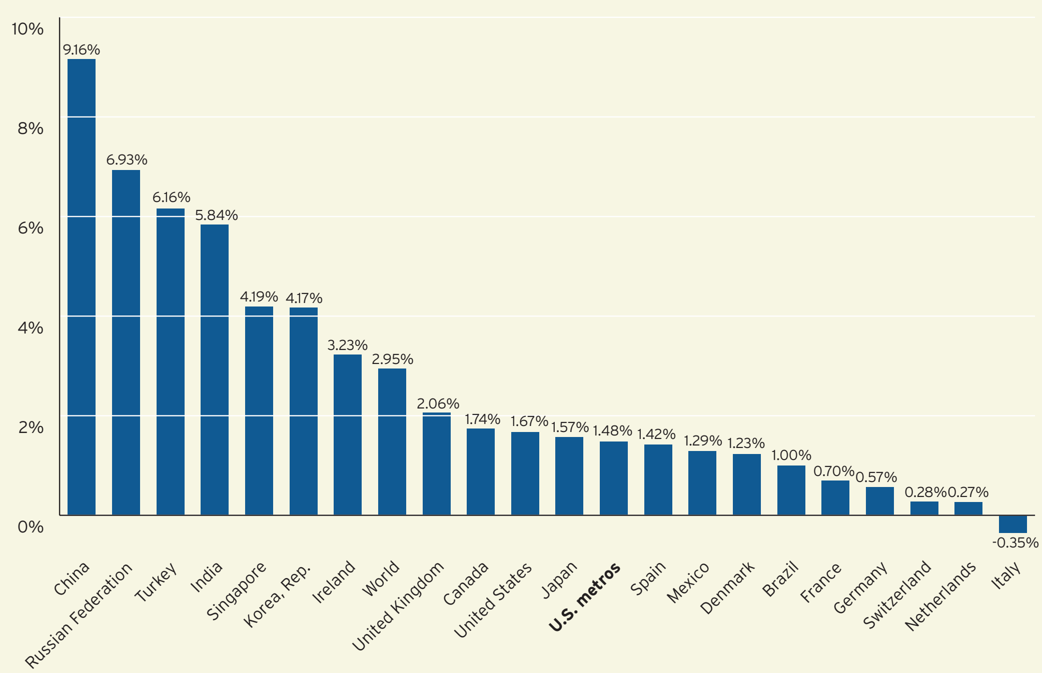
In 2005, for example, American metros accounted for 22 of the 25 "urban agglomerations" with the highest GDP per capita in the world, according to an Organization for Economic Cooperation and Development (OECD) analysis of 78 large metropolitan economies around the globe. Topping the list of world leaders were such expected American powerhouses as **Boston, Minneapolis, New York, San Francisco, Seattle,** and **Washington**, all of which generate per capita output of more than $50,000 a year. But equally suggestive of U.S. strength was the appearance among this select group of a number of metropolitan areas typically thought of as struggling—places such as **Cleveland, Detroit,** and **Pittsburgh**. Troubled in parts, wrenched by economic change, even these regions surpass international economic centers like Vienna, Sydney, Toronto, and Tokyo on the most basic index of economic prosperity, GDP per capita.[3]

And yet, U.S. metropolitan areas as a group face increasing long-term productive-growth challenges. In this respect, new technologies, new capital flows, and new economic, educational, and investment policies around the world are dramatically altering what nations, firms, and workers do—and where they do it.

Developing economies are growing and upgrading, as reports "MetroNation."[4] Emerging as well as established countries are increasing their investments in science, research, and education. And above all, markets for goods, capital, and labor have become more globally integrated, bringing billions of people and hundreds of new regions into the world trading system.

In this environment, concerns about metro America's future productivity raise parallel concerns about the largest metros' long-term ability to maintain their own and America's high standard of living.

The U.S. and its 100 largest metros recorded an annual GDP per capita growth rate higher than several industrialized countries between 2001 and 2005; however, growth rates in developing economies like China and India were much higher



Source: Brookings analysis of WorldBank World Development Indicators data; U.S. Bureau of Economic Analysis GDP by Metropolitan Aread data; and BEA GDP by state data.

Productivity growth has slowed

Economists generally agree that few indicators matter more to economic vitality than productivity growth. For example, the economist Paul Krugman deems productivity growth "the single most important factor affecting our economic well-being."[5] And yet, while productivity in the 100 largest metros remains formidable, its growth slowed markedly in the most recent year for which data are available. Between 2001 and 2004, GDP per job growth steadily increased from 2.3 percent per year to 2.8 percent per year. However, between 2004 and 2005, that growth dropped in the metros to just 1.4 percent.[6] Furthermore, U.S. productivity measured on a per-hour basis actually trails that in several OECD countries, including Belgium, Ireland, the Netherlands, and Norway. Recent GDP per hour growth rates also lag a number of countries, including the Czech Republic, Greece, Hungary, Japan, and South Korea.[7] Finally, a series of tepid or erratic per-hour readings in recent quarters at the national level have been raising questions about what lies ahead.[8]

Looking at several key influences on the nation's metropolitan productivity reveals additional areas of concern:

The production of scientists and engineers is stagnating

Metropolitan areas play a crucial role in producing, gathering, and matching to the economy the highly skilled people who play an important role in boosting innovation and productivity and so prosperity.[9] However, between 1985 and 2005, the number of science and engineering (S&E) bachelor's degrees awarded per million residents in the U.S. increased only 13 percent. By contrast, other countries—regardless of their stage of economic development—have been increasing their production of degree holders far faster. China, South Korea, and the United Kingdom all posted triple-digit percent gains in their per capita rates of S&E degree granting, for instance, increasing their production by 373, 125, and 161 percent, respectively. Germany's 60-percent increase and Japan's 33-percent gain also outpaced the U.S. over this time.[10] Meanwhile, the per-capita number of new science and engineering PhDs has actually declined since 1995.[11]

While productivity in the 100 largest metros remains formidable, its growth has slowed.

Research and development (R&D) investment as a share of GDP is faltering

R&D—another crucial driver of innovation and productive growth—is also a massively metropolitan activity in America, with 84 percent of the nation's R&D-related gross product emanating from the 100 largest metros.[12] But here, too, U.S. performance has been slipping. Between 1991 and 2005, for example, expenditures on R&D as a share of GDP slipped from 2.7 percent to 2.6 percent, leaving the nation seventh in the world behind Sweden, Finland, Japan, South Korea, Switzerland, and Iceland. By contrast, average R&D expenditures across all OECD countries increased slightly. Given trends like these and new activity in emerging countries, it is no surprise that the U.S. share of global R&D investment fell from 46 to 37 percent between 1986 and 2003, according to the Council on Competitiveness.[13]

U.S. dominance of patenting is being challenged

Cutting-edge invention is also an intensely metropolitan activity, with metros accounting for 78 percent of all patents granted in the U.S. And yet, the 100 largest metros' 15-percent growth in patents granted per 100,000 residents between 1975 and 2005 fell far behind both the 71-percent increase in the rest of the world, and the 120-percent increase in the European Union and Japan combined. As a result, the share of U.S. patents granted that originated in the U.S. fell from 65 percent to 52 percent between 1975 and 2005.[14]

The U.S. continues to fall behind on broadband usage, cost, and quality

Finally, while all of the nation's metro areas—and even most of its rural locales—have access to some form of broadband internet connection, the United States is steadily falling behind other countries on broadband subscription rates, cost, and speed. According to the OECD, the U.S. fell from fourth to 15th between 2001 and 2006 based on the number of broadband subscribers per capita. The nation fares little better on rankings incorporating price, speed, and per-household penetration, ranking 12th. In fact, countries like South Korea, Japan, Finland, Sweden, and France all enjoy significantly faster broadband connections despite dramatically lower prices.[15]

Major metros, meanwhile, are falling short on indicators of inclusive growth

Looking beyond their generally strong aggregate performance on measures of productive growth, America's large metropolitan areas as a group are performing far less well on indices of inclusive growth—growth that expands economic and educational opportunities, and fosters a strong and diverse middle class.

In fact, social and economic inclusion seems to be eroding in metropolitan America.

Several trends are especially troubling:

Wages differ dramatically between top and bottom earners

To begin with, wage inequality—as measured by the ratio of the highest to the lowest hourly wage deciles—remains high. In fact, in 2005, individuals in the top 10 percent had wages 6.3 times higher than wage earners in the bottom 10 percent.[16] And the U.S. stands out among advanced nations for its high levels of inequality. In 2005, America's inequality ratio exceeded the OECD average by 40 percent.[17]

The middle class is shrinking

Not surprisingly, given those trends, an analysis of the size of the middle class—defined here as families receiving 80 to 150 percent of their metro area's median income—reveals significant erosion over the last 35 years.[18] Within the 100 largest metros, the proportion of all families with "middle-class" incomes shrunk from 43 percent in 1970 to just 32 percent of them in 2005. The share of upper-income families increased eight points to 29 percent, meanwhile, but the lower-income share also rose: Its four-point growth to 40 percent means that lower-income families now make up the largest share of families in the 100 largest metros.[19] Not surprisingly, middle-class neighborhoods evaporated even more rapidly due in part to rising income segregation.[20]

Areas of concentrated metropolitan poverty, which waned during the 1990s, appear to be re-emerging

Concentrated poverty—the geographic clustering of poor populations into very poor neighborhoods, with all of its negative implications for residents' life chances—also seems to be growing again.[21] This is disappointing, because during the 1990s the share of poor individuals living in very poor neighborhoods declined in major metro areas.[22] However, concentrated *working* poverty—as measured by receipt of the Earned Income Tax Credit (EITC)—appears to be re-clustering in this decade. Between 1999 and 2005, the percentage of tax filers claiming the EITC who lived in ZIP codes where at least

40 percent of filers received the credit rose from 11.7 percent to 13.2 percent within the 100 largest metros.[23] Such an up-tick may be temporary, but nonetheless signals particular challenges to upward mobility for a significant share of lower-income metropolitan families.

Turning to the most crucial determinant of social inclusion—education—reveals the sort of deficits that limit many metropolitan Americans' access to opportunity, and keep America from achieving truly inclusive growth:

Troubling achievement deficits and disparities continue to plague secondary education

Boosting education levels and narrowing educational disparities can widen access to opportunity and help reduce inequality.[24] And yet, in recent years, skills and educational attainment have stagnated, even as racial disparities have persisted. At the secondary level, a recent OECD assessment revealed that U.S. 15-year-olds rank near the bottom of the industrialized world in their ability to solve practical problems that require mathematical understanding and below the OECD average in science competency.[25] That wide achievement gaps separating U.S. black and Hispanic students from white students account for much of this deficit underscores the stark racial disparities that shape the nation's opportunity structure. In 2006, just 5.5 percent of non-Hispanic Asians and 5.8 percent of non-Hispanic whites age 25 to 34 lacked a high school diploma in the 100 largest metropolitan areas whereas 13.0 percent of non-Hispanic blacks and 34.3 percent of Hispanics lacked one.[26]

Higher education remains similarly spotty

First, higher-education completion rates are mediocre. While the U.S. ranks second among over 100 countries tracked by the United Nations on the share of its young adults enrolled in higher education, it drops to 16th in the percentage that actually go on to complete a degree.[27] And the share of 25-to-34-year-olds holding a four-year degree increased only marginally in recent years—from 31.4 percent in 2000 to 32.7 percent in 2006—suggesting this group will fall short of the nearly 5-percentage point national increase in bachelor's degree attainment in the 1990s.[28] Meanwhile, not even achievement of a bachelor's degree in the U.S. guarantees a graduate possesses a modicum of basic skills. To the contrary: Skills declined among college graduates between 1992 and 2003, according to a recent report by the U.S. Department of Education. Between 1992 and 2003, according to the report, the share of all graduates proficient in prose and document literacy dropped nine and 12 percentage points, respectively, while those proficient in quantitative literacy remained unchanged.[29]

Large metros are struggling with significant sustainability challenges

Long-term prosperity also requires ensuring that metropolitan areas' growth is environmentally sensitive and answers to the need to reduce energy consumption and address global climate change. But here, too, a number of performance and capacity measures suggest that America's larger metropolitan areas are struggling to deliver environmentally sustainable development patterns and contain their energy consumption.

Several trends are increasingly troubling:

Low-density suburbanization is rapidly consuming metros' rural land reserves and widening the urban footprint

Between 1980 and 2000, the growth of the largest 99 metro areas in the continental U.S. consumed 16 million acres of rural land, or about one acre for every new household.[30] Indicative of this outward sprawl is the fact that more than 70 percent of the 100 largest metros' recent population growth over the same period of time occurred outside of principal cities—the largest and most established cities within each metro in terms of population and employment.[31] Such decentralizing settlement patterns—in addition to potentially cutting against the productivity and inclusivity benefits of spatial agglomeration—can have serious negative implications for the integrity of regional carbon emissions, local ecosystem health, the costs of providing public services and infrastructure, and the local quality of life.[32]

Job sprawl is alive and well

Employment is also decentralizing. Between 1998 and 2004, the share of all jobs located within a three-mile ring of the 100 largest metros' central business districts (CBDs) dropped from 23.2 to 21.7 percent. The share of jobs between three and 10 miles from CBDs also declined. Meanwhile, the share of metro jobs located 10 miles out or more increased 2 percentage points from 42.4 to 44.4 percent, a trend that can drive up commuting distances and vehicle miles traveled.[33]

Miles traveled on roads are outpacing population growth and driving up congestion and carbon emissions

What is more, U.S. transportation has grown increasingly less efficient in recent years. Vehicle miles traveled (VMTs) in the largest 100 metropolitan areas rose 10.2 percent between 2000 and 2005—nearly twice as fast as population.[34] Congestion has likewise accumulated: The average traveler in the nation's 85 largest urbanized areas tracked saw her annual traffic delays increase from 16 hours in 1982 to 44 hours in 2005—a

175-percent increase. All told, these delays added up to a $67.6 billion drag on metropolitan productivity in the later year—one example of several large negative externalities of congestion that economists view as genuinely significant.[35] Given the virtual absence of fuel-efficiency increases over the last two decades, moreover, these trends have contributed to a 100-metro increase in transportation-related carbon emissions from 232 to 253 million metric tons between 2000 and 2005, a 9-percent increase.[36] Largely as a result, the U.S. continues to rank first among major world economies in per-capita carbon emissions, with roughly double the emission rates of Germany and the UK.[37]

Underlying these issues, meanwhile, are massive problems with a key determinant of national competitiveness as well as sustainability: metropolitan infrastructure systems.

Major metros' transportation and infrastructure networks are frequently unbalanced, insufficient, and deteriorating.
More than half of the largest 100 metros offer no real alternative to automotive commuting.[38] At the same time, antiquated funding schemes and local and national biases for road-building have for years favored highway building at the metropolitan fringe and short-changed urban infrastructure.[39] This has at once exacerbated suburban sprawl and led to an epidemic of deterioration. No more than 32 percent of metro areas' roads could be rated in "good" condition by the Federal Highway Administration in 2004.[40] Adding up the resulting infrastructure deficit, the American Society of Civil Engineers (ASCE) estimates a total five-year investment need of more than $500 billion for road and bridges alone. The figure grows to $1.6 trillion if the accounting is widened to include needed investments in such other infrastructure as the nation's airports, its water and sewer systems, schools, and transit. And yet, notwithstanding the magnitude of the needs, the federal government's infrastructure investments as a share of GDP have declined in recent decades. Making matters worse has been an absence of clear priorities about where and how federal dollars should be invested for the greatest impact.[41]

In sum, America's larger metropolitan areas—while enjoying continued economic strength in a changing world—face significant shared challenges that put the nation's future prosperity at risk. The possibility of slowing productivity growth in major metros, for example, raises serious questions about the long-term competitiveness of the U.S. economy that will bear watching. Meanwhile, the reality of the metros' serious social and environmental problems suggest the nation has not yet complemented past economic success with success at widening the circle of opportunity and ensuring that growth is sustainable. In fact, at a time of economic uncertainty, trends are moving in the wrong direction on the latter two dimensions of prosperity.

2. LOOKING CLOSER, INDIVIDUAL METROS' PERFORMANCE ON KEY INDICES OF PROSPERITY IS HIGHLY UNEVEN, THOUGH NOT RANDOM

Aggregate trends, however, obscure another matter of concern: Large American metropolitan areas vary massively on measures of prosperity. Look beneath their aggregate strength and the 100 largest metropolitan areas display vastly different levels of economic vitality. Probe their social health or sustainability, and the metros exhibit tremendously disparate circumstances. Variation is everywhere.

And yet, this variation is not random. Clear patterns, or at least types of experience, can be discerned in metros' diversity.

The existence of this diversity and the nature of it matters intensely for securing the nation's wider prosperity.

The performance of individual metros on measures of prosperity varies widely

Notwithstanding their aggregate economic strength and general malaise on social and sustainability issues, the 100 largest metropolitan areas perform at staggeringly different levels on key indices of prosperity.

On measures of productive growth, metropolitan areas display vastly different levels of economic vitality. Take productivity and productivity growth themselves, for example. On GDP per job, the standard measure of regional productivity, the 20 best-performing metros in the nation out-performed the worst-performing ones by a factor of 1.6 in 2005. That is, the 20 most productive metros—frequently "knowledge-economy" high-fliers like **Boston; San Jose, CA;** and **Seattle**—generated about $111,000 worth of goods and services per job on average in 2005 while the 20 least productive locations—often struggling industrial locations like **Buffalo, NY; Greenville, SC; Scranton, PA;** and **Youngstown, OH**—managed to produce just $71,000 worth (the average 100-metro figure was $97,000). Turning to the *growth* of productivity, a critical measure of whether a place is "moving in the right direction," GDP per job gains in the top tier of metros outpaced that in the bottom tier by a nearly three-to-one margin. Metros like **Des Moines, IA; Durham, NC;** and **Portland, OR,** in this respect, posted an average annual GDP per job growth of some 3.24 percent during the years 2001 to 2005 whereas metros like **Jackson, MS; Phoenix;** and **Greensboro, NC** managed to increase their productivity by no more than 1.13 percent a year over those years.

No wonder, given these statistics, that the basic standard of living and its growth in the largest 100 U.S. metros also varies massively. On this front, the $57,800 collective per capita GDP of top-quintile powerhouses like **Boston; Dallas; Denver; Philadelphia;** and **San Jose, CA** nearly *doubled* the $30,700 per person standard of living generated in the least-prosperous 20 metros (places like **Akron, OH; El Paso, TX; Fresno, CA; Riverside, CA;** and **Syracuse, NY**) in 2005. Similarly, the 20 metros with the fastest-increasing standards of living (including **Des Moines, IA; San Diego;** and **Trenton, NJ**) were in recent years increasing their basic standard of living over seven times faster on average than the slowest-growing locations (including **Louisville, KY; Tucson, AZ;** and **Worcester, MA**). In short, massive differences persist in the basic economic functioning of U.S. metropolitan areas.

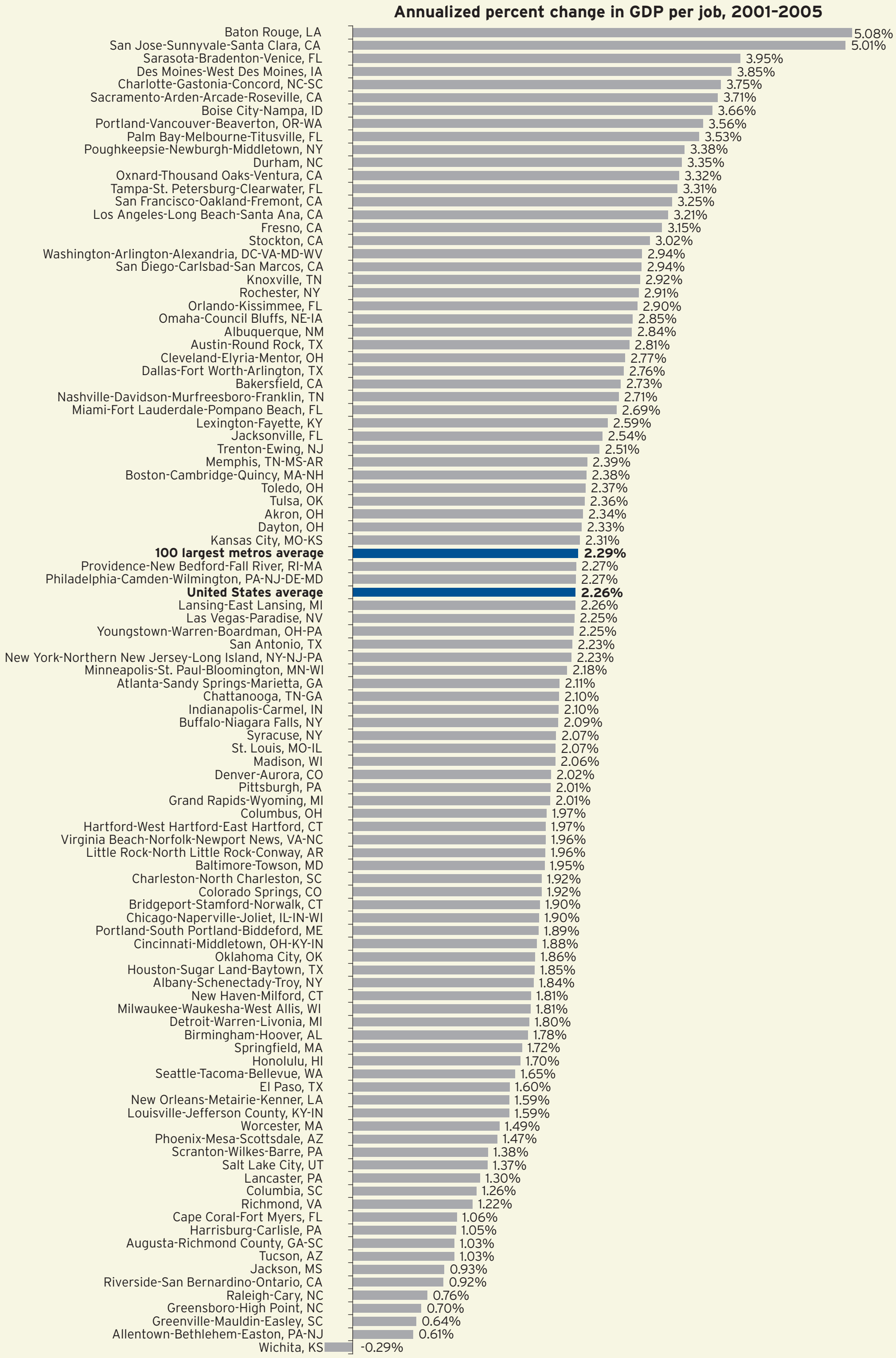
On indicators of social and economic inclusion, large metros are also performing at highly divergent levels. Most troubling here is the uneven performance of U.S. metros on measures of wage inequality and educational attainment by race.

Wage inequality varies sharply. Across the 100 largest metros, the average ratio between the 90th and 10th wage deciles—in other words, between the best- and worst-paid strata of earners—reached about 5.2 to 1 in 2005 for the 20 most equitable metros, including places like **Hartford, CT** and **Portland, ME**. By contrast, the same ratio for the least equitable metros (including places like **Houston, Washington,** and **Los Angeles**) exceeded 6.7-to-1.[42]

Similarly stark divides characterize education gaps between the races in the metros. In 2006, for example, more than 25 percentage points separated the high-school diploma attainment rates of whites and non-whites aged 25 to 54 in the most bifurcated 20 metros. Nearly one-third of the non-white working-age population in places like **Houston; Los Angeles;** and **Sarasota, FL** lacked a diploma. By contrast, the equivalent gap in the 20 most evenly educated metros—including places like **Columbus, OH; Pittsburgh;** and **Tampa, FL**—reached just 5.6 percent, with 7.2 percent of whites and just 13 percent of non-whites going without a diploma. Similar divides characterize bachelor's degree attainment rates, on which the most educationally fissured metros contend with a 22.0 percentage point gap (46.5 percent of whites have graduated from college compared to just 24.5 percent of non-whites). By contrast, the bachelor's degree gap by race closes to 9.7 percent in the most evenly educated metros.[43] In this respect, U.S. metro residents exhibit massively different social and earnings prospects.

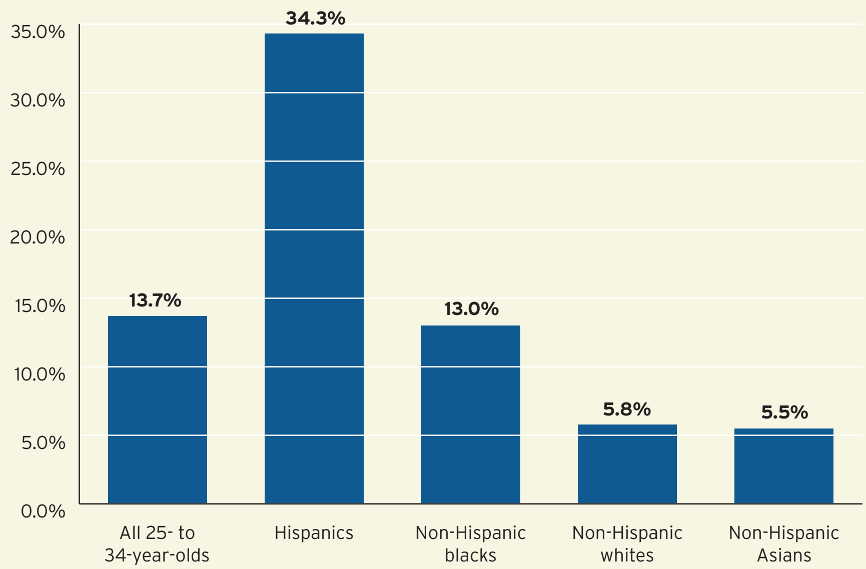
Finally, the performance gaps are even wider on measures of environmental and developmental sustainability. Most crucially, metros' carbon emissions vary tremendously across the country, as reveals new research conducted for the *Blueprint* by Marilyn Brown, Frank Southworth, and Andrea Sarzynski.[44] On this critical front, metros' carbon emissions per capita range from 1.64 met-

The 100 largest metros vary remarkably on productivity growth, ranging from over 5 percent annually in Baton Rouge, LA, to -0.3 percent in Wichita, KS



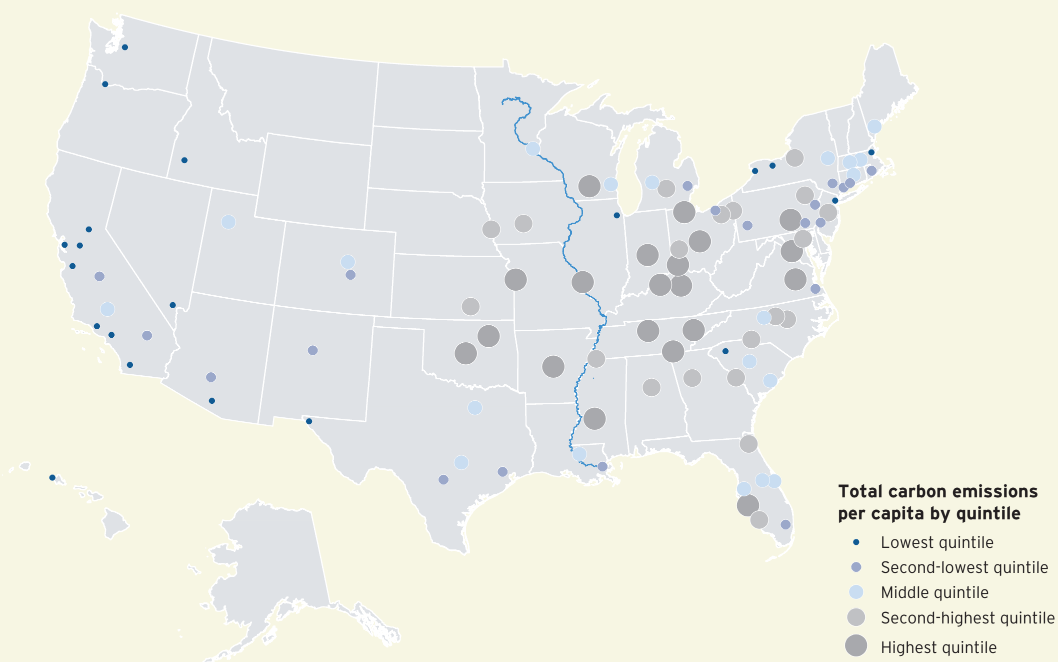
Source: Brookings analysis of Bureau of Economic Analysis Local Area Personal Income data and GDP by Metropolitan Area data.

The share of 25- to 34-year-olds that had not graduated high school varied considerably by race and ethnicity within the 100 largest metros in 2006



Source: Brookings analysis of Bureau of Economic Analysis Local Area Personal Income data and GDP by Metropolitan Area data.

Metros east of the Mississippi River—with the exception of larger, dense metros like Boston, Chicago, and New York—contend with larger carbon footprints than those west of the Mississippi River



Source: Marilyn Brown, Frank Southworth, and Andrea Sarzynski, "Shrinking the Carbon Footprint of Metropolitan America" (Washington: Brookings Institution, 2008).

ric tons per person in the 20 metros with the smallest per capita carbon footprints to 3.14 metric tons per capita in the 20 metros with the "dirtiest" profiles. Residents of sprawling, automotive metros like **Columbus, OH; Harrisburg, PA;** and **St. Louis** were in 2005 emitting around 1.9 times the amount of carbon as those in dense, transit-rich metros such as **Chicago, New York,** and **San Francisco**. In short, U.S. metros are functioning at widely differing levels of efficiency on one of the most important indicators of long-term environmental sustainability.

* * *

And so it goes. On one measure after another, the nation is filled with metros performing at remarkably different levels on key factors of prosperity. The 20 most college-educated metros—places like **Boston; Denver; Madison, WI;** and **Washington**—boast bachelor's degree attainment rates nearly twice as high as those in the least college-educated locales, such as **Baton Rouge, LA; Dayton, OH; Louisville, KY;** and **San Antonio.** Metros experiencing the largest declines in the middle class between 1970 and 2005 saw their share of middle class families drop over three times faster than the slowest-declining quintile.[45] And likewise, the 20 least compactly growing metros consumed 18 times more rural land for every new housing unit than the 20 most compactly growing metros.[46]

In sum, these variations are troubling—not just for the well-being of U.S. metros and their residents but for the future of the whole country. Metros matter—by dint of the special functions they carry out for the nation by virtue of their size, density, and specialization. They are the nation's hot spots of economic exchange and clustering; its chief arenas of access to opportunity; the main places in which people live. For that reason, the wide gaps in performance that separate the worst-performing metros from the best represent weaknesses in the nation's underlying network. Such gaps are places where the inherent potential of metropolitan areas to deliver superior economic performance, social inclusion, or environmental sustainability is not being realized. In short, too much potential is being left on the table that needs to be tapped if the nation is to maintain its prosperity in an increasingly competitive world.

Amidst all this variation, meanwhile, several major types of metropolitan areas can be discerned

In this respect, metros' varied performance is not random. For all the metros' heterogeneity, a relatively few distinct sorts of metropolitan experience can be described based on individual metros' particular strengths and weaknesses.

For example, three broad types of metro can be identified by ranking the performance of the 100 largest metropolitan areas on three "summary" indicators of prosperity—productivity growth from 2001 to 2005, which stands in for "productive growth;" top- versus bottom-decile wage inequality, which measures social inclusion; and carbon emissions per capita, which can summarize a metro's degree of sustainability.[47] In this fashion the metros can be grouped as follows:

- **High-performance metros,** such as **Boise, ID** and **Portland, OR**—enjoy better than average rankings across all three indictors, with particularly stellar performance in at least one category. About one in five large U.S. metros fall into this category
- **Low-performance metros,** which account for a quarter of the 100 largest metros, face exactly the opposite reality: These places, epitomized by **Birmingham, AL,** post sub-par rankings across all three summary indicators and reside at or near the bottom of the pack in at least one category
- **Mixed-performance metros** account for the majority of metropolitan areas, and usually exhibit solid performance on one dimension of prosperity tempered by much weaker performance on another. Metropolitan **New York,** for instance, registers in the top ten on sustainability, runs almost dead-last on inclusion, and turned in a middling performance on productivity growth in recent years

Looking more closely at this classification scheme and the arrays of metros within its categories prompts several observations:

Virtually no metropolitan area can be said to have secured true prosperity. Notwithstanding the high economic productivity of famed high-flyers, or the encouraging equity of some metros, virtually all face gaps in their prosperity. Only one metro—**Boise, ID**—ranked in the top third of all metros on all three indicators, for example. By contrast, 82 of the nation's largest metropolitan areas struggle with either mixed or low performance. In fact, even most high-performing metros face significant shortcomings on at least one dimension of prosperity. For instance, **Tampa, FL** ranks in the top 20 on both productivity and inclusion but posts a ranking of 47th on sustainability. **Portland, OR** ranks in the top 10 on both productivity and sustainability but falls to 47th on inclusion. In short, virtually all metros face challenges on at least one or another dimension of prosperity.

California metros and some of the nation's most knowledge-intensive economies enjoy strong productivity growth but face troubling levels of income inequality. All but one California metro (**Riverside**)—

The 100 largest metros vary widely in their performance on key prosperity indicators

Indicator	Performance of top and bottom quintiles
Productivity and innovation capacity	
GDP per capita growth, 2001 to 2005	11.8%
	1.5%
GDP per capita, 2005	$57,798
	$30,672
GDP per job, 2005	$110,997
	$70,840
GDP per job growth, 2001 to 2005	13.6%
	4.6%
Share of traded sector employment within strong clusters, 2004	69.6%
	26.8%
BA attainment rate, 2006	37.2%
	21.0%
PhD attainment rate, 2006	2.2%
	0.7%
Share of employment in science and engineering occupations, 2005	4.6%
	1.7%
Share of employment in research and development, 2005	1.1%
	0.1%
Social and economic inclusion	
Annual wages, 2005	$50,271
	$33,723
Wage growth, 1995 to 2005	22.3%
	5.6%
Wage inequality, 2005	5.2
	6.7
Non-white income for every dollar of white income, 2005	$0.76
	$0.52
High school non-attainment percentage point gap between whites and non-whites, 2005	7.0%
	26.2%
Postsecondary educational attainment gap between whites and non-whites, 2005	4.5%
	28.0%
Share of middle class, 2005	37.3%
	29.5%
Loss in share of the middle class, 1970 to 2005	-4.3%
	-14.1%
Concentrated working poverty rate, 2005	0.0%
	25.1%
Share of place-based subsidized housing units in concentrated poverty, 2000	1.7%
	31.0%
Share of housing voucher units in concentrated poverty, 2000	0.8%
	14.0%
Sustainability	
Rural acres consumed for each net new housing unit, 1980 to 2000	0.20
	3.58
Share of jobs within 3 miles of the central business district, 2004	36.3%
	12.3%
Metric tons of carbon per capita, 2005	1.64
	3.14
VMT per capita, 2005	7,085
	12,398

Source: Brookings analysis of data from the Bureau of Economic Analysis; the U.S. Census Bureau; Ned Hill, Cleveland State University; Internal Revenue Service; the Department of Housing and Urban Development; Brown, Southworth, and Sarzynski, "Shrinking the Carbon Footprint of Metropolitan America;" Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; and David Theobald, Colorado State University.

Top and bottom three metros	Ratio between high and low values
Baton Rouge, LA; Oxnard, CA; Palm Bay, FL	7.8
New Orleans; Raleigh, NC; Wichita, KS	
Bridgeport, CT; San Jose, CA; Charlotte, NC	1.9
Youngstown, OH; Riverside; CA, Stockton, CA	
Bridgeport, CT; San Jose, CA; Houston, TX	1.6
Springfield, MA; Youngstown, OH; Scranton, PA	
Baton Rouge, LA; San Jose, CA; Sarasota, FL	3.0
Jackson, Phoenix, Raleigh, Richmond	
Trenton, NJ; Palm Bay, FL; San Jose, CA	2.6
St. Louis; Oklahoma City; Little Rock, AR	
Washington; San Jose, CA; Bridgeport, CT	1.8
Youngstown, OH; Stockton, CA; Bakersfield, CA	
Durham, NC; Trenton, NJ; San Jose, CA	3.1
Youngstown, OH; Scranton, PA; Stockton, CA	
San Jose, CA; Palm Bay, FL; Durham, NC	2.7
Stockton, CA; Memphis, TN; Youngstown, OH	
Albuquerque, NM; Durham, NC; Trenton, NJ	15.7
Harrisburg, PA; Fresno, CA; Youngstown, OH	
San Jose, CA; Bridgeport, CT; San Francisco	1.5
Scranton, PA; Youngstown, OH; El Paso, TX	
San Jose, CA; San Francisco; Bridgeport, CT	4.0
Buffalo, NY; Rochester, NY; Youngstown, OH	
Lancaster, PA; Springfield, MA; Scranton, PA	1.3
New York; Houston; San Jose, CA	
Pittsburgh; Palm Bay, FL; Lansing, MI	1.5
El Paso, TX; Charleston, SC; Bridgeport, CT	
Knoxville, TN; Chattanooga, TN; Jacksonville, FL	3.7
Boise City, ID; Fresno, CA; El Paso, TX	
Pittsburgh; Knoxville, TN; Louisville, KY	6.2
El Paso, Phoenix, Boise City, San Francisco	
Des Moines, IA; Madison, WI; Boise City, ID	1.3
Bakersfield, CA; Fresno, CA; El Paso, TX	
Sarasota, FL; Jackson, MS; Austin, TX	3.3
Milwaukee; New Haven, CT; San Jose, CA	
Denver; Salt Lake City; Worcester, MA	--
Memphis, TN; Jackson, MS; El Paso, TX	
Portland, ME; Madison, WI; Oxnard, CA	18.2
Chattanooga, TN; Augusta, GA; Springfield, MA	
Sarasota, FL; Lansing, MI; Des Moines, IA	17.5
New Orleans; Springfield, MA; Fresno, CA	
Miami; Las Vegas; San Francisco	17.9
Lansing, MI; Scranton, PA; Youngstown, OH	
Honolulu; Lexington, KY; Bakersfield, CA	3.0
Miami; Los Angeles; Detroit	
Honolulu; Los Angeles; Portland, OR	1.9
Cincinnati; Indianapolis; Lexington, KY	
New York; Honolulu; Lancaster, PA	1.7
Jacksonville, FL; Trenton, NJ; Jackson, MS	

along with a number of other knowledge economy places like **Austin, TX** and **Washington**—enjoy relatively high productivity growth but contend with poor wage equality. **San Jose, CA** epitomizes this experience. The exemplar of innovation-driven economic growth, the metro enjoys the second highest annual productivity growth rate at just over 5 percent per year. But San Jose simultaneously contends with the worst wage inequality in the 100 metros: Earners in the top 10 percent make 7.6 times as much as those in the bottom 10. Similarly, tech-heavy **Durham, NC**—home of the nation's largest research park—ranks 11th on productivity growth (3.3 percent annually) but 7th-worst on income inequality (top earners make nearly seven times that of the lowest earners).

Many older industrial metros—particularly those in the Northeast, as well as some southern places—contend with weak productivity growth but enjoy relatively low levels of wage inequality. Consider, for example, **Albany** and ***Buffalo*** in New York; **Hartford** and **New Haven** in Connecticut; the Pennsylvania metros of **Allentown, Lancaster,** and **Scranton**; Massachusetts' milltown metros of **Springfield** and **Worcester; Cincinnati** and **Milwaukee** in the Great Lakes region. These places, along with a collection of southern metros like **Cape Coral, FL; Greensboro, NC; Greenville, SC;** and **Richmond, VA**, all post meager productivity growth numbers but enjoy some of the lowest income inequality ratios among the 100 largest metros. For example, **Portland, ME**—another northeastern member of this group of metros—ranks 68th with its 1.9-percent rate of annual productivity growth but posts an income inequality ratio of just 5-to-1, good for 8th-best.

Metros that register high rates of productivity growth but poor levels of sustainability are found almost exclusively in the south and southeast. **Des Moines, IA** and **Trenton, NJ** join a long list of southern metros that achieve strong productivity growth but appear to do so at the expense of their environmental sustainability. **Knoxville, TN** exemplifies the story. The metro lies in the top 20 on productivity growth at over 2.9 percent annually, but emits 3.1 tons of carbon per capita to rank in the bottom 10 on sustainability. **Sarasota, FL**'s experience is similarly bi-polar: It ranks 3rd-best on productivity growth but falls to the bottom quintile on sustainability.

Many knowledge-economy metros, including most of California's metros, balance productive and sustainable growth but fall short on inclusion. From **Boston** in the east to **Albuquerque, NM** and **San Diego, CA** in

The 100 largest metros display three broad types of experiences

	Example metros	*Productive growth* Annual productivity growth, 2001 to 2005	Rank	*Inclusive growth* Wage ratio between 90th and 10th percentiles, 2005	Rank
High performance (18)	Boise City, ID	3.66%	7	5.5	27
	Portland, OR	3.56%	8	5.8	47
	Tampa, FL	3.31%	13	5.3	20
Mixed performance (57)	New York, NY	2.23%	47	7.0	98
	Chicago, IL	1.90%	67	6.3	83
	Phoenix, AZ	1.47%	84	5.7	46
Low performance (25)	Richmond, VA	1.22%	89	5.8	52
	Birmingham, AL	1.78%	76	6.0	69
	Jackson, MS	0.93%	94	6.6	90

Source: Brookings analysis of data from the Bureau of Economic Analysis; the U.S. Census Bureau's American Community Survey 2005 Public Use Microdata Sample (PUMS); and Brown, Southworth, and Sarzynski, "Shrinking the Carbon Footprint of Metropolitan America."

the west, dynamic metros with significant shares of knowledge-economy employment are keeping productivity growth high while holding carbon emissions low. The California metros of **Los Angeles, Oxnard, San Francisco,** and **San Jose,** for instance, all rank in the top 15 on both productivity and sustainability. But all of these places contend with some of the highest levels of wage inequality in the country.

America's 100 largest metropolitan areas face a welter of shared and individual obstacles to its future well-being.

In short, while almost every sizable metropolitan area in America faces serious challenges on at last one or more dimension of prosperity, virtually no metro faces its challenges alone, notwithstanding the variety of local conditions in metropolitan America. Instead, a finite number of types of metropolitan experience can be discerned—types that find groups of metros with similar geographic or economic profiles sharing relatively similar combinations or configurations of challenge. These varieties of metropolitan experience confirm that while individual metros' performance on key indices of prosperity is highly diverse and may seem bewildering, it is not random, and should prove susceptible to policy learning and exchange.

To summarize, then, the critical prosperity-driving network of America's 100 largest metropolitan areas—formidable as parts of it are—faces a welter of shared and individual obstacles to its future well-being—a well-being on which the nation depends.

Large metros' economic productivity as a network, for example, comes despite the system's persistent and often deteriorating combined performance on measures of

Sustainable growth Tons of carbon emissions per capita, 2005	Rank
1.51	5
1.45	3
2.50	47
1.50	4
1.97	15
2.07	21
3.04	86
2.90	79
3.06	87

social inclusion and sustainability. High and rising aggregate productivity, in this respect, has been achieved in spite of: broad education deficits, a shrinking middle class, and racial and economic segregation, on the social front; and frequently sprawling land use, growing transportation and infrastructure problems, and rampant energy consumption and carbon emissions on the sustainability side.

Such problems represent a substantial waste of potential and a missed opportunity to enhance the productivity and general well-being of the national prosperity system. These shared problems underscore that the nation must focus intensely now on realizing the maximum potential of all of its larger and smaller metropolitan areas, with an eye to lifting the whole nation's prosperity.

At the same time, this aggregate story masks wide differences of performance between metropolitan areas. These differences confirm that much talent is also being wasted as some regions lag behind. But the equally compelling takeaway here is the variety of U.S. metropolitan experiences. This variety underscores that any national drive to raise the performance of the overall metropolitan network will need to recognize the diversity of local conditions and capacities as it seeks to raise national aspirations and performance.

In short, significant potential is being left on the table in metropolitan America—and needs to be retrieved.

Retrieving that potential and putting it to work by attacking a series of shared as well as local and particular deficits must become a critical national, state, and metropolitan priority.

III. RESPONDING TO CHANGE: METROS CAN'T "GO IT ALONE"

"MetroNation" argued that in a globalizing world America's metropolitan areas are the true drivers of U.S. prosperity.[1]

But it bears noting, too, that when it comes to policy experimentation, city and suburban leaders are also emerging as drivers.

City and suburban leaders toil on the front lines of America's response to the challenges facing the country, all of which intersect in metropolitan areas.

Laboring in the face of massive, disruptive change, these leaders are working out new ways to maximize their regions'—and the nation's—standing on the crucial "drivers" of productive, inclusive, and sustainable growth and the prosperity to which they contribute.

Because ***innovation*** matters if locations are to compete globally, metropolitan leaders are taking steps to ramp up their regions' ability to invent and commercialize new products, processes, and business models.

Because ***human capital*** matters in innovation, networks of metro leaders are working on ways to continuously enhance the levels of training and education marshaled by their regions' workforces.

Because ***infrastructure*** matters to move goods, people, and ideas quickly and efficiently, leaders are striving to construct state-of-the-art transportation, telecommunications, and energy distribution networks.

And because ***quality places*** matter, city and suburban stewards of their locales are working increasingly to amplify the inherent attractions of metropolitan places—their variety of spaces, their environmental assets, their distinctive neighborhoods, downtowns, and waterfronts.

And yet, while these actions and initiatives in service of prosperity are tough-minded, imaginative, and promising, they will not and cannot suffice by themselves.

Metros, or "city-regions," or "region-states," may be the true sources of prosperity today. But the fact remains that the ability of their leaders to master change and determine outcomes by themselves remains at best partial.

Metropolitan areas are the true sources of prosperity today. However, the ability of their leaders to master change and determine outcomes remains at best partial.

Metropolitan leaders simply lack the jurisdictional reach to master the vastness of the economic, social, and environmental currents enveloping them, whether they be the global movements of talent and capital that drive innovation; the cross-boundary nature of infrastructure networks; or the drift of carbon emissions across city, state, and even national lines. Beyond that, metropolitan areas often do not even exist politically, and certainly not in isolation. Rather, they lack defined political standing, and their fortunes remain heavily entangled with the activities, rules, and structures of other institutions, most notably national and state government.

And so this chapter scans a wide array of metropolitan, national, and international experience to make three broad points about the ingenuity, limitations, and needs of American metropolitan areas as they strain to augment their own prosperity and that of the nation. Along these lines, the chapter advances the following arguments:

- **Metropolitan leaders are taking the lead in working to expand the range of assets U.S. regions deploy to drive metropolitan prosperity**
- **Metropolitan areas, however, can't "go it alone"**
- **Many countries are engaging to nurture their city-regions and generate nationwide prosperity**

1. METROPOLITAN LEADERS ARE TAKING THE LEAD IN WORKING TO EXPAND THE RANGE OF ASSETS U.S. REGIONS DEPLOY TO DRIVE PROSPERITY

Metropolitan areas—the nation's true engines of prosperity—are the places where the nation's key economic, social, and sustainability challenges most visibly intersect, and leaders there are frequently setting the pace of the nation's efforts to work out the next generation of responses. In that fashion, organizations and leaders with a metropolitan perspective are working hard to augment and align their regions'—and the nation's—arrays of fundamental prosperity-driving assets.

The range of their efforts is impressive:

Because the ability to invent new products, processes, and business models is critical to secure productive growth, numerous metropolitan leaders and organizations are investing smartly in innovation

Reflecting their differing regional circumstances, the new generation of metro-scaled innovation efforts ranges from upgrading traditional industry clusters to diversifying existing economies to defending and extending an existing competitive advantage.

Metro leaders in places like greater Cleveland and Detroit are determined to improve the competitiveness of existing traditional industries, often involved in manufacturing.[2] In **greater Cleveland**, the business network developed by WIRE-Net effectively served over 1,050 businesses from 2001–2005 by convening manufacturing firms to learn local best practices, implement new knowledge and training, and update industrial practices.[3] Similarly, **metro Detroit's** Automation Alley focuses on knowledge-intensive activities to link the region's long-standing automotive sector to emerging enterprises in information and communications technology.[4]

In other places, the drive to generate innovation takes the form of efforts to diversify regional economies beyond historical job bases like coal, steel, or manufacturing by nurturing more knowledge-intensive industries that can improve locales' resiliency in the face of economic cycles or shifting industry trends. Targeted cluster development efforts are under way in **greater Kansas City** around life sciences research and in **Fresno, CA,** around advanced logistics and water technology.[5] **Greater Louisville's** consolidated economic development agency and **metro Charleston's** chamber of commerce conduct broader industry recruitment and business retention and expansion efforts for their respective regions.[6] And in **metro St. Louis,** business leaders are successfully establishing new incubators and cultivating venture capital to promote regional entrepreneurship.[7]

For its part, **Northeast Ohio's** Fund for Our Economic Future, a collaboration of over 100 foundations, organizations, and philanthropists, awards grants to advance new innovation-driven economic development in the region, including support for cutting-edge, high-technology sectors, such as biotech and fuel cells.[8] To this end the fund has deployed more than $23 million in grants from 2004–2007 and has already raised commitments for an additional $28 million to make grants from 2007–2010.[9] A similar regional philanthropic endeavor, marshalling some $100 million, is being launched in **Southeast Michigan**.[10]

Nor is work to boost innovation the province solely of the struggling. Leaders in some of the nation's most economically vibrant and productive metropolitan areas are among those most determined to work out creative strategies to stay at the forefront of the world economy. Even after nearly 50 years, leaders in **Raleigh-Durham** continue to find ways to implement value-added policies and programs to keep companies in their Research Triangle Park and surrounding region competitive.[11] On the West Coast, **San Diego's** CONNECT program has helped to launch roughly 1,275 startups since 1985 by supporting the "soft" infrastructure for entrepreneurship that links new enterprises to money, markets, partners, management, and other resources.[12] And, **San Jose's** Joint Venture: Silicon Valley Network annually draws about 1,000 stakeholders to discuss regional economic trends to ensure that adequate investments are being made in infrastructure, communication networks, and science and technology research.[13] A similar regional benchmarking project was recently completed in Arizona that complements efforts of regional business groups in **Phoenix, Tucson,** and **Flagstaff** as they lead Science Foundation Arizona to enhance scientific education and research throughout the state.[14] In **Seattle**, metro business associations stay ahead of the curve on regional competitiveness by carefully studying best practices from their international peer city-regions.[15]

Local leaders are innovating regionally in pursuit of prosperity

	Metro	Initiative	Description
Productive Growth	San Diego	CONNECT	Since 1985, CONNECT has helped to launch roughly 1,300 startups in hi-tech and biotech by linking entrepreneurs to money, markets, new technology, management, partners, and other resources
	Northeast Ohio	Fund for Our Economic Future	The fund brings together over 100 foundations, organizations, and philanthropists to advance innovation-driven regional economic devleopment. It has deployed over $23 million in grants from 2004–2007 to support cuting-edge technology, such as fuel cells and biotech, and it is expected to grant another $28 million between 2007 and 2010
	Detroit	Automation Alley	With over 850 business, government, university, and research members, Automation Alley strives to promote a technology cluster in Southeast Michigan through regional marketing, branding, and networking. Its focus on cross-sector synergies links the region's automotive sector to emerging IT and communications enterprises
Inclusive Growth	Chicago	Employer-Assisted Housing (Metropolitan Planning Council)	To help workers afford homes closer to their jobs, MPC and its partners help regional employers offer homeownership education and provide down payment, rent, or savings assistance. Since 2000, 60 employers have provided homeownership counseling for 2,100 employees, resulting in 1,200 successful buyers
	Miami	Prosperity Campaign	To boost EITC participation, 10 metro-wide "Prosperity Centers" offer free tax filing and connections to other financial services. Launched in 2002, the campaign has increased the number of Miami-area volunteer-prepared EITC returns by almost 400 percent
	San Francisco	Workforce Funding Collaborative	The collaborative pools funds from government, philanthropy, and private sector sources to train disadvantaged job seekers for employement in health care and life sciences. Between 2004 and 2006, the collaborative served 1,165 individuals, of whom 82 percent completed education and training initiatives and 79 percent were placed in actual jobs
Sustainable Growth	Denver	FasTracks	Thirty-two metro mayors support this initiative to create a regional system of new rail and bus rapid transit with transit-oriented development to solve the region's problems with traffic congestion, expanding highways, sprawl, and smog
	New York	Regional Plan Association (RPA)	A long-time advocate for greater metro-wide connectivity and expanded access to the Tri-State's urban core, RPA spurred the development of a $1.5 billion light rail connection to Kennedy airport. Progress has also been made on realizing RPA's plans for a new subway line and a new train terminal, both on Manhattan's East Side
	Portland, OR	Metro	A directly-elected multi-purpose regional government operating since 1979, Metro has the authority to coordinate land use across several local jurisdictions on issues of housing, transportation, infrastructure, and environmental services. Metro's current focuses include integrating housing choices and affordability into policymaking and funding allocations, better evaluating land use impacts of transportation investments, and safeguarding regionally significant natural areas

Because innovation demands a workforce that is growing continually more skilled, metropolitan actors are working to develop their* human capital *with improved education and skill-building

Strengthening regional labor pools, integrating new immigrants, and supporting working middle class families are also frequent metropolitan preoccupations.

Milwaukee; Lancaster County, PA; and the San Francisco Bay Area, for example, run highly sector-focused training initiatives to ensure that workers are trained for jobs that actually exist in their regions. **Milwaukee's** Wisconsin Regional Training Partnership has been so successful at linking unions, community organizations, and technical colleges, that its efforts at modernizing workplace technologies and practices and training workers are credited with adding an additional 6,000 industrial jobs to the metro area between 1995 and 2000.[16] **Lancaster's** Workforce Investment Board identifies common employment gaps across specific clusters of related businesses and then funds workforce education to address those needs.[17] And the **San Francisco Bay Area's** Workforce Funding Collaborative pools resources from government, philanthropy, and private sector sources for grants to service providers that connect disadvantaged jobseekers to employment in the regional hotbeds of health care and life sciences. Between 2004 and 2006, the collaborative awarded grants totaling $3.4 million dollars to serve 1,165 individuals, of whom 82 percent completed education and training initiatives and 79 percent were placed in actual jobs.[18]

Leaders in greater Louisville and Philadelphia are also working at the metropolitan scale to enhance local human capital stores. In Louisville a unified Metropolitan College initiative carries out employer-focused human capital development by channeling input and resources from **metro Louisville** government, two higher-education institutions, and three key regional businesses: UPS, ResCare, and Humana.[19] Since the college's inception in 1998, roughly 2,250 incumbent workers, mostly from UPS, have received free post-secondary education to upgrade their skills and enhance their career prospects within their respective firms.[20] In **Philadelphia**, metro leaders are connecting new immigrants from around the world to employment opportunities, job readiness training, English as a Second Language classes, and other services to better include them in the regional economy. Through their Welcoming Center for New Pennsylvanians, they have assisted more than 2,000 clients from 64 countries since 2003.[21]

***Because state-of-the-art transportation, telecommunications, and energy distribution systems are critical for moving goods, ideas, and workers efficiently, metropolitan-scaled organizations are also undertaking efforts to upgrade their* infrastructure**

In this connection, local governments and regional authorities throughout the country are expanding their transit systems, innovating on transportation pricing, and developing their telecommunications networks to improve the speed and connectedness of their economies.

Metro Denver's FasTracks is expanding the regional transit system with over 100 miles of new light rail and bus rapid transit and corresponding transit-oriented development to alleviate the area's problems with sprawl, congestion, and smog. Thirty-two metro mayors back this project, which could potentially double the number of residents living within one-half mile of a proposed transit stop by 2025.[22] Similarly ambitious light rail projects are underway in **greater Dallas, Phoenix,** and **Salt Lake City**.[23] In **New York**, the Regional Plan Association's consistent advocacy for greater metro-wide connectivity and expanded access to the Tri-state's urban core has spurred the development of new transit projects. Already built is a $1.5 billion light rail connecting Kennedy Airport to the commuter rail serving Long Island. Projects underway include the first ever Long Island Railroad terminal on Manhattan's East Side and a brand new subway line that would bring hundreds of thousands of East Side residents within a reasonable walk of a subway stop.[24]

Metro leaders are also upgrading parts of their transportation infrastructure to reduce the monetary, environmental, and time costs of congestion. **Seattle's** FAST Corridor increases regional freight mobility by improving access between rail lines, ports, and highways, and relieving bottlenecks where goods are transferred between nodes.[25] Regional transportation leaders in New York and San Diego have introduced value-pricing or congestion-pricing to keep traffic flowing through metro roads. **New York** and **New Jersey** collect lower tolls from electronic payers and off-peak drivers.[26] **San Diego** charges variable tolls for use of the I-15 High Occupancy Vehicle lanes that change depending on traffic conditions and the number of riders in the vehicles. San Diego's toll revenues are helping to finance an express bus system.[27]

Leaders in the **Scranton, PA region**, for that matter, crafted their Wall Street West strategy after 9/11 to become a redundant data solution for New York City's financial firms. Their well-considered plans to house back office and secondary operations have garnered both federal and state support for necessary workforce and infrastructure investments, including a $25 million fiber optic network connecting Northeast Pennsylvania and New York City to facilitate data transmission.[28]

And finally, because economic change and environmental challenges are revaluing the dense form and distinctive assets of urban areas, metros are undertaking strong efforts to develop **quality places**

On this front, energetic and enterprising organizations and leaders are taking steps to curb sprawl, reduce traffic congestion, improve air quality, and respond to climate change, all efforts aimed at bolstering their regions' sustainability and quality of life.

In **greater Salt Lake City** and **Denver**, for example, regional visionaries succeeded in swaying several municipal governments to voluntarily adopt regional growth principles such as adequate public infrastructure, water quality management, diverse housing types, and integrated land use and transportation strategies into their own local comprehensive planning.[29] In **metro Portland** and **Minneapolis-St. Paul**, long-standing regional governments use their cross-jurisdictional authority to implement action plans to coordinate growth, housing, transportation, and environmental services region-wide.[30] For that matter, **Greater Kansas City's** Mid-Atlantic Regional Council, an active metropolitan planning organization (MPO), has managed to enlist numerous localities to common regional goals, such as interconnected greenways.[31]

On environmental protection, regional planning or transportation agencies routinely take responsibility for meeting federal clean air standards. However, leaders in **metro Chicago** take pollution reduction a step further with Clean Air Counts, which encourages partnership between area governments, businesses, transportation agencies, and environmental groups to voluntarily cut ground-level emissions by a goal of five tons a day.[32] **Metro Los Angeles** also goes further by regulating standards for local fleet vehicles to achieve environmental justice goals for communities located adjacent to the freeways. The air quality district there has also spurred the development of clean energy technologies by awarding grants to several promising enterprises.[33]

Going beyond just air quality issues, moreover, leaders in metros like **Seattle-King County, Miami-Dade County,** and the **San Francisco Bay Area** are taking the initiative to reduce their contribution to climate change by curbing regional carbon emissions.[34] Their climate action plans include a range of strategies, such as raising awareness, reducing vehicle miles traveled, promoting alternative energy, conserving energy resources, encouraging residential density, supporting green-building, and pursuing transit-oriented development.

In sum, in an age when metropolitan areas and city regions are the organizing units of the new global order, metropolitan leaders and organizations are ushering in a new era of pragmatic experimentation in American regions. Out of this urgent problem-solving is emanating a new generation of actions and plans that are imaginative, important, and grounded in sound evidence and informed practice.

Metropolitan leaders are working hard to augment their regions' arrays of fundamental prosperity-driving assets.

2. METROPOLITAN AREAS, HOWEVER, CAN'T "GO IT ALONE"

And yet, home-grown ingenuity—constrained as it is by current jurisdictional and policy realities—will not by itself carry metropolitan America or the nation far enough in advancing prosperity.

Certainly, there are idealistic observers of the "borderless" economy like Kenichi Ohmae who hail the rise of the autonomous "region-state" and call for "dysfunctional," irrelevant nation-states to get out of the way so that decisive and assertive regions can connect up freely to the global economy and thrive.[35] And yes, many metropolitan leaders would subscribe to this vision.

However, at least for the foreseeable future, it would be a mistake either to overestimate the power of metropolitan areas to act on their own or to dismiss the role of nations in maximizing prosperity, as William Barnes and Larry Ledebur point out in their important book, *The New Regional Economies*.[36] Metropolitan actors, after all, remain circumscribed in their jurisdictional reach and limited in their clout. At the same time, nations still matter a lot in setting the context for metropolitan enterprise and problem-solving.

Metropolitan power, while significant, remains circumscribed

Cities and suburbs are more and more where the action is. And yet, the inherent limits of their jurisdiction and standing mean that metro interests cannot "go it alone."

Certainly, many metropolitan areas falter for other reasons: For example, they may lack leadership of the kind that engages deeply to transform an area's standing. And yes, in other regions crucial capacity is missing, whether it's a cohesive regional culture or a sophisticated ability to assess trends and opportunities.

But for the most part, what circumscribes metropolitan leaders' ability to deliver prosperity unilaterally and locally is the sheer scope of the challenges facing regions combined with their inherently limited political power.

Though metropolitan areas may be the crucial unit of the national economy, they are not isolated or self-sufficient. The very flows of capital, people, traffic, and pollution that "make" them are also what they can't control. Metropolitan challenges and opportunities simply transcend not just regional boundaries, but state and national ones as well. In this way, the sheer scope of the challenges metropolitan actors face as they seek to amass the fundamental assets that drive prosperity ensures they can't do it all themselves:

Boosting *innovation* requires contending with the full force of global economic integration, for example…yet metro leaders' power to shape outcomes remains limited. More and more, metropolitan area leaders find themselves racing to stay even in a vastly widened competitive arena, never more than when it comes to assembling the inputs to innovation necessary to maintaining productivity growth. For example, other countries have ramped up their investments in knowledge, skills, and technology to such levels that U.S. shares of global totals in R&D spending, patents, scientific publications, science researchers, and bachelor and doctorate degrees in science and engineering have all slipped since 1980.[37]

And yet, while metropolitan area leaders endeavor to respond, most find they retain only modest ability to do it. Metropolitan leaders cannot by themselves counter the well-funded and sophisticated plays of determined nation-states. Rarely can metro leaders by themselves catalyze the strong industry clusters critical to prosperity, given that such clusters frequently demand partnerships across levels of government and inter-state lines. And, finally, metro leaders cannot often themselves make investments of sufficient scale in higher education, R&D, and commercialization to drive truly market-changing innovation.

Elevating local *human capital* stores requires contending with enormous social and demographic trends…yet metros' tools remain few. Similarly, large-scale demographic trends engulf metropolitan areas in massive, persistent human capital challenges. Most notably, the nation's diversity (intensified by international migration) and its income divides—both of which come together in metropolitan areas—significantly complicate metropolitan efforts to elevate education and training levels. In this regard, while blacks and Hispanics account for over 90 percent of projected growth in the working-age population through 2050, they currently retain the lowest levels of educational attainment among groups, with only 17 percent of Hispanics and 25 percent of blacks managing to achieve postsecondary degrees, compared to 38 percent of non-Hispanics whites and 56 percent of Asians.[38] Likewise, postsecondary completion rates for low-income students—who also reside disproportionately in cities and other metropolitan locales—linger roughly one-third as high as those of high-income students, even when controlling for academic background and skills.[39]

Faced with these realities, metropolitan leaders again grapple with colossal challenges while possessing only limited discretion and a partial set of policy tools. Metro leaders cannot on their own, for example, develop a highly-skilled workforce when large-scale domestic and international migration patterns subject their cities and suburbs to vast national and global population flows. Likewise, they cannot by themselves address the human capital dimensions of longstanding educational deficits in

Over 9,000 general purpose governments and nearly 15,000 special purpose governments operate within the 100 largest metros

	Total	Average
General purpose local governments	9,429	94
County	524	5
Municipal	5,667	57
Township	3,238	32
Special purpose governments	14,805	148
Independent school districts	4,213	42
Single purpose districts	10,592	106

Source: Brookings analysis of U.S. Census Bureau, 2002 Census of Governments.

minority or low-income communities. And they possess neither the necessary financial resources nor the ability to tailor relevant federal programs to bring promising education and training interventions to scale.

And it's the same with the other two drivers of prosperity: Developing world-class *infrastructure* and sustainable, *quality places* each require responding to deep-set problems of vast scope…yet metropolitan actors' fiscal, jurisdictional, and regulatory reach remains narrow. America's infrastructure deficits, in this respect, are so massive that it is estimated that bringing all our highways, bridges, rail lines, and other physical assets up to good condition will cost an enormous $1.6 trillion over five years.[40] Sure to aggravate these infrastructure needs, moreover, are the additional 73 million new and replaced housing units and 144 billion square feet of new and replaced commercial and industrial space that the nation is projected to require by 2040.[41] Driven by affluence and demographics, this super-scaled growth—combined with the decentralized development patterns promoted by decades of sprawl-producing federal, state, and local policy choices—presents super-scaled challenges both to the developers of quality infrastructure and to those who would shape distinctive, sustainable urban places. And then there is the largest sustainability problem of them all: global climate change. Here, too, the sheer scale of the problem, which flows across not just metropolitan but also state and national lines, far outstrips the reach of metropolitan response.

And so, once again, metropolitan leaders find their orbit of control—whether geographical or administrative—far too small to master the widening sweep of sprawl, the super-regional scale of development and transportation flows, the supra-national drift of carbon emissions.

Metro leaders can't on their own bend development and traffic patterns to support quality place-making and economic efficiency when their geographical reach is finite and their policy reach partial. They cannot on their own fully fund and coordinate necessary transit options or other infrastructure to ensure the long-term sustainability of their growth. And, they certainly cannot establish nationwide industry regulations or negotiate international treaties for climate protection that would begin to address the global warming crisis at the scale it demands.

* * *

Yet there is another even more fundamental limit on metropolitan autonomy, and that is the administrative reality of metro regions' institutional weakness. Yes, cities and suburbs remain the fundamental source of American prosperity, as contended "MetroNation." And yes, metros furnish the natural geography at which to aggregate, amplify, and align the key drivers of prosperity, whether it be crucial innovation inputs, human capital, key infrastructure links, or the attributes of place that play a role in augmenting the rest.

But the fact remains that while metropolitan area actors may want to solve fundamental problems by themselves and may want to act comprehensively, they in truth rarely can because in most cases they lack the administrative and legal standing to do it.[42]

In this respect, it does not go too far to note that in practical administrative terms "metros" frequently don't really exist.

Legally, American metropolitan entities wield only those powers delegated to them by states, and those powers remain in most cases slight.[43] Sure, there are now hundreds of these regional actors, ranging from the creation

of full-blown "metro" cities like Louisville to the growing list of metropolitan councils, special-purpose authorities, councils of government (COGS), regional planning organizations (RPOs), regional business and labor organizations, regional workforce investment boards (WIBs), and regional manufacturing and small business assistance organizations. Yet for the most part, these actors' authority to address big problems remains partial, provisional, and squeezed between that of others.

For example, while the best of the metropolitan planning organizations (MPOs)—which the Federal-Aid Highway Act of 1962 required states to designate to carry out comprehensive, cooperative transportation planning—have had success in promoting more coherent transportation, land-use, and resource systems, the organizations' overall ability to shape metropolitan outcomes has been uneven at best because they remain ambiguously poised between federal, state, and local governments.[44] Created by the states, MPOs remain subsidiary to them, with state departments of transportation retaining principle decisionmaking power on transportation projects as well as veto-power over MPO-selected projects. Likewise, the MPOs—always fiscally constrained—must contend in the other direction with local governments' constant efforts to preserve local control over transportation and land-use planning prerogatives.

And so it goes for almost all "regional" entities. Subservient to states (or only to their members), yet usually lacking both democratic accountability and substantial authority over dozens of localities, metropolitan actors can neither control the actions of powerful federal and state agencies nor easily evoke inter-jurisdictional consensus from the intense fragmentation of local government. In that sense, metropolitan actors seek to craft solutions to America's most critical problems in an uncomfortable space. Above them legislate the far-more-powerful states and the federal government. Below them, in just the largest 100 metropolitan areas, operate no fewer than 9,429 separate, zealously parochial general purpose governments (counties, municipalities, and townships) and another 14,805 special purpose districts responsible for providing basic services such as schools, transit, or water.[45]

In short, though the nation is metropolitan as an economic fact it is not so either politically or administratively. Metropolitan leaders strain to plan and act in response to global currents that greatly exceed the confines of their local geography. Meanwhile, they must do so while employing only the limited array of powers afforded them by constitutional and statutory law (set by higher levels of government), or conveyed to them by municipalities. In that sense, U.S. metropolitan areas remain at once central and peripheral. Crucial sources of prosperity and problem-solving, they nevertheless exist only tentatively, or provisionally, in administrative terms. For all of their growing sophistication and confidence, then, metropolitan area leaders continue to lack the jurisdictional reach and power to act forcefully to advance their regions' fortunes, or to master events unilaterally.

At the same time, nations still matter

Implicit in the limits of regional power here and abroad, meanwhile, lies the continuing relevance of nations and states. Metropolitan actors may remain circumscribed in their geographic and jurisdictional reach and power, but nations (and states) enjoy greater powers—powers highly relevant to the wealth of metros.

In this sense, it is one thing to emphasize the importance of metropolitan economies and problem-solving; and it is quite another to declare the irrelevance of nations—to call for the nation-state to "end," as Ohmae does.[46]

Nations continue to matter and will continue to play a critical role in the emerging global economy of linked regions, for regions are heavily influenced by them.

To begin with, even Ohmae concedes the role of the nation-state in maintaining the nation's defense, regulating trade, maintaining a sound currency, and setting exchange rates.

But beyond that, national governments remain deeply influential in the life of regions and metropolitan areas by dint of their unique ability to bring to bear critical resources, wide-reaching regulations, information, and facilitation:

Financial resources. Most obviously, nations can bring financial resources to bear in support of state, regional, and local development. In the U.S. in fiscal year 2005, for example, federal spending on domestic, non-defense expenditures roughly equaled the combined total of all state and local spending on general expenditures, and came in at about $2 trillion.[47] Such largesse matters intensely to metropolitan areas, as it flows directly to dozens of programs that boost economic growth, promote innovation, support workforce training, bridge gaps between wages and the cost of living, and build metropolitan transportation networks.

Regulations. Likewise, national governments—as nations' ultimate lawgivers and regulators—set the rules with the widest reach. In the U.S., federal regulations set many of the rules guiding economic activity, including the base interest rate that impacts every financial transaction; the antitrust laws that condition business competition; the international agreements that determine trade flows; and the patent laws and tech-transfer rules that govern innovation.[48] Similarly, federal rules also propound national standards for social inclusion and environmental sustainability. These standards range from anti-discrimination, immigration, and minimum-wage laws to federal regulations addressing environmental challenges, ranging from air and water pollution to brownfield contamination.[49]

Information. National governments also generate, collect, disseminate, and analyze valuable data—data that motivates action for economic, social, and environmental change. Here in America, federal statistics cover information on consumer prices, educational attainment, housing costs, pollution levels, and much more.[50] Unlike other data providers that may have limited capacities or profit motives, federal agencies are uniquely capable of developing indicators on a regular schedule, making them readily and freely accessible, and ensuring they are reliable and consistent over space and time.[51] The decennial Census and the American Community Survey, in particular, serve as foundations for many other data sources, and could only be produced at the necessary scale through federally mandated survey participation.[52]

Facilitation. And finally, more than any other party, national governments can facilitate connections between public, private, and nonprofit agents that can result in more effective and innovative working relationships. In the U.S., this is especially true, as the breadth, depth, and reach of federal programs makes them especially well-placed to bring together players in diverse fields to share information, exchange knowledge, and engage in cooperative initiatives. The Manufacturing Extension Partnership (MEP), for example, exists specifically to connect small manufacturers to a nationwide network of experts that can advise on issues such as supply chains, human resources, and capital access.[53] Meanwhile, federal agencies—from the Small Business Administration to the Environmental Protection Agency—regularly convene conferences where local practitioners meet potential partners and learn about the latest resources, program evaluations, and best practices. Furthermore, the federal government can also galvanize innovative public-private-nonprofit partnerships in its contracting of external providers, and it can incentivize homegrown regional networks though smart grant stipulations, such as those found in the Workforce Innovation in Regional Economic Development (WIRED) program.[54]

Turning from the general types of national engagement to substantive areas of involvement, the list of areas of unique national responsibility—while not long—remains important.

In this respect, key portions of the work of assembling and maintaining the assets that drive prosperity—by dint of their nature—tend to flow up to national governments because they are uniquely placed to carry them out:

Only national governments can ensure adequate provision of certain public goods that make the entire nation better off but might not otherwise be adequately produced.[55] Basic scientific R&D, intra-regional transportation links, and higher education are all examples of investment areas that generate public goods of national significance that might not be produced in sufficient quantities without national intervention. Sub-national governments will tend to under-invest in such public goods because the returns cannot be contained within their borders. Similarly, private-sector actors may also under-fund such goods because they will not capture all of the value generated from them or because, in some cases, like basic research, commercial gains may remain distant.

National governments are also best suited to sponsor those policies that effectively redistribute wealth from higher to lower income groups.[56] To be sure, state and local governments in the U.S. are taking steps to supplement wages for working families and otherwise boost social benefits, but by and large these actors lack the fiscal capacity to provide benefits, tax relief, or wage subsidies sufficient to address the full range of the nation's poverty challenges.[57] In this respect, the sheer scale of the need for action argues for national leadership. But there are other considerations. That many economic regions cross state or other sub-national boundaries argues for the provision of a consistent national platform. Likewise, the reality of tax competition between jurisdictions also suggests the need for national leadership. Left solely to lower levels of government, redistribution via programs for low-income housing, tax credits, and other benefits could set off intra-jurisdictional rivalries that would result in a much weaker social "safety net" overall.

Furthermore, national governments must lead in the protection of certain basic rights for residents and the oversight of certain activities that have intra-jurisdictional spillover effects.[58] On their own, sub-national governments could produce a patchwork of laws and regulations that would be disruptive for both civic and business life, without completely addressing the issues at hand. In the case of immigrant rights, for example, different authorities may try to enforce different stances, but, in the end, only national governments can set and administrate consistent border policy. And without national prodding, few localities and regions would find it in their interests to manage environmental externalities that have negative cross-border impacts on air, water, and climate. Carbon emissions, in particular, demand national attention because reducing them enough to curb global warming requires international cooperation that only national governments can negotiate.

Finally, national governments may need to play a role in facilitating the emergence of more cohesive regional governance. In this domain, states or provinces may have more direct influence over local governance, as they do in the U.S. However, nations' strong interests in cohesive, well-functioning regions combined with the large number of regions that cross state boundaries argues for a national role in helping regions develop effective regional governance, most likely through the fashioning of effective interlocal collaborations. The bottom line: The importance of regional success to national success, and the importance of governance to improved regional outcomes, gives the nation a legitimate concern in facilitating greater intra-regional cohesion.

* * *

In brief, then, the world's city-regions, "region states," and metropolitan areas may be the driving force of the global economy, but they are not administratively autonomous, and cannot "go it alone." Embedded in nations, entangled in them, these increasingly independent-minded locations nevertheless depend on tactful, dependable, strategic engagement at the national level if they are going to resolve their myriad challenges and realize their full potential.

3. MANY COUNTRIES ARE ENGAGING TO NURTURE THEIR CITY-REGIONS AND GENERATE NATIONWIDE PROSPERITY

Wise nations will work hard, then, to nurture their metros and city-regions. And as it happens, many are.

From China to New Zealand, the central governments of many other countries are striving to create more productive, inclusive, and sustainable societies through strategic interventions to bolster their standing on the "drivers" of prosperity, bolster the autonomy and cohesion of their city-regions, and improve their own functioning.

The panoply of bold efforts is again impressive:

National governments in many quarters are intervening to secure their countries' standing on the fundamental drivers of prosperity strongly in response to 21st-century challenges. On issues ranging from innovation to education and training to infrastructure and the crafting of quality places, these central governments are channeling resources to make a meaningful difference across their countries.

Many central governments—including those of Canada, Finland, France, Ireland, Japan, Netherlands, Norway, South Korea, and Sweden—are actively investing in technological *innovation* to boost national productivity.[59] Many nations are of course busily increasing government R&D spending, with **China** and **South Korea,** for example, typically increasing national R&D investment by more than 10 percent annually. China's 2006 R&D spending of $136 billion surpassed Japan's to take over second place globally.[60] Finland, Japan, and many other countries, meanwhile, are moving in a different direction, and have become particularly active in deploying stand-alone innovation-promotion agencies to incentivize bottom-up collaboration, energize specific industries, sponsor regional cluster initiatives, and nurture small- and medium-sized firms. **Finland's** agency, TEKES, facilitates networking and knowledge-sharing among researchers and businesses, and, in 2006, invested over $600 million to leverage a roughly equal amount into 2,100 research projects conducted by individual firms or partnerships.[61] **Japan's** Industrial Cluster Program connects a total of 5,800 small and medium sized firms to over 200 participating universities and 500 government officials across 19 regional clusters.[62] Between 2001 and 2005, nearly 40 percent of the program's firms started new collaborative projects, 60 percent launched new business lines, and participating universities produced 133 spin-offs.[63]

Central governments in other countries are striving to bolster their standing on the drivers of prosperity, develop the autonomy and cohesion of their city-regions, and improve their own functioning.

Other nations are likewise making serious investments in their countries' *human capital*. Understanding that lifelong learning requires a solid foundation, for example, **Denmark** and **Sweden** guarantee every child a place in their nations' childcare systems and spend roughly two percent of their respective GDPs on government-supported early education services.[64] Ireland and Singapore, for their part, are each engaged in long-term drives to achieve step-changes in basic- and advanced-education attainment. Over 40 years, **Ireland** has transformed itself from one of the poorest countries in Western Europe to one of the wealthiest in part due to investments in education aimed at competitiveness in the 21st-century knowledge economy. After decades of investment in all levels of education and the creation of nine new technical colleges and two universities, the "Celtic tiger" has virtually caught up to the United States' high school and college attainment rates. A validation of Ireland's human capital investments can be seen in the knowledge economy firms—companies like Google, Microsoft, and Intel—that have established operations there.[65] **Singapore** has also made disciplined, creative investments in simultaneously developing and attracting talent. Beyond rewarding effective teachers and developing quality curricula, Singapore's Economic Development Board attracted ten top-tier academic institutions—including MIT, NYU, and the University of Chicago—in less than two years in their effort to become a "global schoolhouse." And while all of Singapore's college students can apply for scholarships to earn PhDs abroad, the opportunity is also extended to foreigners so long as they agree to work in Singapore for six years upon completion of their studies.[66]

Boosting Innovation in Korea: Catalyzing Progress through National Leadership

In the 1950s, South Korea and Afghanistan had roughly the same per-capita income.

Today, South Korea's is almost 25 times greater. While there are a number of factors that explain what has perhaps been the fastest rate of economic growth of any nation in history, embrace of technological innovation is one of the main reasons.

While private-sector innovation and investment have driven the Korean miracle, smart government innovation policies have also played a key role. Korea has approached its innovation policies with a focus on supporting private-sector innovation efforts through nimble public-private partnerships.

Perhaps the centerpiece of Korea's efforts is the Industrial Technology Foundation. Established in 2001, ITF engages in a wide range of technology activities, including training to develop industry technicians and cooperating with international entities to promote industrial technology development. One of its key activities is to spur regional innovation-based cluster development by supporting industry-university innovation partnerships. For example, working with the telecommunications sector, the government established an IT and telecom research institute that receives about half its money from industry and the other half from government to conduct early stage scientific and technical research on key technology areas that industry can't or won't do much research in. If the United States wanted to match Korea's investment per dollar of GDP it would have to invest $3.4 billion per year, considerably more than it does now.

Korea has also put in place policies and institutional efforts focused on achieving world leadership in information and communications technology. Korea already leads in a number of areas, including broadband telecommunications, mobile commerce, and telematics. To help get them to this place, Korea again relied on public-private partnerships through the establishment of a number of specific agencies. For example, the Korean Agency for Digital Opportunity and Promotion, has worked to close the digital divide, particularly among the elderly and disabled.

The Korean Information Agency is in charge of working with the private sector and other government agencies to drive digital transformation, including broadband, e-government, RFID deployment, and ubiquitous sensor networks (for example, they have a pilot program to outfit bridges with wireless sensors to measure stress and risk of failure). In short, few nations have engaged so strategically or effectively in the fundamental assets that drive innovation and with it economic growth.

Source: Robert D. Atkinson, Daniel K. Correa, and Julie A. Hedlund, "Explaining International Broadband Leadership" (Washington: Information Technology and Innovation Foundation, 2008).

Elsewhere, nations are engaging heavily in building transformative *infrastructure* systems. Some of the work involves major drives to establish that crucial link to global business and information networking: ubiquitous, fast, and cheap broadband access. On this front, **South Korea, Japan,** and **Sweden** have all led with aggressive campaigns to accelerate the construction of nationwide broadband networks and the spread of digital literacy.[67] As a result, Japan's consumers now enjoy the fastest and cheapest broadband access in the world while for its part Sweden comes close today to 100-percent broadband access. Paralleling these efforts, meanwhile, are many nations' often-dramatic efforts to refurbish and expand their major transportation systems. **China's** drive to build and connect its city-regions is unprecedented at $160 billion invested annually into new projects, for example.[68] The country completed a 25,000-mile highway system in just 12 years and expanded Beijing's subway system from 70 to 355 miles in just over a decade.[69] In Europe, multiple nations are coordinating the development of a high-speed rail network that by 2020 will connect urban centers from every corner of the continent.[70] The **Spanish government,** specifically, spends roughly $6 billion a year on rail projects and aims to place 90 percent of its population within a few dozen kilometers of a high-speed rail line by 2020.[71] **Germany** too is upgrading its already exceptional intercity high-speed rail network with faster connections between major cities and a new $2.5 billion magnetic-levitation line linking Munich to the Bavarian airport.[72] The **UK** and the **Netherlands** plan to further promote alternative transportation through national investments into road pricing and congestion fees, similar to those in London.[73] The UK's Transportation Innovation Fund will dispense around $400 million a year to back local British efforts in such schemes—a significant investment for that nation.[74]

And then, in their efforts to create *quality places* and support environmental sustainability, many nations are making several smart investments. The **UK** has dramati-

Human Capital Development in Singapore: Driving Growth through Transformative Education Investments

Around the world, national leaders are paying attention to Singapore's disciplined commitment to education—a commitment that has turned the nation into a showcase of leading-edge human capital development as well an economic star.

Beyond mandating attendance—parents send their children to school or pay a $5,000 fine—the nation has moved aggressively to diversify its educational offerings, streamline transitions between secondary and postsecondary learning, and develop a world-class university system using non-traditional means.

Granting schools independence and autonomy is allowing Singapore's schools to tailor instruction, recruit top teachers, and pursue innovative programs. The establishment of privately funded schools, along with the creation of several specialty schools—such as the National University of Singapore High School for Mathematics and Science, the Singapore Sports School, and the Specialized School for the Arts—has diversified educational offerings. And the country's "Integrated Program" places students on a continuous track from secondary school straight through junior college

In addition, Singapore's education secretary collaborates closely with economic agencies in linking curricula to future development opportunities and has invested billions of dollars recruiting scientists and satellite programs of leading universities worldwide in an effort to create a "global schoolhouse." By 2003, the country's Economic Development Board had surpassed its 2008 goal of attracting to Singapore 10 renowned institutions, including Duke University, INSEAD, the Massachusetts Institute of Technology, New York University, and the University of Chicago.

The results of Singapore's investment in human capital development are impressive. The nation consistently ranks at the top of international comparisons of math and science test scores. Literacy is nearly universal. Lavish doctoral scholarships—for citizens and foreign students—are simultaneously attracting and retaining talent. And life science PhDs are now eight times as thick on the ground as in the U.S. on a per capita basis. In short, this multilingual, multicultural city-state—now boasting the 42nd-largest economy in the world—has managed through smart human capital investments to transform an economy almost wholly reliant on fishing and low-wage manufacturing into a high-tech powerhouse.

Sources: John Kao, Innovation Nation *(New York: Free Press, 2007); Trivina Kang, "Taking Human Capital Investment Seriously: Reflections on Educational Reform." Educational Research for Policy and Practice 3 (2004): 63-76; World Bank World Development Indicators; UNESCO, Global Education Digest 2006; and Singapore's Economic Development Board at www.edb.gov.sg.*

cally increased its focus on cities over the past decade, investing billions of dollars into city centers, public spaces, and smart growth. The country's "Town Center First" development principle prioritized development in the core, bringing downtown development from 25 percent to 41 percent of total development in 10 years. Smart growth policies require new housing developments to achieve higher densities and require that at least 60 percent of such developments occur on brownfields—a requirement that has been exceeded by 10 percent since 1997.[75] **Germany**, for its part, is rethinking its physical landscape and investing in the regeneration and redevelopment of the former industrial areas of the Ruhr Valley. Taking a lead on creating a more sustainable environment through cleaner energy, meanwhile, **Denmark, Spain, Germany, Japan,** and **France** make national investments subsidizing alternative fuel sources, including wind, solar, and nuclear power.[76] **Denmark's** long-term support of wind power has allowed it to capture nearly 20 percent of its electricity from this renewable source and develop a thriving wind turbine industry with 20,000 domestic jobs that provided roughly 40 percent of global sales in 2004.[77] And **Spain** is using national tax subsidies, similar to those that catalyzed its wind energy success, to build its solar power industry, where the number of companies has leapt from a couple dozen a decade ago to several hundred today.[78]

Around the world, then, numerous nations—America's competitors—are engaging aggressively to secure for themselves the critical innovation, human capital, infrastructure, and place assets that ultimately drive regional and national prosperity.

* * *

Transportation Infrastructure in Germany: A Nation Leads, Empowers, and Maximizes Performance All at Once

Faced with aging infrastructure, growing freight demands and environmental concerns mirroring problems in the United States, Germany has opted for an entirely different approach to transportation policy. In contrast the U.S., in which programming is driven largely by parochial political concerns, Germany's federal government has laid out a coherent mobility vision that at the same time empowers regions to carry it out and seeks to maximize performance all through the system.

Having identified the nation's 11 top regions—with input from regional leaders—the national government seeks to address multiple issues simultaneously, including internal population shifts and trans-border issues that are impacted by transportation such as climate change. To do that, it has created a cooperative model that seeks to target and build on each region's unique strengths as economic clusters, rather than setting them up to compete with each other for resources. Each metropolitan region comes up with a strategy that builds on its existing strengths and realistic potential, while thinking in terms of its role within the national "division of labor."

In the past, Germany's spatial policy was designed to help prop up weaker rural areas. Given the challenges presented by economic and demographic changes, however, the federal government has switched its focus to the major metropolitan regions and their potential for economic growth and innovation and has led in that way. Every region now has a specific goal for economic development and the federal government seeks to speed up links between these different actors, while also encouraging conservation of resources within each region and promoting compact cities and the urban core. Yet here there is a strong strand of empowerment. "Our thinking is that every region has specific potential," says Engelbert Lutke Daldrup, state secretary at the federal Ministry of Transport, Building, and Urban Affairs, which provides a significant share of capital funding for roads and transit. "Out strategy is not to exclude regions but to help them mobilize."

How does this work? The ministry lays out the broad agenda but remains agnostic about the projects that will achieve them. The feds, states and local governments all have responsibility for different modes—air, rail, waterways and roads—but coordination between them is generally done at the metropolitan level. Aside from its role as lead organizer, the federal government seeks to provide ongoing guidance through collection and analysis of data, sorting through the complex interplay of settlement patterns, speed of travel and transportation's impact on land use. Rather than just being concerned about the environmental impact when a new road is built, for example, the ministry continues to measure ongoing effects.

In contrast to the U.S., where maintenance often suffers in favor of funding new construction, Germany relies and builds on existing infrastructure in order to expand capacity and to fix bottlenecks. The German republic also seeks to maximize system-wide performance with careful analysis. Every state and local transit and highway project that uses federal funds has to go through a standardized assessment to determine whether the project meets requirements in terms of areas such as its viability and its environmental impact. Learnings from those assessments ensure that German regional transit and land-use policies has been evolving for decades, leading to greater use of public transportation, reduced energy consumption, and lower household transportation costs.

So yes: It has taken time for Germany to reach its present balance. But that's all the more reason for the U.S. policy makers to examine the transferable lessons from Germany right away. Catherine L. Ross, a former transportation official for the state of Georgia, says that such "international show and tells" are needed to inform a national infrastructure system that today is served piecemeal. "We need a regional framework that's larger than a state and larger than a road or a county."

Source: Jonathan D. Miller, "Infrastructure 2007: A Global Perspective" (Washington: Urban Land Institute and Ernst and Young, 2007); Robert Puentes, "A Bridge to Somewhere: Rethinking American Transportation for the 21st Century" (Washington: Brookings Institution, 2008); Werner Rothengatter, "The Case of Germany" in National Systems of Transport Infrastructure Planning: Round Table 128, *ed. European Conference of Ministers of Transport Economic Research Center (Paris: OECD, 2005); U.S. Department of Transportation, "Review of Congressional Earmarks Within Department of Transportation Programs" (Washington: U.S. Department of Transportation, 2007); and Oliver Weigel, "The German Metropolitan Agenda," Presentation at the Rockefeller Foundation Urban Summit, July 2007.*

Crafting Quality Places in the UK: Leading on Land Use and Development

One nation that has embraced a vision of placemaking as a driver of national success is the United Kingdom, where the connection between quality city-regions and prosperity has been the object of high-level ministerial and policy focus for a decade now. Since the 1990s, in fact, the UK national government has employed its centralized planning authority to aggressively promote "smarter" metropolitan growth to improve the economic, social, and environmental conditions in and around urban centers.

The "town center first" development principle, for example, has steered local officials away from building sprawling "big-box" retail and spurred the physical regeneration of city commercial centers. This guiding principle sets out a sequential approach to development, whereby developers must first prove that "in town" locations are not viable before they can build at the "edge of town" or "out of town." Since the mid-1990s, when this guidance was first issued, the number of approvals granted to "edge of town" planning applications has significantly dropped and the proportion of total retail floor space in city centers has jumped from 25 percent to 34 percent as of 2004.

Other planning guidance from the UK government sets high-level goals for housing density and brownfield development. These target goals stipulate that 60 percent of all new residential developments be sited on brownfields and that new housing developments achieve densities of 30 to 50 units per hectare, depending on the location's character. Progress toward these targets has been very strong. By 2006, 74 percent of new housing developments were on brownfields, and the density of new dwellings averaged 40 units per hectare nationwide.

While the UK still struggles with unnecessary sprawl, long travel times, and segregated communities, the national government's willingness to craft policy innovations that prioritize urban centers and strengthen metropolitan areas have put the country on a solid footing for tackling its challenges and show one nation treating placemaking as a fundamental prerequisite for prosperity.

Sources: Kate Barker, "Barker Review of Land Use Planning" (London: HM Treasury, 2006); and Chris Webber and Dermot Finch, "Building Stronger City-Regions: U.K. Lessons for U.S. Policy" (Washington: Brookings Institution and Center for Cities, 2008).

In addition to bolstering their fundamental assets, nations around the world are also empowering their city-regions, recognizing that national prosperity depends on regional success. Given that recognition, many nations are experimenting with ways to bolster the power and cohesion of their city-regions, whether by providing them greater flexibility and decisionmaking authority or seeking to encourage regional cohesion—or both.

Devolution of more power to regions has been an ongoing process in **England** for the past decade.[79] During that time, the British government has taken steps to relax Whitehall's control over cities in a drive that combines greater local decisionmaking and program delivery with a national policy framework intended to advance national priorities and headline outcomes. Simultaneous to this relaxation of centralized control, the government has created nine distinct Regional Development Agencies (RDAs) with the autonomy and flexibility to respond to local challenges and opportunities in specific areas of England. Each RDA is given executive responsibility to develop a shared stakeholder vision for regional competitiveness and discretion to deploy its share of national funding (roughly $4.7 billion total for 2007–2008) to those activities considered most effective for executing it.[80] Planned reforms will give RDAs even greater future flexibility by replacing onerous reporting requirements with fewer, outcome-based performance targets. Recent proposals would further boost local power by allowing cities—which still have almost no independent revenue-raising powers—to levy a small supplement on business property taxes to co-finance local infrastructure investments.[81]

The historically centralized national governments of France and Italy have also been devolving greater authority to localities and regions. These nations have modified their constitutions to officially recognize "regions" and "metropolitan cities," respectively, signaling that these sub-national units are significant to overall national well-being.[82] **France**, for example, recently reformed its provision of national intercity rail service from a centralized approach to one similar to **Germany's**, where local and regional leaders are given direct national rail subsidies to buy the level of rail service most appropriate to their

Regional Governance in South Africa: Empowering Metros and Promoting Inclusion through Municipal Consolidation

The promotion of regionalism in South Africa has been a matter of more than technical significance in post-apartheid South Africa, where the process of transitioning to democratic local government has involved hundreds of municipal consolidations. National elections in 2000 reduced the number of municipalities in the country from 843 to 284. In particular, the Municipal Structures Act of 1998, which took effect after those elections, consolidated six major urban municipalities with dozens of their surrounding townships to create "unicities." The six "unicities" are Cape Town, Johannesburg, Tshwane (Pretoria), eThekwini (Durban), Nelson Mandela (Port Elizabeth), and Ekhureleni (East Rand). Together, they constitute 31 percent of South Africa's total population, yet contribute 55 percent of the nation's GDP.

Given the deep-rooted inequities in South Africa, the creation of the unicities was a profound act that inaugurated a new era for the national government. While apartheid kept South Africa's cities predominately white and the suburban and rural townships mostly black (or for other persons of color), the unicities forced ethnic and racial diversity within the consolidated metropolitan area. Furthermore, each unicity introduced one common tax base and budget for its geographic area so as to balance historical fiscal inequities and ensure service delivery that would benefit metro residents more equitably. The formation of unicities also emphasized the need for spatially integrating the new metro regions through coordinated land use, transportation, and infrastructure planning.

The process of establishing the unicities has been complex and their economic, political, administrative, and spatial unification have met with mixed success. Nonetheless, South Africa's efforts in this regard are a bold move to embrace new national values and bolster the country's major metro areas, which were already the nation's engines of economic growth. Here, regionalism has advanced inclusion as well as prosperity.

Sources: P.S. Reddy, "Metropolitan Unicity Development in South Africa: A Case Study of the Greater Johannesburg Area" (Brussels: International Association of Schools and Institutes of Administration, 2003). Available at unpan1.un.org/intradoc/groups/public/documents/IIAS/UNPAN011208.pdf; and personal communication from Marc Weiss, Chairman and CEO, Global Urban Development, June 24, 2007.

needs.[83] In **Japan**, meanwhile, a recent law to decentralize government calls for greater consideration of local interests in formulating grants and subsidies, and an official panel will recommend a devolution program that transfers powers to sub-national authorities to better revitalize local regions.[84] And even the highly centralized **Chinese government** has granted powers to its mega-cities of Beijing and Shanghai that are on par with those enjoyed by provincial authorities so that local leaders can better direct the public investment that fuels their explosive growth.[85] This is also the case for the metropolitan city of Busan in **South Korea**.[86]

Another approach to decentralization employed by the national governments of France, Canada, and Sweden has been to defer to regions through formal agreements that adapt national policy objectives to regional contexts through negotiations between the different government levels.[87] The say afforded to metros in contract negotiation has been effective in tailoring national funding to projects specifically designed to meet local and regional needs. Reviews of **France's** State-Region Project Contracts, for example, reveal that all negotiating parties, including the central government and regions, feel that the process puts them on equal footing.[88] A similar framework of equal partnership in **Canada's** Urban Development Agreement aligned multiple governments to address specific poverty, workforce, housing, and economic revitalization issues to enable an urban turnaround in Vancouver.[89] And, **Sweden's** Local Development Agreements cover over 1,000 projects that have shown collective progress in increasing employment rates and reducing public benefit dependency in 24 housing districts in major urban regions.[90]

Related to all of these efforts has been a flowering of national initiatives to promote "*regionalism*" within city regions. Notable among these have been striking and varied efforts to promote greater degrees of internal cohesion among locales in South Africa, France, and Scandinavia. In post-apartheid **South Africa**, for example, the intervention has been unlilateral and top-down: The national government simply mandated dozens of consolidations of the municipalities around key cities with the aim of eradicating racial segregation and reducing fiscal disparities.[91] By contrast, **France** has employed a bottom-up method of reform based on the provision of fiscal incentives for the creation of new supra-regional authorities called either Urban Communities or Agglomeration Communities. Along these lines incentive grants over and above communities' existing block grants are employed to promote voluntary cooperation and to encourage localities to cede certain responsibilities, like planning functions and the provision of public housing and transport, to the new regional entities.[92] Also in Europe, the concept of regionalism has spread across national borders so that several central governments are cooperating with their neighbors in efforts to promote and strengthen key cross-border city-regions. For example, the national governments of **Denmark** and **Sweden** have collaborated to strengthen the Oresund Region around the Danish capital of Copenhagen and the large Swedish city of Malmo. Together, the two nations jointly funded a combination road and rail bridge to connect the cities and have designed coordinated metropolitan growth strategies. Their efforts have also sparked tremendous regional university cooperation that has further stimulated the area's booming knowledge economy.[93] Finally, 13 areas of **England**—including cities like Manchester, Leeds, Newcastle, Bristol, and Birmingham—are now working with the government to develop "Multi-Area Agreements" that would allow them to pool transport, regeneration, and planning budgets and powers at the metropolitan level—and use them to address cross-boundary priorities.[94] The first of these agreements is expected in the summer of 2008. Additionally, the nation's RDAs will also soon be responsible for Single Regional Strategies covering economic development, housing, transport, and spatial planning. They are expected to work closely with local councils and metropolitan areas to execute and deliver these strategies. With these initiatives in place, one of the most centralized countries in the developed world will have embraced both decentralization and regionalization at once.

National governments around the world are empowering their city-regions, recognizing that national prosperity depends on regional success.

* * *

Still other national governments, finally, are getting smarter about how they organize their own bureaucracies and operations, knowing that high-performance government is also a prerequisite for optimal national and regional outcomes. These nations realize that with better program integration, increased accountability, clearer goal-setting, and more informed planning, national governments can engage more successfully with their regional partners to address their nations' biggest challenges.

Consolidation of previously isolated departments and program groups has been one strategy. To end program delivery through programmatic silos, for example, Brazil, Germany, Japan, and the UK have all established national super-agencies to enhance the coordination of separate policies and programs that are closely related when implemented on the ground. **Brazil** established one ministry to take a comprehensive approach to managing urban development, social inclusion, and universal access to basic services. Its Ministry of Cities brings together four national secretariats: Housing, Environmental Sanitation, Urban Programs and Transportation, and Urban Mobility.[95] **Germany's** Federal Ministry of Transport, Building, and Urban Affairs and **Japan's** Ministry of Land, Infrastructure, and Transport each facilitate broad awareness of the critical intersections between decisions about transportation, built space, and sustainability.[96] And for its part the **UK's** new Department of Innovation, Universities, and Skills brings under one roof responsibility for all of the nation's innovation and human capital initiatives, from basic literacy and skills-building to higher-education policy and R&D grants, all with an explicit focus on building a competitive economy.[97]

Governments are also using national "spatial strategies" to better integrate their public investments. In Germany, Ireland, and the Netherlands, national spatial planning around key metropolitan areas informs how these governments tackle economic revitalization, infrastructure upgrades, traffic congestion, and other land use-related issues. The **German** national plan directs the deployment of rail and telecommunications resources so as to strengthen the country's 11 identified metropolitan regions, thereby enhancing connections between magnets like Berlin, Hamburg, Frankfurt, Munich, and the rest of the country.[98] **Ireland's** planned investments for energy, communications, housing, and business seek to encourage more economic activity outside the greater Dublin area. Specifically, the Irish strategy calls for more balanced regional growth through the development of numerous,

sufficiently-sized metros connected by regional gateways and hubs.[99] And, in the **Netherlands**, national spatial development prioritizes infrastructure and investments that enhance the international competitiveness of key airports, ports, research and development centers, and industrial bases.[100]

Result-oriented management, meanwhile, is a key organizing principle for Canada, Denmark, Finland, the Netherlands, New Zealand, Sweden, and the UK to improve performance, accountability, and resource allocations.[101] These national governments are utilizing performance measures, benchmarking, and evaluations to shift programs' emphasis from various programmatic "inputs" to the achievement of actual outcomes. The **UK** formalizes its efforts through Public Service Agreements (PSAs), which are essentially commitments developed and agreed upon by the Cabinet that provide national direction and inform departmental budgets.[102] On everything from education to workforce to revitalization programs, PSAs transparently articulate long-term, outcome-focused targets for service delivery, which are regularly refined with input from front line practitioners. This way, PSAs can strike a balance between key national priorities and implementation flexibility, particularly for high-performing groups that succeed in meeting all standards.

To avoid politicizing performance management, for that matter, the **Netherlands** and **New Zealand** have engaged in the wholesale creation of separate public service agencies with managerial autonomy from traditional central government ministries.[103] Given relatively clear public purposes and independent managers, these agencies can be held more easily accountable for the process and outcomes of their service delivery. In fact, a government review of Dutch agencies concluded that this agency model does contribute to improving efficiency.[104]

Finally, around the world, central governments are committing to ambitious national goals to mobilize responses to climate concerns. In Europe, **Germany** has pledged to cut carbon emissions by 40 percent by 2020; **Norway** is striving to be the world's first zero-emission nation by 2050; and **Portugal** is determined that in the near future it will supply 45 percent of its energy with renewables and become the continent's leading renewable energy producer.[105] In Asia, **China** has pledged by 2010 to produce 10 percent of its energy supply from renewables, and by 2020, to become the world's largest wind energy producer. **India** has publicly said it will reduce its emissions by 25 percent by 2020, and **Japan** envisions reducing the entire world's carbon emissions by 50 percent by 2050.[106]

* * *

Other national governments are getting smarter about how they organize their bureaucracies, knowing that high-performance government is a prerequisite for optimal outcomes.

To summarize: Metropolitan area leaders—though they stand at the fulcrum of national competitiveness and labor there creatively—will not likely be able to prevail by themselves in defending and extending U.S. prosperity. Innovative and effective as they increasingly are, city-regions' limited institutional capacities are continually overmatched by the titanic scale and breadth of 21st-century challenges. For that reason, the federal government—like national governments around the world—will likely need to engage far more strategically to provide metropolitan leaders the support, tools, and flexibility they need to maximize the nation's prosperity as only they can.

IV. FALLING BEHIND: CURRENT FEDERAL POLICY STANCES AND AMERICA'S METROPOLITAN AREAS

Given the importance of its metropolitan areas,

the nation requires a framework of federal policies that provide metropolitan actors the support, capacity, tools, and discretion they need to maximize America's prosperity.

What might such a framework look like?

It would begin with a federal government that engages consistently and appropriately to help boost the stock of prosperity-driving assets—innovation inputs, human capital, infrastructure, and quality places—available in metropolitan areas.

Such a framework would also empower actors with a metropolitan view, and work to enhance their ability to act decisively for the benefit of their metro and that of the nation.

Finally, such a framework would require a government in Washington that upgrades its own performance so that it maximizes the performance of the entire metropolitan system through its own dealings and partnerships.

How is the nation doing in providing such a framework?

In a few areas, such as on investments in basic science and technological R&D, or the reconstruction of public housing blocks in the 1990s, Washington has performed quite well in recent decades. In these areas, strategic federal efforts have supported local innovation that has benefited America as a whole.

And yet, in too many policy domains, Washington's current policy stances must be counted either as unhelpful to the nation's metropolitan problem-solving or hostile to it.

Too often, metropolitan leaders find the federal government they deal with adrift, obsolescent, and unresponsive to the requirements of a region-focused world.

Confusion increasingly blurs relations between Washington, states, and metropolitan actors about the appropriate nature of their respective partnerships that should drive prosperity. Likewise, few metropolitan innovators would call Washington a high-performance organization, but instead complain about a federal apparatus that appears mostly a "legacy" government, a collection of largely outmoded agencies, many formed in the 1950s and 1960s and carrying out programs forged in the 1970s and 1980s through means and mechanisms suited to a pre-Internet world.

In this vein, this chapter makes several major contentions about the current moment for policymaking, the demands being placed on organizations, and the current state of federal policy and practice as it affects America's metropolitan areas. To that end, the pages that follow argue that:

- **Radical change is challenging all organizations—including those in Washington—to transform themselves**
- **Washington, however, remains adrift**
- **Washington's drift hinders metropolitan efforts to leverage key drivers of prosperity and solve problems across boundaries**

1. RADICAL CHANGE IS CHALLENGING ALL ORGANIZATIONS—INCLUDING THOSE IN WASHINGTON—TO TRANSFORM THEMSELVES

Federal policy has, at times, in recent decades struck the right balance of leadership, flexibility, and creativity in helping to augment metropolitan and national standing on crucial drivers of prosperity.

Federal support for advanced scientific research has undeniably stimulated technological innovation and increased the productivity of regional economies.[1]

Programs aimed at increasing Americans' access to postsecondary education, from the GI Bill and Pell Grants to the Lifetime Learning Tax Credit and education IRAs, have also helped metropolitan areas secure the drivers of prosperity, in this case by promoting the development of local human capital.[2]

For that matter, the innovative federal transportation framework embodied by the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 and the Transportation Equity Act for the Twenty-First Century (TEA-21) of 1998 gave states and metropolitan areas greater certainty of funding and more flexibility for program design—each necessary for driving prosperity with appropriate infrastructure.[3]

And the federal government has been on occasion an important catalyst for the crafting of quality urban places in metropolitan America, perhaps never so much so as through the HOPE VI public housing transformation program, which by replacing isolated housing blocks with attractive, neighborhood-friendly mixed-income units has been a powerful force for neighborhood revitalization.[4] This initiative, too, has made a difference.

And yet, notwithstanding these relative successes, much federal policy on metropolitan issues suffers from serious shortcomings, and fails either to ensure the nation secures the crucial drivers of prosperity or to see to it that metropolitan areas have the power, discretion, and standing they need to leverage their assets.

Most glaringly, in a world characterized by convulsive change, Washington remains largely unresponsive to the era's major economic, social, and environmental imperatives, whether in its own activities or its dealings with actors attempting to craft responses in metropolitan areas.

Hasn't it always been thus? Actually, no.

Every era produces a characteristic organizational paradigm, as Robert Atkinson argues, and for a time at least, these paradigms—informed by the technological, economic, and social system of the moment—may yield institutions and governments well-attuned to the era's economic, social, or environmental realities.[5]

The rise of the large factory-based, industrial economy in the 1890s, for example, brought about wide-scale municipal and state government reform, as well as the increased federal role of the Progressive Era. These reforms balanced and channeled the new scale and power of corporations with anti-trust oversight, financial-system reform, and consumer protections designed to stabilize capitalism in a time of uncertainty.[6]

Likewise, the enlargement of the mass-production corporate economy engendered the New Deal and Great Society paradigms that relied on the "top-down" "managerial" state and "big government" to manage society. This governmental configuration also proved for a time effective, and gained legitimacy by winning World War II, building the Interstate Highway System, and sending a man to the moon.[7]

No such optimal tuning of Washington governance to today's variegated economic, social, and developmental realities can be found. Instead, while many programs and agencies reflect the mid-century economic order and its administrative expression, events are throwing into relief the shortcomings of an increasingly maladjusted federal apparatus.

What happened? The world changed.

The transition to an entrepreneurial knowledge economy has reshaped the needs and priorities of the private and public sectors

	Issue	Mass production corporate economy	Entrepreneurial knowledge economy
Economy-wide characteristics	Markets	Stable	Dynamic
	Scope of competition	National	Global
	Organizational form	Hierarchical	Networked
	Production system	Mass production	Flexible production
	Key factor of production	Capital / labor	Innovation / knowledge
	Importance of research	Moderate	High
	Relations between firms	Go it alone	Collaboration
Government	Overall governance model	Rule-bound / centralized	Decentralized discretion with iterative performance management from center
	Performance measurement	Focus on processes	Focus on results
	Geographic scope of activities	Insular	Trans-boundary
	Decisionmaking	Compartmentalized	Integrated
	Inter-governmental relations	Go it alone	Collaboration

Source: Modified from Robert Atkinson, The Past and Future of America's Economy: Long Waves of Innovation that Power Cycles of Growth *(Northampton: Edward Elgar, 2004).*

Federal policy on metropolitan issues often suffers from serious shortcomings.

Accelerated by new technologies, globalization, and deregulation, the advent of a "new" economy in recent decades has brought a new era of speed, entrepreneurship, innovation, flux, and complexity—as well as profound new challenges for organizations.

"MetroNation," in this series, notes how rapid technological advancement and liberalized trade have sped the integration of vast emerging economies into the global system, touching off hyper-competition between firms and nations to command markets and high-value production.[8] But heightened competition between nations is just one manifestation of the new dynamics. More pressing for both private- and public-sector governance is the extent to which new economic and social currents are shattering the "old" model of top-down, managerial mass-production for stable markets.

The pace and scope of change has been staggering. New technologies, new financial instruments, and deregulation have swept away stability in sector after sector, reducing barriers to entry, fracturing the old oligopolies, and creating in some industries "competitive anarchy" among a proliferation of new players.[9] Immigration, migration, world-wide capital flows, and widening income inequality are roiling once homogeneous national markets, creating regional variation, rendering standardization untenable as they bring new diversity and flux.[10] And then, too, the Internet is shifting power from producers to consumers, sharpening and widening demands for increasingly customized, higher-quality services and products.[11]

In short, organizations of all types are more and more dealing not with a single mass market but with a proliferation of segmented, diverse, and empowered sub-markets and regions buzzing with opportunities and demands that "vary significantly from place to place, time to time, and person to person," as Atkinson puts it.[12] The result has been a quantum increase in the complexity of social and economic circumstances in the U.S. and a growing sense in almost all areas of endeavor that the application of uniform, pre-set routines and playbooks can no longer work in the face of increasingly differentiated, fast-moving, and localized problems.[13] The spreading reality: Organizations of all sorts must transform themselves or fail.

So many are transforming themselves.

Compelled by the new conditions, firms, governments, and organizations of all types have embarked upon an urgent search for new, more flexible and effective forms of organization out of which the outlines of a distinctive 21st-century style of governance have begun to emerge.[14]

Most tangibly, hierarchical, bureaucratic organizations (in business and sometimes in government) have for over 30 years been giving way to flatter "learning" organizations that rely less on rules dictated from the "top" and more on decentralized problem-solving to deal with fast-moving change and turbulence.[15]

Along these lines, organizations have been simultaneously rethinking their structures and seeking to optimize performance.

The tumult has been most intense in the private sector. There, firms have been experimenting with decentralized organizational configurations, trying to locate new, more flexible structures that can create and maintain competitive advantage in the face of constantly shifting conditions:

- The central role of "headquarters" (or the "lead" firm in a conglomerate) persists but is increasingly being narrowed and focused on targeted "enterprise leadership." Frequent activities of the center include: setting strategy; approving units' goals and monitoring progress; as well as stimulating best practice exchange and other sorts of knowledge-sharing[16]
- Top-down planning and control structures are giving way to decentralized, "federated" systems that seek—because pre-set central plans cannot encompass the complexity and variation of contemporary reality—to build in space for decisive front-line responsiveness, problem-solving, experimentation, and learning[17]
- And at the same time, firms are paying extensive attention to optimizing the performance of their organizations and partners in order to maximize effectiveness:
  - With markets and customers increasingly demanding, companies are relentlessly focusing themselves on market conditions and customer needs[18]
  - To improve their ability to deliver integrated "solutions," firms are straining to transcend if not obliterate organizational silos that fragment response and hinder the provision of end-point solutions[19]
  - Because they can't "do it all," companies are seeking through partnerships, networks, and various market mechanisms to leverage their impact[20]
  - And finally, to make it all work, firms are deemphasizing rule-driven control in favor of an accountability that links significant devolution to systematic measurement, benchmarking, evaluation, and learning.[21] Crucial to this is the collection and dissemination of standardized high-quality data about the results of initiatives and its use in identifying and disseminating best practices

Along these lines, Timothy Sturgeon has described how the leadership of electronics firms grew more strategic in the late 1990s, and moved to increase firms' concentration on R&D, product design, and marketing while outsourcing more and more manufacturing to highly proficient contractors.[22]

Likewise, Gary Herrigel reports that Illinois Tool Works (ITW), a manufacturer of plastic and metal components, operates as a federation of 600 empowered units that look to the central headquarters for financing and R&D but are otherwise largely independent, free to set their own goals against which they are held accountable.[23] And meanwhile, Whole Foods Markets maximizes performance across its 270 grocery stores by combining the radical autonomy it allows its store-based work teams with strong accountability. "In essence," writes the management scholar Gary Hamel, "each team operates like a profit sector and is measured on its labor productivity…Every four weeks, Whole Foods calculates the profit per hour for every team in every store. Teams that exceed a certain threshold get a bonus in their next paycheck."[24]

For their part, states and local governments have joined in the ferment, seeking to locate new ways of conducting the public's business, often inspired by the tumult and experimentation roiling the private sector:

- Numerous states have worked to focus their leadership, choosing to lead strongly on key issues while attempting to clarify a division of labor across levels of government. Accordingly, a half dozen states have passed legislation that achieved some sort of universal health coverage; dozens have invested hundreds of millions of dollars in technology-based economic development, and more than half have entered a multi-state climate change initiative while a smaller number have initiated various efforts to sort out and streamline the rolls and responsibilities of state and local government[25]

- Other states and municipalities are embracing decentralization, devolving more autonomy and discretion to sub-units, line personnel, or local entities in order to improve their responsiveness. For example, Minnesota and West Virginia allow local governments to apply for waivers that eliminate regulatory barriers to efficient public service delivery[26]
- And more commonly, many jurisdictions have been moving with increasing energy to reform their own operations and service delivery, often borrowing techniques from the private sector:
  - Numerous states and municipalities have moved to respond to the needs of their "customers," rather than the bureaucracy[27]
  - Many states and localities have developed functionally integrated agencies and programs, seeking to transcend the worst of the old bureaucratic "stovepiping"[28]
  - A growing number of states and localities are also seeking to maximize their effectiveness and nimbleness through partnerships, networks, and various market mechanisms to leverage their impact[29]
  - And finally, to make it all work, state and local governments have become increasingly bold in deemphasizing rule-bound discipline and control in favor of an accountability that links significant devolution to systematic measurement, benchmarking, evaluation, and learning. They, too, are becoming sophisticated collectors, aggregators, and disseminators of high-quality performance data and best practices in their efforts to serve the public well[30]

In this vein, numerous states and localities are busily "reinventing government" or working to provide "high-performance government" with scores of customer-responsiveness, program-integration, "linked-up government," performance budgeting, or outcome measurement initiatives.

The spectacle, in short, is varied, intense, and impressive. At a moment of disruptive change, organizations of all types are engaged in a panoply of experiments that frequently seek to rethink relations between the center and its satellites, devolve more autonomy to sub-units, and improve the performance of the overall system. Within that experimentation can be seen the emerging outlines of a new, simultaneously directed and decentralized brand of high-performance governance for the 21st century.

2. WASHINGTON, HOWEVER, REMAINS ADRIFT

So how is the federal government doing in embracing new 21st-century governance?

The answer is not so well—with troublesome consequences for America's metropolitan areas and the national prosperity that depends on them.

Implicit in the new governance, after all, is the need to address crucial issues involving the relations of the center to its parts, and how the center performs.

Getting the first issue of Washington's relations with relevant sub-units right—essentially, getting *federalism* right for a new era—is essential because a proper balance between national purpose and state and local autonomy is critical if metropolitan areas and the nation are to prosper.

In this regard, a well-tuned and productive partnership between Washington, the states, and localities has long been viewed as a prerequisite for the effective and creative performance of America's public sector in general.[31] But today, shaping such a partnership may matter even more, given the simultaneous need to ensure metros gain an optimal stock of the fundamental drivers of prosperity as well as the standing, discretion, and power they need to exploit their assets in an era when top-down solutions and hierarchy are less valid (in organizations and nations).

At the same time, optimizing Washington's *performance* in its own operations and partnerships is also essential to making sure metropolitan areas flourish. After all, metros' fortunes remain heavily influenced by federal spending, rules, and incentives on everything from R&D and education to the EITC, transportation and infrastructure, housing, and the environment.

And yet, the fact remains that today neither America's federal-state-local compact nor Washington itself are working well in support of metropolitan-scale problem-solving.

Without either a compelling vision of its relationships and responsibilities or a concerted drive to maximize its own effectiveness, Washington has drifted in recent years into a peculiar period of simultaneous inattention, intrusiveness, and obsolescence.

In this respect, Washington has been doing at once too little of what it ought to be doing and too much of what it shouldn't, even as it has failed to embrace the best techniques of 21st century governance and organization management.

Three significant criticisms of U.S. governance are unavoidable:

Washington is often absent when it should be present

The first problem with Washington's relationship to metropolitan areas in recent years has been the federal government's absence from vigorous problem-solving on numerous metro-relevant issues.

Blame it on the nation's post-9/11 security preoccupations. Blame it on decades of fiscal constraints, Washington gridlock, appropriate skepticism about the shortcomings of "big government," or a less-warranted ideological hostility to any and all government engagement. But for whatever reason, the federal government has too often been aloof from metropolitan affairs when it should have been engaged and so has often failed to lead in key instances to help leverage critical drivers of metropolitan success for the nation's benefit.

A large and diverse country needs leadership from the center in critical areas. A national vision needs to be set on innovation and infrastructure as much as on foreign policy, for example.[32] Basic standards must be established if a nation is to achieve progress toward key national goals or ideals, whether the protection of basic rights or the maintenance of a basic safety net for persons in need.[33] And then, intervention to address vast, diffuse problems that spill across state borders and capacity remains a critical responsibility of the national government.[34]

And yet, the federal government has frequently failed to lead the nation along such lines. On neither innovation nor infrastructure nor such critical matters as stimulating regional problem-solving in metropolitan areas has Washington managed to set an explicit national vision for success, despite pressing need, as explained in several *Blueprint* policy-series papers.[35] On standard-setting, federal income-support programs have failed to significantly address the growing divide between workers' wages and the costs of life's daily necessities.[36] And for that matter, Washington's failure to establish coherent legal or economic frameworks on the two most critical boundary-transcending challenges of the era—reducing carbon emissions and supervising immigration—has created much uncertainty and left states and metropolitan areas scrambling to work out responses.[37] Similarly disappointing has been the ebbing of federal efforts to encourage cohesive regional problem-solving and cross-jurisdictional problem-solving within metropolitan areas—an essential prerequisite for regions and the nation to make the most of their assets.[38]

In short, America's city, suburban, and metropolitan leaders survey a national government strangely adrift—and largely unhelpful—on many of the most challenging changes sweeping the country and its metropolitan hubs.

Washington is too often present when it ought to be absent

At the same time Washington is often absent when metropolitan areas need guidance or support, Washington remains all too present when metros areas need more flexibility and room to innovate. This too holds cities and suburbs back, as it complicates or precludes creative local problem-solving.

The diversity of U.S. metropolitan areas alone suggests that regions and localities need substantial autonomy to respond to distinctive local realities. Beyond that, a suitable degree of discretion on policymaking allows the accumulation of local knowledge unavailable in Washington, and most importantly, can facilitate beneficial experimentation with differing policies. This was the point of Justice Brandeis' famous celebration of the states as America's "laboratories" of democracy.[39]

Yet, if Brandeis were on the bench today, he would note that the federal government is hobbling state and metropolitan experiments in many ways. Federal programs often intrude Washington's policy biases into metropolitan areas' policymaking, as when federal transportation programs tilt towards automobiles and bus rapid transit, rather than deferring to better-informed regional preferences.[40] Similarly, ill-considered federal involvement has generated significant unintended consequences in metropolitan areas, with the grimmest example being the way that federal low-income housing policy—with its heavy

focus on housing the very poor in special units concentrated in isolated urban neighborhoods—has contributed to the concentration of poverty, undermining lives and places.[41] And then, Washington too often actively discourages state, metro, and local problem-solving, whether by preventing states from enforcing predatory lending laws against national banks (a move that likely contributed to the sub-prime mortgage crisis that has wracked so many metropolitan areas), or by blocking California and 16 other states from implementing laws limiting greenhouse gas (GHG) emissions from cars and trucks.[42]

The result: Washington has blurred the nation's intergovernmental relations by doing too much of what it shouldn't be doing even as it does too little of what it should do. And so a growing confusion about the relationships between Washington, states, and metropolitan areas has left the core hubs of American prosperity at once unattended and micromanaged, neglected, and hobbled.

Washington has failed to embrace the possibilities of 21st century governance

But metropolitan America is not only vexed by what Washington does (or doesn't do). Also problematic is *how* Washington functions. Washington is stuck.

Twenty-first century governance frequently exhibits at least five defining characteristics as private- and public-sector ferment shows. Along these lines, high-performance governments of this era tend to:

- Understand their environment, not least the geography, people, markets, and social realities of their locale[43]
- Integrate or "join-up" programs[44]
- Shift from a focus on prescriptive rules to a focus on outcomes[45]
- Engage in and support partnerships[46]
- Share information to achieve performance targets[47]

Unfortunately, though, very few federal agencies can be said to have fully transformed themselves into high-performance, 21st-century organizations by availing themselves of these tools and techniques.

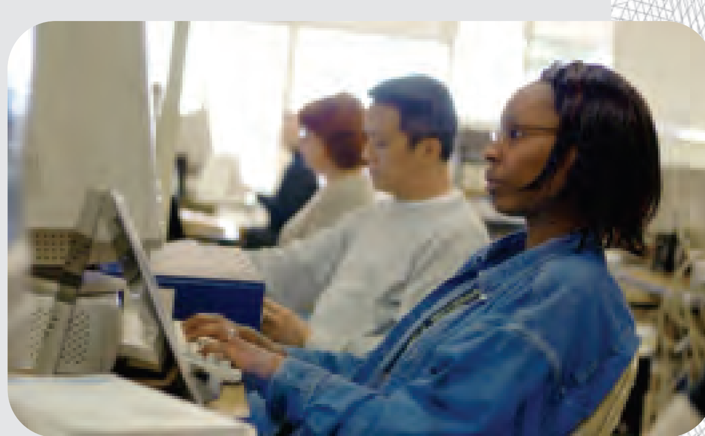
Many of Washington's programs and priorities were established decades ago to address earlier challenges and adhere now to obsolescent administrative approaches. At the same time, while government reform remains a constant buzzword, progress remains marginal.

To begin with, Washington seems neither to acknowledge nor understand the primacy of metropolitan areas in U.S. affairs, their variety, or their internal realities. Federal economic policy largely ignores the centrality to the nation's economy of its regional economies in general and its industry clusters more specifically.[48] Federal transportation policy continues to assign states—not metro areas—the primary role in transportation planning and programming.[49] Federal rental housing policies focus mostly on cities, although poverty has suburbanized.[50] And federal "urban policy" in the form of tax credit programs and housing investments ignores school underperformance—a large drag on urban economic success.[51]

At the same time, Washington's structures, policies, and rules today remain heavily stovepiped—narrowly defined, poorly coordinated, and in general ill-suited to supporting creative metropolitan problem-solving. In this respect, the dizzying pace, diversity, level of connectedness, and rising expectations of the metropolitan era are all requiring a move toward policies and approaches that employ synergistic, multi-dimensional thinking and action.[52] However, whether in individual program areas (such as economic development, education, housing, or transportation) or across a broad range of federal activities, the totality of federal activities often remains rigidly compartmentalized and fragmented. Unlike the UK, with its emphasis on "joined up" programs, Washington has largely failed to recognize the interconnectedness of housing and transportation issues, school and housing issues, and transportation and energy issues, and so fails to seize opportunities to improve outcomes through integrated problem-solving.[53]

For that matter, federal programs and regulatory approaches remain intensely rule-bound and hard for metropolitan actors to employ for creative problem-solving. On this front, it bears reiterating that the most effective organizations, public and private, here and abroad, have been shifting away from systems that rely on tightly drawn rules and regulations.[54] These organizations perceive that pre-set, one-size-fits-all standards cannot manage turbulent realities and may lock out creative solutions. They recognize that an inward focus on process and rules may not produce useful results. And so, many public-sector organizations are moving to incite progress by setting broad goals and latitude while measuring performance, instead of commanding it by limiting actors' discretion through rules and constantly monitoring compliance.[55] However, rule-driven, compliance-oriented management remains alive and well in Washington, and continues to hamstring metropolitan problem-solving. Federal rules keep workforce investment boards focused more on maintaining the Workforce Investment Act infrastructure of one-stop career centers than on developing a workforce with the skills necessary for success in the local job market.[56] New federal TANF rules force states to focus more on arbitrary process-oriented participation rates and guidelines and less on actually promoting key employment and income goals for their beneficiaries.[57] And various procedural rules make it difficult to use Small Business Administration and HUD programs to create mixed-use projects, the preferred form of metropolitan development.[58]

Getting It Wrong: Federal Stovepiping and Rigidity Complicate Human Capital Development in Seattle



Problem-solvers in the Seattle area have been struggling for years to devise innovative ways to enhance the career readiness of the region's low-income workers.

What is surprising but illustrative, however, is how often the path-breaking work of one successful innovator—the nationally-acclaimed Seattle Jobs Initiative (SJI), now in its 11th year—has actually been complicated by federal rules and rigidity.

In this respect, SJI administrators have long found federal programs and rules addressing workforce development well-meaning but also incoherent, fragmented, and sometimes counter-productive.

The problems are diverse but all thorny:

- Pell Grants are geared toward making college affordable for traditional students studying full time but do little to assist low-income working adults like those participating in SJI programs
- The federal Food Stamp Employment and Training (FSET) program matches local training and support-service expenditures for low-income individuals, but its cap of 30 hours per week on total work plus training time forces SJI to limit the length of its training programs to prevent participants' disqualification
- And likewise, the Temporary Assistance for Needy Families (TANF) program requires participants to engage in a minimum of 32 hours of activities per week, making it very difficult for college-based and other training programs to serve both individuals on FSET and those on TANF. Too many hours disqualifies those on FSET while too few hours disqualifies TANF recipients

Beyond these issues, there is a deeper problem: Overall, these largely fragmented federal policies with their overly proscriptive rules hinder local and regional efforts to align programs behind a unified strategy to help the low-income workforce obtain credentials beyond a high school degree—the most significant determinant of upward mobility given more than three-quarters of Washington state's new well-paying jobs require postsecondary education.

To be sure, for all of these impediments, SJI has in 11 years moved over 5,500 low-income workers into jobs in the Seattle region starting at $12 an hour with benefits. In this, SJI is working in part to fill several gaps in federal offerings by combining industry-sector-specific training that integrates employer expectations with "wrap-around" supports—a comprehensive package of housing, transportation, and child care assistance. What is more, area foundations, corporations, and government agencies are now developing the King County Workforce Education Collaborative to go even further. Recognizing the importance of postsecondary education and training, this undertaking aims to quadruple the rate at which the estimated 75,000 low-skilled, low-income workers in Seattle and King County obtain the postsecondary credentials that will dramatically increase the wages and benefits they earn on the job.

Yet for all that, federal rules and policy shortcomings continue to complicate large-scale problem-solving in metropolitan Seattle. In fact, the higher aspirations of the Workforce Education Collaborative make the federal stumbling-blocks encountered by SJI an even greater problem. Part of the collaborative's strategy, therefore, is to work for changes in federal policy, which takes scarce resources and time away from the organization's larger goal but ultimately may lead to larger success.

By rethinking its well-meaning policies and adjusting its rules to better accommodate the needs of low-income workers, the federal government would do much to help programs—like those in Seattle—make even more progress in providing pathways to the middle-class and meeting the demand for skilled workers to fill middle-wage jobs.

Sources: David Kaz, Seattle Jobs Initiative; and Steve Johnson, Seattle Office of Economic Development. For more information on SJI, see their website at www.seattlejobsinitiative.com.

Another hallmark of 21st century governance is the prolific, creative use of partnerships.[59] With the traditional, command-control model of administration ill-suited to contend with the volatility of today's conditions, leading-edge private- and public-sector organizations are increasingly exploiting the power of partnerships and networks—including government agencies at all levels, non-governmental organizations, private companies, and philanthropies as well as citizens—to achieve results that draw on the expertise and creativity of those best situated to produce them. However, on this front, too, the federal government lags. Despite noteworthy efforts in this direction, federal policy and practices do not adequately employ public- or private-sector partnerships in achieving national ends, or sufficiently enlist or leverage the latent power of its potential metropolitan partners in solving national problems. Metropolitan planning organizations are underutilized as well-placed regional actors.[60] Federal programs related to innovation do not work closely with state or local governments or regional organizations despite local actors' success, flexibility, and proximity to production processes.[61] And for that matter, Washington provides little meaningful support for the true innovators in public schools and charters who are demonstrating success in educating disadvantaged populations or helping to reverse the loss of middle-class households by providing financial guarantees for higher education.[62]

Finally, firms and governments alike are increasingly setting broad performance targets for networked organizations that communicate the overall objectives of the network to all parties, measure performance against those targets, and then disseminate information, best practices, and promote learning to maximize success. However, progress along these lines, while real, has again been slow in Washington. Federal policies and practices still do not adequately deploy information, benchmarking, and best-practice exchange to manage performance, accelerate problem-solving, and catalyze learning. The U. S. still lacks a comprehensive national indicators system for monitoring outcomes and providing a clear sense of what the nation has achieved and what needs to be done.[63] And equally telling, the Bureau of Labor Statistics used to measure the productivity of the federal government but stopped doing so in 1996.[64]

* * *

In short, current federal policy structures and practices —accumulated over decades—no longer fit the realities of the Metropolitan Age, and do not reflect the best practices of 21st-century governance.

More broadly, Washington's relations with the nation's most critical sub-units—its metropolitan areas and states—have grown skewed, even as the national government has lagged in embracing the best techniques of contemporary organization and network management. The result is that Washington's current combination of absence, presence, and backwardness fails to provide American cities, suburbs, and states the appropriate mix of leadership, flexibility, and effectiveness they need from a crucial partner at a moment of massive change.

3. WASHINGTON'S DRIFT HINDERS METROPOLITAN EFFORTS TO LEVERAGE KEY DRIVERS OF PROSPERITY AND SOLVE PROBLEMS ACROSS BORDERS

And here is the final point: The shortcomings of federal policy and practice here enumerated—Washington's peculiar combination of absence, intrusiveness, and obsolescence—must today be counted as a drag on metropolitan area leaders' ability to adapt their regions to fast-changing realities.

A national government retains unique powers, resources, and capacities essential to ensuring that the nation and its regional leaders secure and leverage the key local assets that drive metropolitan prosperity: innovation capacity, human capital, infrastructure, and quality places. To that extent, metropolitan—and national—prosperity in the U.S. depends vitally on Washington striking the right balance of leadership, deference, and creativity in its dealings with states and metropolitan areas as they seek to amass and align the crucial inputs of metropolitan success.

And yet, the fact is that the federal government has for the most part failed to strike the right balance of leadership, tact, and effectiveness in its interactions with metropolitan actors as they have sought to assemble and amplify the critical drivers of prosperity.

The federal government does not adequately or appropriately promote innovation *in metropolitan areas*

Innovation—the process of inventing and exploiting new products, processes, and business models—drives productivity growth and is therefore critical to retaining quality jobs in America, creating new ones, raising wages, and improving the local and national standard of living.[65] In this respect, the nation's economic performance hinges in large part on how well metropolitan areas—the bulk of the economy—function as incubators of new ideas and knowledge-driven businesses.

However, the federal government—thanks to a number of failures to lead, empower, and employ 21st-century governance techniques—has been only a mediocre steward of innovation in metropolitan America (notwithstanding its investments in fundamental science and R&D). For example:

- **Washington has been absent where it should be present in advancing an overall vision for how to catalyze commercial innovation in metropolitan America.** Several problems have been highlighted by *Blueprint* papers:
  - *The nation lacks an explicit national innovation strategy at a time of growing economic challenge*[66]
  - *Few U.S. innovation programs recognize the centrality to the nation's economy of its regional economies in general and its regional industry clusters in particular*[67]
  - *Very little attention is paid to the mechanics of how innovation and jobs can arise from the intense, place-based interactions of firms, workers, universities, industry associations, and investors* [68]
  - *Most federal economic development programs assume that most regions are largely alike, and so ignore regions' variety*[69]

- **Where Washington does assert itself on innovation, meanwhile, it does so in a way that intrudes relatively narrow biases into regional dynamics, and so does less than it could to empower regional innovation.** Several problems exist:
  - *Federal innovation efforts tilt heavily toward basic research and scant commercialization efforts, mistakenly assuming that basic research automatically leads to innovation*[70]
  - *Federal innovation efforts are aimed primarily at large firms and major research universities rather than smaller firms and institutions*[71]

- **And then, Washington's efforts to spur innovation fail to embrace state-of-the-art governance techniques.** In this respect, U.S. innovation activities remain poorly organized, fragmented, and insufficiently oriented to partnerships, catalytic relationships, and information exchange. For example:
  - *Nine federal departments and five independent agencies carry out 180 disparate federal economic development programs. There is little if any coordination across these departments, agencies, and programs*[72]
  - *Federal energy R&D occurs in fragmented and often obsolete silos that are poorly linked to the market, universities, and entrepreneurs that have the ability to accelerate the commercialization of new technologies*[73]
  - *Federal innovation-related programs do not adequately take into account existing state policies, nor does Washington partner with smaller firms, states, or local governments. For example, the National Science Foundation (NSF) has historically invested in research centers with little consideration for existing state science and technology policies and programs. Likewise, Washington does not enlist the capacities of small firms to promote innovation and commercialization, nor does it adequately partner with effective state innovation efforts*[74]
  - *For that matter, only a few federal programs—representing less than 1 percent ($558 million) of the total federal spending flowing towards regional economic development—focus on developing regional industry clusters or networks*[75]
  - *Finally, detailed, reliable, wide-ranging data, analysis, and best practice information about innovation in general and industry clusters more narrowly is simply unavailable, although the preparation of such information remains a traditional role of national governments*[76]

The federal government does not adequately promote metropolitan human capital *gains*

Metropolitan-areas' human capital stocks matter because innovation—the key to national economic growth—demands a workforce with education and skills that are continuously being upgraded. However, federal policies addressing education and workforce training are often incoherent and compartmentalized and ultimately fail to make the necessary connections between K–12 education, postsecondary learning, and the ever-changing demands of an increasingly global economy.

- **Federal leadership on human capital is at best incoherent, and in some areas nonexistent.** Most notably:
  - *Washington lacks any coherent vision on secondary education, and exercises very little if any leadership in preparing students for postsecondary success. This absence is particularly stark given Washington's activism in lower grades with the No Child Left Behind testing standards, and its heavy investments in higher education through investments in institutions, research, and students*

- **Where Washington does act on human capital issues, meanwhile, it often does so in ways that hamper local problem-solving.**
  - *Rules implementing the Workforce Investment Act overly restrict access to training and view it as a "last resort" to getting people into jobs (and off public programs) rather than a critical component to achieving employment that pays good wages*[77]
  - *The federal Food Stamp Employment and Training (FSET) program does not properly encourage, and at times, actually impedes, the efforts of metropolitan entities to design effective programs to promote educational and career progress among low-income workers. Unhelpfully, the program withholds services from food stamp recipients engaged in more than 120 hours of activities per month, which means it excludes those who are either working full time while they study or engaged in intensive training programs that mimic the workplace*[78]

- **Finally, federal efforts to promote human capital don't often enough exploit the techniques of high-performance governance.** In this respect, federal programs are frequently compartmentalized, overly rule-bound, focused too much on adherence to procedures and protocols rather than results, and don't adequately employ the power of partnerships:
  - *A lack of alignment among diffuse federal education and workforce training policies—there are nine federal agencies overseeing 44 separate training programs—is a major obstacle to regions trying to meet diverse student needs and develop a skilled workforce ready to tackle regional economic priorities*[79]
  - *New federal TANF rules force states to focus more on arbitrary process-oriented participation rates and guidelines and less on actually promoting key employment and income goals for their beneficiaries*[80]
  - *The federal government does not adequately support educational entrepreneurs that experiment with innovative strategies for educating disadvantaged communities*[81]
  - *And neither does Washington leverage the power of financial guarantees for postsecondary education as a means of reversing middle-class population decline in urban cores*[82]

On **infrastructure,** *the federal government is at once absent, intrusive, and behind the times*

Infrastructure networks are also critical to metropolitan and national prosperity. Productive growth, especially, depends on a state-of-the-art infrastructure network because transportation, telecommunications, and energy distribution systems—the circulatory networks of the nation—accelerate the movement of goods, ideas, and workers within and between markets.[83] Infrastructure links also provide the shape and determine the growth corridors of metropolitan development.

And yet, despite rising congestion and growing dilapidation, the federal government remains at once absent, intrusive, and largely behind the curve in acquitting its responsibility to play a key role in ensuring the nation profits from top-flight infrastructure networks.

- **Washington remains absent where it should be engaged in crafting a national infrastructure vision.** The gaps are massive, as reports Robert Puentes in a major *Blueprint* policy paper:
  - *There is at present no overarching national vision, plan, or overall goals for the nation's surface transportation system*[84]
  - *Meanwhile, Washington provides little or no leadership on the development of inter-jurisdictional freight corridors, let alone inter-regional mobility*[85]

- **Meanwhile, the federal government is too often present where it should be absent, intruding its biases into state and local problem-solving and sometimes generating unintended consequences.** The problems here have serious ramifications for regions' development:
  - *Highway programs remain biased toward building new roads when the more crucial need is to maintain and renovate old ones*[86]
  - *Surface transport programs remain highly biased against transit. The Federal Transportation Administration's increasingly rigorous pre-analyses of proposed public transit projects do not extend to federally funded highway projects, which are approved with relative ease*[87]
  - *Even within the transit arena, the Small Starts program for expediting smaller-scale projects strongly favors bus rapid transit solutions (suited to longer hauls) and is biased against streetcars (useful for supporting denser development and urban revitalization)*[88]

- **And finally, federal infrastructure policies and programs have failed to embrace key elements of state-of-the-art performance-driven management.** Again, the gaps are substantial:
  - *Federal transportation policy has only haltingly recognized metros' centrality to transportation outcomes, and continues to assign states the primary role in transportation planning despite the existence of capable metro-level public authorities*[89]
  - *There are now 108 separate federal surface transportation programs, leading to fragmented institutional arrangements that produce disconnected transportation and land use decisions*[90]
  - *The federal government's certification process for transportation partners is scant, with metropolitan planning organizations required only to be consistent with the Civil Rights Act, the environmental justice executive order, and the Americans with Disabilities Act. Meanwhile, state departments of transportation are not subject to certification nor are they penalized for improvement plans that flout the planning factors outlined in federal law*[91]
  - *At a moment of transportation crisis, billions and billions of federal transportation dollars are disbursed without meaningful direction to the states about how they might be spent to advance the national interest most effectively*[92]
  - *Equally disturbing is a pervasive lack of fact-gathering, analysis, and accountability across the transport program. Federal agencies do not collect, share, or analyze sufficient information about the federal system. Agencies conduct little or no performance assessment on the results of federal spending. And no one holds states accountable for their use of federal money*[93]

The federal government fails to invest in—or fails to empower state and local actors to create—sustainable, quality places

Fourthly, the creation of sustainable, high-quality places matters because a globalizing economy, changing demographics, and new environmental challenges are revaluing cities, augmenting the importance of such urban attributes as density, distinctive neighborhoods, downtowns, and waterfronts. "MetroNation" in this series noted the importance of desirable, amenity-rich urban locales in enhancing the productivity, inclusivity, and environmental sustainability of metropolitan areas.[94] Through their density, such locations help match workers to firms, promote the sharing of key goods, and stimulate learning. Likewise, the diversity of urban places makes them focal points of more inclusive growth just as their compactness can help the nation achieve greater energy and resource efficiency.

And yet, Washington remains in many ways unattuned to the importance of crafting attractive, energy-efficient quality places and often acts in ways that stimulate low-density, energy-intensive, low-quality development.

- **The federal government has failed in recent years to provide leadership in helping metropolitan areas and the nation rethink counterproductive practices and create sustainable, higher-quality places.** Washington's absence again has deep-going implications:
  - *The public housing transformation program called HOPE VI, the most successful neighborhood revitalization of the past four decades, currently languishes, a victim of ideological squabbling and budget constraints*[95]
  - *Washington's inability to establish any coherent legal or economic framework for reducing carbon emissions has left cities, metropolitan areas, states, and the private sector to proceed without the certainty and efficiencies of a national approach*[96]
  - *The federal government currently plays only a modest, largely ineffective role in catalyzing energy efficiency in the residential and commercial building sectors, depriving metros of ways to scale up interventions*[97]

- **In a number of areas, meanwhile, federal presence has actually distorted regional development patterns and actually complicated metropolitan efforts at placemaking.** These distortions have greatly altered the development trajectory of U.S. metropolitan areas:
  - *Federal transportation policy—with its heavy orientation to highway funding—remains heavily implicated in the unintended consequence of suburban sprawl and city population decline*[98]
  - *Federal low-income housing policy—with its heavy focus on housing the very poor in special units located in isolated urban neighborhoods—has contributed to the concentration of poverty and further exacerbated sprawl*[99]
  - *Even newer efforts to produce affordable housing units, such as the Low Income Housing Tax Credit program, have yielded more units in urban areas than in suburban areas of growing employment*[100]
  - *For that matter, the federal mortgage interest deduction—intended to deliver the American Dream of homeownership nationwide—instead drives up regional housing and land prices, finances the construction of larger homes, and contributes to decentralized development patterns*[101]

- **And lastly, Washington's compartmentalized policies and implementation—particularly on housing and transportation—fail to employ up-to-date practices to the detriment of metropolitan outcomes.** Ultimately they do not comport with metropolitan complexity:
  - *Many federal programs ignore metros' internal realities, and so either under-perform or exacerbate problems. For example, federal rental housing policies are mostly city-focused although poverty has suburbanized*[102]
  - *The effectiveness of the housing voucher program has been undercut by its fragmented and insular administration by local public housing authorities (PHAs). Rarely does the administrative geography of the PHA match the metropolitan geography of rental and job markets. In the Detroit metropolitan area, for example, 31 separate authorities administer public housing; in Philadelphia, 19 do; in Chicago, the number is 15*[103]
  - *And the fragmentation extends beyond individual programmatic areas to the broader range of federal activities. For example, the federal government completely fails to recognize the connection between housing, transportation, and energy issues, and administers policies and programs for these two functions separately, thereby failing to seize opportunities to improve outcomes through integrated problem-solving*[104]

- *HUD's super-restrictive site contamination policies ironically eliminate many previously developed sites from HUD-funded housing uses, and so discourage affordable housing development on reclaimed brownfield sites while channeling development to suburban and greenfield locations*[105]

* * *

Finally: The federal government has largely abandoned its past efforts to encourage more cohesive regional and cross-jurisdictional problem-solving in metros

And there is one more area of needed federal attention to the fundamentals of metropolitan vitality: engagement to help metropolitan areas develop the inter-local cohesion they need to work across jurisdictional lines to make the most of the prosperity driving assets they gather.

The weak standing of "metropolitan" actors combined with the fragmentation of most U.S. metro areas makes imperative the development of such cross-jurisdictional governance. Moreover, the nation's strong interest in well-functioning regions combined with the large number of metropolitan areas that cross state lines has long begged for a national role in helping regions develop more ways of working more cohesively and decisively across intra-metro jurisdictional lines.

However, with the exception of the strengthening of MPOs, the federal government has mostly withdrawn from its past efforts in the 1960s and 1970s to actively promote regional planning.[106] Few conditions on the award of transportation, housing, environmental, or other categorical or block grants provide incentives for the development of more effective regional planning and governance. Federal programs themselves remain stovepiped, thereby reinforcing local fragmentation. And little effort has gone into linking city and suburban leaders into a national learning network or catalyzing local testing of improved regional governance models. Moreover, even the nation's investment in MPOs has been problematic. Not only do the organizations remain subject to both state power above them and local power below. What is more, the U.S. DOT has done little to ensure the organizations promote integrated planning. DOT has required only that the MPOs create annual five-year transportation investment strategies. There has been no requirement from Washington that transportation investments be synchronized with land-use plans and regulations or other concerns, with the exception of the Clean Air Act.

In this manner, Washington has at once failed to lead on the promotion of metropolitan cohesion, failed to empower metropolitan actors to act regionally, and failed to bring to bear leading-edge governance practices. This record fails to answer to the nation's interest in ensuring that metropolitan areas gain truly cohesive governance systems and truly empowered regional actors.

* * *

To conclude, then, the federal government has proven itself capable at times and on particular issues of becoming a deft, catalytic partner of metropolitan America as the nation and its major cities and suburbs have sought to achieve true prosperity in the form of productive, inclusive, and sustainable growth.

Unfortunately, however, Washington has in recent decades failed on balance to respond adequately—either through specific programmatic activity or organizational changes—to the vast economic, social, and environmental changes roiling the nation. The result: The federal government must today be counted largely adrift—a "legacy" apparatus of limited relevance in areas of critical need, insufficient supportiveness of local creativity, and frequently outmoded practices. The ultimate upshot: Such drift limits the ability of the national government to serve as an active, supportive, creative partner in the search for metropolitan and national prosperity.

V. METROPOLICY: SHAPING A NEW FEDERAL PARTNERSHIP FOR A METROPOLITAN NATION

And so America—the MetroNation—requires "MetroPolicy."[1]

What is MetroPolicy?

MetroPolicy is what the MetroNation lacks now, which is a purposeful, broadly supportive, and effective national policy framework that comports with the reality that America's prosperity emanates overwhelmingly from its metropolitan areas.

Such a new stance would reverse the decades-long drift of the federal government on issues of crucial metropolitan relevance. More positively, a wisely considered and implemented body of such policies, stances, and programs would reestablish Washington as a steady, empowering, and accountable partner with states, localities, and the private and voluntary sectors in the service of metropolitan prosperity.

Along these lines, MetroPolicy calls at once for updating intergovernmental relations to better serve the needs of metropolitan areas and applying more of the practices of high-performance governance to Washington's own activities and to its partnerships.

And so this final major chapter of "MetroPolicy" outlines the need for and nature of a new federal partnership for a metropolitan nation by making three main points:

- **A MetroNation needs MetroPolicy**
- **MetroPolicy implies a new intergovernmental partnership**
- **MetroPolicy can help the nation leverage key drivers of prosperity**

1. A METRONATION NEEDS METROPOLICY

The U.S.—like its competitors—is a MetroNation. And yet, while the nation has become metropolitan in point of economic, social, and environmental fact, it is hardly such a thing as a matter of policy.

Hence the imperative: Federal policies need to respond—as they have in past eras—to the economic, social, and environmental demands of a new moment in history.

Global in scale, locally varied, fast-moving, and complex, these demands are today more than ever metropolitan in nature. Therefore, effective problem-solving necessitates governance responses that acknowledge the era's metropolitan order and seek to ensure metropolitan areas prosper.

And so the ultimate goals of MetroPolicy revolve around strengthening the ability of individual metropolitan areas to amass and then align the fundamental assets that drive local and national success.

MetroPolicy strives first, then, to enhance the availability nationwide and in metros of those crucial assets. Accordingly, MetroPolicy aims to:

- Spur *innovation* among firms and workers and invent substantial new markets for high value American products and services
- Grow locations' *human capital* and build an educated and highly skilled competitive workforce that is racially and ethnically diverse
- Create and maintain state-of-the-art *infrastructure* that furthers the nation's ability to compete globally and achieve sustainable growth
- Develop and enrich *quality places* so that the nation can accommodate the 120 million additional Americans projected by 2040 in ways that minimize energy consumption and maximize economic and fiscal return[2]

Yet because these critical drivers of prosperity come together in specific metropolitan places, MetroPolicy seeks also to strengthen the ability of metropolitan area actors to leverage, link, and align to maximum effect the assets they possess. To that end, MetroPolicy further aims to:

- Help metropolitan areas move toward more cohesive *regional governance* systems that match the geography of metropolitan reality

METROPOLICY DIFFERS SHARPLY FROM "URBAN POLICY"

MetroPolicy is designed to leverage the core assets that drive prosperity in the nation. Traditional "urban policy" has principally focused on alleviating the deficits (e.g., concentrated poverty, abandoned housing) that are present in urban communities.

MetroPolicy encompasses broad and systemic approaches to enhance assets like innovation and infrastructure. Urban policy has mostly consisted of relatively marginal programs and micro interventions, mostly in the housing arena.

MetroPolicy engages markets—for housing, for labor, for transportation—at their actual geographic scale, the metropolis. Urban policy has principally focused on intervening within sub-markets, cities, and distressed urban neighborhoods.

MetroPolicy addresses the challenges of "strong" and "weak" markets alike. Urban policy has principally focused on the most distressed places.

MetroPolicy rewards problem-solving across the artificial lines of political jurisdictions (e.g., states and localities). Urban policy has focused almost exclusively on spurring change within cities, which make up only a portion of metropolitan economies.

MetroPolicy rewards integrated problem-solving across areas of domestic policy (e.g., transportation and housing) that are clearly connected on the ground. Urban policy tends to focus on interventions within discrete areas of domestic policy (e.g., housing) without regard to such connections.

MetroPolicy promotes social inclusion for the bulk of America's poor and minority residents, who live in cities and suburbs. Urban policy focuses predominantly on cities.

This priority responds to the fact that America is a MetroNation economically, socially, and environmentally, but not one administratively or politically. And so MetroPolicy seeks to aid and abet the many innovations in *metropolitan*-scale collaboration that aim to overcome governmental fragmentation with myriad forms of regional governance. Only through such nudging will U.S. metros gain the cohesion needed to bridge the proliferation of city, suburban, and state lines that divide them and make the most of the assets they possess for the greater good. In this way, MetroPolicy differs significantly from mid- to late-20th-century "urban policy" with its long-running focus on alleviating deficits by intervening in individual urban communities, often through segmented, narrowly focused individual programs.

In sum, a MetroNation demands a deliberate, empowering, and effective federal policy framework that will at once ensure the adequate provision of the fundamental assets that drive prosperity and facilitate their alignment by decisive metropolitan actors with a regional view. If developed seriously and wisely, MetroPolicy will provide that framework.

2. METROPOLICY IMPLIES A NEW INTERGOVERNMENTAL PARTNERSHIP

But MetroPolicy will also need to tend to the intricate—and currently problematic—relationships between the various levels of government that will heavily shape the conversion of a new policy ideal into a reality.

In this respect, MetroPolicy will require a rethinking of intergovernmental relations and federalism in light of metropolitan concerns and realities.

In envisioning a metro-friendly intergovernmental compact, it is worthwhile to recall that the "federalism bargain" is inherently dynamic and has been under continuous renegotiation during the past century.[3] Powers and responsibilities constantly shift between different levels of government—including localities—in response to the social, economic, environmental, and political imperatives of different eras. In every era the relationships between Washington, the states, and localities change to suit the economic, social, and political dynamics of the time.

This flexible ability to evolve and adapt stands as one of the most enduring, strengthening qualities of the American system of intergovernmental relations.

In the mid-20th century, for example, the Great Depression and the two decades following the end of World War II brought forth a marked growth in the powers and presence of the federal government. A grand "safety net" that included depository insurance, Social Security, Medicare, and Medicaid was erected to stabilize financial markets and protect the aged and infirm. A continental highway system was constructed to connect the states and our major population centers and make us one nation. A framework of civil rights and environmental laws was established to prevent and redress the ravages of racial discrimination and the degradation of our natural world through air and water pollution. And major immigration laws were enacted to open up our borders and connect us to the world.

Beginning in the 1970s, the federalist pendulum swung sharply back towards states and even localities as resources and responsibilities were pushed out of Washington. Armed with new "block grants," revenue sharing, and the devolution of powers, states and localities began out of both desire and necessity to tailor national programs and policies to their own distinctive realities.[4] At the same time, the general atrophying of federal leadership earlier described has also forced local governments to innovate on everything from health care and welfare reform to growth management, housing production, and the assimilation of immigrants.

This amalgam of conscious devolution and federal drift in recent decades—which has coincided with the growing centrality of metropolitan areas—has led to a period of dispersed and decentralized invention as states and localities embraced their central role as "laboratories of democracy." In many respects, this period has begun to legitimate a "third tier of federalism," as devolution has often skipped the states (Washington's constitutional partner) to engage directly with localities and even metropolitan entities on issues (as on housing and transportation) that fall naturally within their orbit.

However, at the same time, the current aging configuration of federal-state-local relations—particularly if viewed from the standpoint of metropolitan America—has come to seem increasingly maladapted to present realities.

In short, neither the mid-20th-century model of "made in Washington" nor the late-20th-century model of "get it out of Washington" appear well suited for the exigencies of the dawning Metropolitan Age.

And so, what is needed is a new intergovernmental partnership—a contemporary, collaborative, intermingled compact between Washington, the states, and metropolitan areas that reflects the distinctive realities of a moment that is globally integrated, hyper-variegated, super-demanding … and *metropolitan-led*.

This new configuration of federal-state-local relations should extend the dynamic history of American governance to again find via federalism and intergovernmental relations what Pietro Nivola has deemed its bottom-line virtue: an optimal "division of labor" between the levels of government for improving how the government serves its citizens.[5]

At the same time, MetroPolicy—while suggesting certain divisions of labor—will not necessarily renew efforts of the recent past to definitively "sort out" the work of the public sector by rationally assigning responsibility for entire public functions to particular levels of government.[6]

Although enticing in theory, these visions of grand trades between the federal, state, and local tiers have been largely ignored in practice, given the political and administrative difficulty of wholesale resortings. But what is more problematic about such clean and rational allocations is their incompatibility with the reality of commingled responsibility. In truth, the American federal arrangement has always been a cooperative "partnership," with "shared functions" both a practical reality and a valuable ideal for effective governance.[7]

What is more, the complex, large-scale, and intermingled nature of metropolitan challenges especially demand shared responsibility, as Bill Barnes and Larry Ledebur have written in *The New Regional Economies*.[8] In this respect, no single structural fix—no tidy "tradeoff" of responsibility—will achieve the pervasive assumption and reorientation of policy stances that is needed. Instead, MetroPolicy calls—as do Barnes and Ledebur—for "important innovation at all levels of government" aimed at finding what works best to promote metropolitan prosperity. In short, states and localities are interested in most every aspect of policy (whether or not they take the lead on it), and so should the nation.[9]

A MetroNation demands a deliberate, empowering, and effective federal policy framework.

Thus, MetroPolicy does not propose a wholesale reallocation of government functions but instead advances principles and ideas for reconfiguring governance across multiple areas of domestic policy to shape a productive partnership.

Along those lines, the new MetroPolicy compact should have several general characteristics:

- The compact must be pragmatically geared to enhancing the assets that drive prosperity and the metropolitan places where those assets concentrate
- This compact must embrace lower levels of government as full partners in fulfilling metropolitan and national objectives
- And, this new compact must take advantage of the boundless possibilities of 21st-century governance, building from innovations in private-sector practice, local and metropolitan innovations, and the possibilities of technology and communication

Getting It Right: The Federal Governement's WIRED Program Catalyzes Economic Development—and Collaboration

Not every region can be the next Silicon Valley, but nearly every region has a specialty that could keep it competitive globally, whether it's reviving industrial design in Western Michigan or modernizing boat building in Maine. But it remains a tough sell to get local leaders—politicians, chamber of commerce types, development officials, and educational institutions—to put aside parochial habits in order to plan a coherent economic strategy and prepare the workforce that can make it happen.

That is what the WIRED program is all about. The U.S. Department of Labor created the competitive grant program three years ago (the acronym stands for Workforce Innovation in Regional Economic Development) and has so far given out nearly $250 million to 39 different regions.

The catalyst effect is what's been most important. Applications have to come from governors, assuring a high level of political coordination, and propose a strategic partnership that includes businesses and business associations, education institutions at all levels, philanthropic organizations, governments, and workforce and development systems, all spanning jurisdictional lines. WIRED in effect forces entities within a region—political, economic, and academic—to come together to fashion a strategy that recognizes their region is comprised of multiple jurisdictions that share economic and cultural attributes that spill across political boundaries. The WIRED initiative has fostered collaboration in ways that were all but unprecedented in many parts of the country.

The central idea is to link innovation to workforce training. In Maine, for instance, industry leaders and the University of Maine are collectively updating workers' skills so they can move the state's historic boat-building industry into molding composite hulls, a process in which enormously expensive materials cry out for highly-trained workers. In the nine-county Metro Denver area, community colleges are reaching into high schools to offer credits that help put students on the path toward the region's growing aerospace and energy sectors. These specific programs are part of the larger agenda that calls for figuring out where a region's collective strengths lie and focusing cooperative efforts in those areas, whether it's biosciences or mining.

It's an unfortunate irony that WIRED funds themselves come with plenty of strings attached—the legacy of the federal government's fractured approach to workforce development, which honors political boundaries rather than recognizing or fostering economic regions. Sen. George Voinovich has introduced legislation to provide more flexibility in mixing and matching funds. In the meantime, WIRED's seed money has become the fulcrum of leveraged dollars both locally and between no fewer than 10 federal departments.

There are still plenty of places where regional cooperation takes no more tangible form than daylong "visioning" conferences. Getting educators to plan alongside the most hopeful vibrant industries in a region—and getting public officials within that region to align their efforts, rather than always competing with one another—is a challenge that is still at a shockingly early stage. But that kind of multilevel collaboration is necessary to combat the contemporary paradox that leaves jobs begging even in supposedly declining sectors such as manufacturing due to the lack of qualified workers.

"It is an unnatural act among unconsenting adults to cooperate within a region," says Emily Stover DeRocco, of the National Association of Manufacturers, who created the WIRED program as an assistant secretary of Labor. "But it was clear that single jurisdictions, whether city or county, were not able to draw together all the assets needed to create new clusters of development."

Sources: Karen Mills, Elisabeth Reynolds, and Andrew Reamer, "Clusters and Competitiveness: A New Federal Role for Stimulating Regional Economies" (Washington: Brookings Institution, 2008); and the federal government's WIRED website at www.doleta.gov/wired.

In short, MetroPolicy should embody three essential principles:

First, the federal government should lead where it must because of the need to match the scale and geographic reach of key current challenges

Globalization has eroded America's edge in industrial and post-industrial sectors alike, placing enormous pressure on the nation as a whole to maintain and burnish the assets that drive innovation, productivity, and prosperity.

Competition abroad and economic restructuring at home have also created a new iron "law of wages," requiring national interventions to make work pay and prepare the American workforce for ever-intensifying competition in all spheres.

And global warming constitutes a dual threat to our economy and our environment, necessitating national responses and international engagement.

In the face of these global trends, states and metropolitan areas cannot "go it alone." They simply do not have the resources or the powers to adapt to globalization, create broad-scale opportunity, or address climate change, let alone provide innovation inputs no one else will, manage global migration flows, and ensure the nation develops critical inter-state, cross-boundary transportation networks.

Consequently, the national government must intervene in these fundamental arenas of domestic life to set a strategic vision for the country, establish basic standards of action, provide what no other level of government can or will, or address issues that naturally transcend state borders. In short, the forces affecting metros—globalization, wage stagnation, climate change—so transcend parochial borders that the national government must act in certain areas with vision, direction, and purpose. Frequently these interventions will help to enhance the availability nationwide and in metros of those crucial assets that drive local and national success, or help metropolitan areas to move toward more effective, region-scaled governance arrangements.

Second, the federal government must empower metros where it should to reflect the variety of metropolitan experiences and unleash the potential for innovation and experimentation that resides closest to the ground

At the same time, U.S. governance needs to reflect the variation of the country and unleash the latent potential for policy innovation within metropolitan areas.

MetroPolicy, in this respect, seeks to build in space and flexibility for varied local problem-solving.

Trend data reveals a nation of enormous economic, social, and environmental diversity. Boise and Boston, and Akron, Birmingham, and Dallas all contend with vastly different degrees and types of prosperity, which naturally motivate different priorities in policy response. Thirty years of devolution, moreover, has actually enhanced the ability of states and localities to design strategies that are grounded in distinctive experience as well as implement such strategies with rigor and competence. In light of all this, federal programs and the nation as a whole will only be successful if national policies can be tailored to the distinct realities of disparate metros, and if the latent creativity of metropolitan, state, and local actors can be unleashed and added up. To that end, greater flexibility in program design must be diffused throughout the system.

Yet there is a more immediately practical rationale for empowering states and localities. A federal republic, unlike a constitutional monarchy, vests inherent powers in states and, by extension, lower levels of government. As a result, large areas of domestic policy—ranging from land use and zoning to routine law enforcement—remain largely managed by states and the local governments they create. In these areas, the real question for the federal government must become how best to support and further smart action below.

Empowerment, moreover, must include capacity building, given that metropolitan governance in the United States (coincident with the geography of the economy) remains a work in progress, not fully formed. To that extent, the federal government must seek to foster broad experimentation with new forms of functional and formal governance that befit the challenges of a MetroNation. And here, Washington must act in close concert with the states, which remain the final arbiter of the powers and geographic reach of local levels of government.

And finally, the federal government must maximize performance and fundamentally alter the way it does business in a changing world

A decentralized system such as a MetroNation requires a special sort of effectiveness on the part of the center if it is to function at the highest level. In keeping with that, MetroPolicy requires rearranging federal roles and stances in keeping with the imperatives of the emerging organizational model of highly networked, simultaneously "loose" and "tight," high-performance government.

Along those lines, the federal government needs to focus much more than it has to date on the needs of its state and metropolitan partners and move to support metropolitan creativity and problem-solving. Specifically, Washington needs to:

- Keep the needs of metropolitan areas top-of-mind, and make metropolitan prosperity a constant goal of policymaking
- Incentivize and reward problem-solving that crosses disciplines and "joins up" solutions
- Move beyond rule-driven administration to smarter, more flexible interactions with states and localities that combine more local discretion with leaner performance management, including negotiated, outcome-based targets
- Embrace partnerships, both intergovernmental and with the private-sector, as well as employ market mechanisms, as appropriate, to achieve scale and systemic impact
- Build a national foundation of basic data and information to understand variability, drive markets, and ensure that state and local decisions can be evidence based, outcome-driven, and performance measured
- Set up a robust, national system for identifying and diffusing the best innovations to speed the adoption and adaptation of successful practices and protect against states and localities "reinventing the wheel"

In these ways, three decades of corporate reorganization and public innovation point the way. "Smart governance" diffused from the center is not an oxymoron but rather a necessity if the nation and its metro areas are to resolve their myriad challenges and realize their full potential.

* * *

In sum, MetroPolicy—a 21st-century fusion of updated, metro-centric federalism and up-to-date performance management—is a vision whose time has come.

3. METROPOLICY CAN HELP THE NATION LEVERAGE KEY DRIVERS OF PROSPERITY

But that is only the vision. Now let's consider what MetroPolicy and a complimentary metro-friendly federalism might look like in practice.

Again, such an effort to renew federalism in service of metropolitan prosperity might in prior decades have advocated "sorting out" U.S. governance by assigning whole public functions to particular levels of government.

But that is not the approach of MetroPolicy, which begins with the messier reality (and ideal) of shared responsibility for metropolitan outcomes.

Instead, MetroPolicy proposes a general style of policymaking aimed at improving the effectiveness of whole zones of intermingled federal, state, local, private-sector, and non-government engagement by helping the federal government strike an appropriate, metro-optimal balance of leadership, empowerment, and performance maximization.

The best way to explore how MetroPolicy might work, meanwhile, is to examine how key *Blueprint* proposals, "added up," would serve to improve metropolitan America's standing on key drivers of prosperity—innovation capacity, human capital, infrastructure, and quality of place—as well as foster more cohesive metro governance.

In this fashion, adding up the *Blueprint's* current ideas across these policy domains reveals the broad outlines of a renovated federal policy stance.

Blueprint recommendations for federal leadership and vision, for example, address (because no other level of government sufficiently can) key matters of national concern like metropolitan areas' innovation capacity, intermodal transportation, workforce quality, and climate change, and regional governance. These recommendations are broad in scope and respond to market or government failures with lean, strategic interventions such as the creation of a new National Innovation Foundation (NIF); a Strategic Transportation Investments Commission and National Infrastructure Corporation; and a refocused Office of Innovation within the Department of Education.

Other recommendations aimed at *empowering* states, localities, and public-private partnerships suggest ways for Washington to catalyze much more robust, self-organized metropolitan problem-solving. Whether in the form of an industry cluster innovation program within NIF aimed at fostering local industry networks, a METRO program to stabilize and streamline support for MPOs, or a Sustainability Challenge to entice states and metropolitan areas to devise inventive means of reducing carbon emissions, these recommendations call for a "bottom up" and demand-driven approach to policymaking.

And then, a third set of policy recommendations aims to *maximize the performance* of government at all levels through a sophisticated array of metrics and performance standards. These recommendations include a Cluster Information Center to track and monitor cluster performance data, real time pricing mechanisms to regulate energy usage, and a TransStat initiative that would create a platform of data, metrics, analytic tools, and spatial planning techniques to guide decision making on transportation. They also propose the creation of a MetroExchange network for identifying and diffusing the best innovations in cross-boundary problem-solving

Yet those are the broad contours of MetroPolicy. What is equally important are the specific ways various ideas propose to advance American prosperity by tending to its crucial influences: (innovation capacity, human capital, infrastructure, and quality of place) as well as the effectiveness of metro governance.

INNOVATION

Innovation ultimately drives the American economy and will be crucial to producing sustainable prosperity. And yet, federal innovation policies today remain diffuse, insufficiently attentive to the commercialization of research, and blind to how innovation and jobs arise from the intense interaction of firms, industry associations, workers, universities, and investors.

To spur innovation, therefore, the federal government must bring purpose and rigor to national innovation policy while respecting and building upon the distinctive assets of particular metropolitan areas.

LEAD

INNOVATION

To begin with, the federal government should *lead* where it must by creating a **National Innovation Foundation (NIF)**, a nimble, lean, and collaborative organization devoted to championing the cause of innovation and supporting firms and other organizations in their innovative activities. (See "Boosting Productivity, Innovation, and Growth through a National Innovation Foundation" by Robert Atkinson and Howard Wial, available at www.blueprintprosperity.org.)

NIF would, to start with, promote the importance of innovation both outside and within the government, serving as a source of assistance and expertise to federal and local innovation programs. To that end, the new government-sponsored entity would produce an annual *Innovation Report of the President* (akin to the Economic Report of the President) that would drive national focus by presenting new metrics of national innovation performance relative to the nation's competitors and point out new opportunities for the country to pursue.

NIF would also become the forum for rearranging and augmenting the government's fragmented efforts to boost innovation in key fields such as precision manufacturing, information technology, clean energy, and the environment. Crucially, NIF would bring under one roof a series of innovation programs that are now isolated and marginalized in separate cabinet agencies.

Together, these activities would give the new entity the clout, cohesiveness, and resources to achieve impact. Along these lines NIF would bolster key industry-university research partners, offer grants to states to support innovation-based economic development, help small and midsized companies adopt best practice production methods, offer grants to regional industry clusters to help them meet competitive challenges, and be the federal government's advocate for innovation.

NIF would, however, in no way try to pick industrial "winners" or give out no-strings-attached "corporate welfare" to businesses. Instead, it would work cooperatively with companies, state governments, and other organizations to help America remain the world's innovation leader in the 21st century. In that fashion, creating NIF would find the nation responding firmly to global challenges by building on the best practices in Europe and elsewhere, where nations like the UK, Finland, Sweden, and Japan have already established sophisticated entities devoted solely to promoting innovation.

To help metropolitan America amass key prosperity drivers—and align them with cohesive regional governance—Washington must lead, empower, and maximize performance

	LEAD	EMPOWER	MAXIMIZE PERFORMANCE
Innovation	• Create a National Innovation Foundation (NIF)	• Establish a cluster-development grant program to support industry cluster initiative programs	• Create a Cluster Information Center to house cluster data, track cluster initiatives and programs, and collect and disseminate best practices
Human capital	• Redirect the Department of Education's Office of Innovation and Improvement to stimulate innovation and focus on results • Expand and modernize the Earned Income Tax Credit	• Make guaranteed access to higher education a centerpiece of community regeneration and encourage such efforts through a national competitive demonstration	• Assess student performance across all education levels • Invest in next-generation assessment, data, and accountability models
Infrastructure	• Establish a national vision for 21st-century infrastructure • Authorize a permanent Strategic Transportation Investments Commission (STIC) • Create a National Infrastructure Corporation (NIC)	• Offer more discretionary funding to metropolitan planning organizations • Require modally neutral treatment of highway and transit proposals	• Launch a TransStat 21st-century data and analysis initiative • Create an incentive pool to reward high-performing states and metros • Utilize market mechanisms
Sustainable, quality places	• Price carbon • Increase energy R&D through multidisciplinary discovery-innovation institutes • Catalyze the green retrofit market through "on-bill financing"	• Create Sustainability Challenge Grants to catalyze metro efforts to integrate housing, land use, transportation, and environmental policies • Initiate a Smart Transportation Partnership to help metro areas leverage the real estate potential around transit stations	• Collect and disseminate emissions data and best practices • Require energy information in real estate transactions through the Real Estate Settlement Procedures Act (RESPA)
Regional governance	• Apply a "regionalism steer" to essentially all federal policies through incentives that promote regional collaboration	• Create a Governance Challenge grant to reward regional coordination on any array of program areas	• Rebuild the nation's government statistics infrastructure • Develop a Metro Innovations Network to collect, disseminate, and promote best practices in regional governance

EMPOWER

INNOVATION

The federal government should also *empower* metros to foster innovation by enabling them to nurture local industry clusters through a flexible, collaboration-oriented **cluster-development grant program.** (See "Clusters and Competitiveness: A New Federal Role for Stimulating Regional Economies" by Karen Mills, Elisabeth Reynolds, and Andrew Reamer at www.blueprintprosperity.org.)

Current federal policies largely ignore the critical role that metropolitan clusters play in spurring innovation and creating quality jobs, preferring to allocate research, job training, economic development, and a slew of other resources with little regard to how these tools are gathered and strengthened at the ground level. What is more, such collaborative activity is frequently under-provided by the private economy since neither individual companies, governments, nor other entities can capture all of its benefits.

And so the *Blueprint* recommends that the federal government—either through the proposed NIF or via a standalone enterprise—should correct some of those omissions by taking an active role in promoting the proliferation of business-led regional cluster initiatives to foster productivity-enhancing collaboration between firms and other partners through market development, networking, the development and diffusion of innovation, and the facilitation of learning and training.

Rather than adopting a top-down approach, however, Washington should view itself in this endeavor as a facilitator of locally organized networking among regional business associations, state and local governments, universities, community colleges, and others better equipped than federal bureaucrats to understand regional development needs and devise useful growth strategies. In that sense, the federal government needs to complement national leadership on innovation with a flexible, "bottom-up" and demand-driven approach quite different from the prescriptive, top-down programs of the recent past. Along these lines, direct federal support should go only to cluster initiative programs run by metropolitan, statewide, or multi-state organizations, which should in turn have the flexibility to make decisions about the specific clusters that should benefit from governmental support.

To that end, the *Blueprint* recommends the creation of a **CLUSTER** (Competitive Leadership for the United States through its Economic Regions) fund initially authorized at a funding level of $350 million over three years. Over time, this CLUSTER fund approach could well emerge as a framework for going further and giving metropolitan areas more freedom to flexibly deploy additional national investments in job training, community colleges, or economic development in the service of advancing their distinctive clusters of economic activity.

MAXIMIZE PERFORMANCE

INNOVATION

Finally, to maximize the impact of national, state, and metropolitan initiatives on innovation across a decentralized federal system, the federal government should do what it can do uniquely well: Launch a major effort to measure innovation performance, benchmark and evaluate innovation-supporting initiatives, and promote the exchange of best-practices and results.

On this front, NIF would play a lead role in collecting data and establishing sophisticated metrics for measuring performance on innovation.

At the most basic level, the foundation would work with other federal statistical agencies to create better national- and metropolitan-level measures of productivity, output, and patents, as well as develop new metrics for assessing the public and private benefits of research and development and the product and process innovations adopted by firms. Likewise, NIF or a freestanding clusters program would replicate the European Union's European Cluster Observatory by establishing a **Cluster Information Center (CLIC)** to collect data on the performance of clusters and guide related policy. (See "Boosting Productivity, Innovation, and Growth through a National Innovation Foundation" and "Clusters and Competitiveness.")

But beyond that, NIF could deploy the new information to guide and evaluate its own work as well as maximize the innovation output of the nation's decentralized network of regional economies. Along these lines NIF could encourage the use of its improved flow of information in systematic benchmarking and evaluation of local experiments. In addition, it could also play a lead role in disseminating best practices on innovation to inform metro and regional leaders about each others' successes. Such an effort would roll up and make visible the work of regional cluster initiatives like Cleveland's WIRE-net, the St. Louis BioBelt, the Wisconsin Regional Training Partnership, and the Massachusetts Life Sciences collaborative, and so help rev up the nation's overall innovation effort.

HUMAN CAPITAL

Throughout recent history, the federal government has acted as a "game changer" in education and human capital policy, as Andrew Rotherham and Sara Mead write in a forthcoming *Blueprint* policy series paper.

The federal government guaranteed access to higher education for returning veterans with the G.I Bill in the 1940s; championed desegregation in the 1950s; greatly expanded federal support for elementary and secondary education (with the Elementary and Secondary Education Act, or ESEA) in the 1960s; and forged new rights for students with disabilities in the 1970s with the Individuals with Disabilities Education Act (IDEA). Continued expansion of Pell Grants and access to federally guaranteed student loans for postsecondary learning have also made a difference.

On the income-support side, Washington has rightly played a larger role. First poverty alleviation, and then income support for workers, have each contributed to enhancing the nation's human capital stock.

And yet, despite many successful efforts, federal education policy today is intensely compartmentalized and, disturbingly, fails to draw the critical linkages between K through 12, college education, and skills training needed to connect primary and secondary education to degree completion and workforce success. At the same time, federal income support programs do too little to address the growing gap between the stagnant wages of a growing share of the workforce and the rising prices of necessities like housing, transportation, and child care.

Accordingly, Washington must establish a new national vision for human capital development—to a large extent focused on the abundant assets and needs of metropolitan areas—not just to address issues of equity and access for individuals, but to develop a skilled national workforce capable of competing vigorously in the global marketplace.

Broadly supportive of this would be a renewed drive by the national government to make work pay and so set a sounder material base for families' and individuals' upward mobility and skills attainment.

LEAD

HUMAN CAPITAL

To begin its new engagement on human capital, the federal government should lead where it must and champion sustained and continuous innovation in education by first creating a real home for investment in educational innovation within the Department of Education (DOE).

To do this, Washington needs to move beyond No Child Left Behind and become a critical partner with philanthropy, social entrepreneurs, and school systems by putting new flexible dollars behind proven educational innovations that have evidence of success and are willing to commit to rigorous evaluation.

At the same time, the federal government should especially support a select number of high-risk, high-reward investments with the potential to drive real gains in educational productivity, testing these models over a number of years in actual schools.

Thus, the *Blueprint* proposes that the DOE's existing **Office of Innovation and Improvement**—significantly revamped—should carry out these two catalytic activities, allowing the office to embrace its originally intended purpose of furthering education innovations rather than its current role of administering grants and demonstration programs. In exchange for the increased flexibility and autonomy necessary to fulfill its renewed purpose of spurring innovative approaches, the Office of Innovation would be required to maintain greater operational transparency and a results-oriented mission. (See "Changing the Game in Metropolitan Education: A Federal Role in Supporting 21st Century Education Innovation," by Andrew Rotherham and Sara Mead, forthcoming at www.blueprintprosperity.org.)

Simultaneous with this educational leadership should come leadership on making work pay and helping lower-income families meet the rising costs of living—efforts that promote many workers' deeper participation in the labor force and the growth of their skills. Such engagement remains a singularly national responsibility, and so the federal government should **expand and modernize the Earned Income Tax Credit** to help an estimated 8.4 million tax filers in the nation's 100 largest metropolitan areas. Along these lines, targeted expansions of the credit and new options for workers to receive the EITC's proceeds throughout the year would contribute meaningfully to more economically inclusive growth in metropolitan America. (See "Metro Raise: Boosting the Earned Income Tax Credit to Help Metropolitan Workers and Families" by Alan Berube, David Park, and Elizabeth Kneebone, available at www.blueprintprosperity.org.)

EMPOWER

HUMAN CAPITAL

The federal government must also empower metros where it should by becoming a more active partner in state and local efforts to revive ailing places through school-centered renewal strategies.

Along these lines, the federal government should make education reform the centerpiece of community regeneration rather than relying entirely on business lending and tax rates, affordable housing, or public works projects.

Suggesting a route towards this goal are a number of states and localities that are partnering with private and philanthropic actors to **guarantee access to higher education** for students graduating from districts struggling to boost enrollment and raise student performance. In particular, the Kalamazoo (MI) Promise offers a unique model for attracting and retaining middle-class families in public schools, provides new incentives for students to graduate and pursue post-secondary studies, and contributes to the economic revitalization of the city and metropolitan area.

And so the federal government should help replicate and expand such efforts with a national competitive demonstration that leverages state, local, and private-sector dollars, and encourages local communities to coalesce around an education-led economic renewal agenda. (See "Promise of Prosperity: A New American Community Compact for Economic Renewal and Education Attainment," by Janice Brown and others, forthcoming at www.blueprintprosperity.org.)

MAXIMIZE PERFORMANCE

HUMAN CAPITAL

To maximize performance on human capital development, finally, the federal government should much more effectively **track and assess student performance** across all levels education levels.

The standards and accountability movement, and NCLB, rely on the assumption that education systems can and do accurately assess what students have learned and how well schools are educating students. But the assessment systems the nation currently employs are highly imperfect, a weak linchpin on which to hang our entire system of accountability. New investments and regulatory fixes under debate in the current NCLB reauthorization are necessary, but will wring only marginal improvements from today's assessment technology. The real breakthroughs will come from entirely different approaches to assessing students and using data to inform school improvement efforts.

And so the federal government should employ 21st-century information and accountability techniques to catalyze real change in education. By investing in the identification and development of **next generation assessment, data, and accountability models**—as part of a larger commitment to funding new education R&D—the federal government could support substantial innovation in several demonstration sites or even an entire state, without jeopardizing today's important emphasis on greater accountability for schools. (See "Changing the Game in Metropolitan Education.")

To ensure, meanwhile, that more students earn post-secondary credentials, the nation must also act much more strategically to track outcomes from high school into—and through—college. To that end, the federal government should work with states to create a real-time data system for monitoring individual students' attainment of key milestones across their high school and college years to help pinpoint performance problems, allocate resources and interventions, and to track success and improvement over time. (See "Smart Cities, Smarter Policies: Supporting Metropolitan Economies by Building Urban Community College Success," by Christopher Mazzeo and Sara Goldrick-Rab, forthcoming at www.blueprintprosperity.org.)

MetroPolicy can help the nation leverage key drivers of prosperity.

The federal government should lead where it must by providing a comprehensive national vision for the movement of people and goods within the gateways of international trade and among the major corridors of inter-metropolitan travel—areas of unique federal purview. (See "A Bridge to Somewhere: Rethinking American Transportation for the 21st Century," by Robert Puentes, available at www.blueprintprosperity.org.)

Globalization, economic restructuring, metropolitan growth dynamics and homeland security, in this respect, have fundamentally altered the transportation landscape in the United States. Today, for example, a relatively small number of ports and freight hubs have become the prime collection and dissemination points for the movement of goods in the United States. It is simply not feasible to devolve responsibility for building and maintaining state-of-the-art infrastructure to these places on the front lines of global competitiveness. Neither China nor Europe, for example, tells the ports of Shanghai or Rotterdam that they are "on their own" in devising ways to adapt to the explosion in international trade. But that is precisely the message the United States sends to the ports of Baltimore, Charleston, Los Angeles/Long Beach, and Seattle.

At the same time, a series of closely linked, inter-metropolitan corridors have become intensely congested with the daily movement of people via air, rail, and road. Here, the federal government has engaged, but in distorting and inefficient ways. The federal government's anemic and unreliable investments in Amtrak, for example, mean that rail service in congested corridors (like the Northeast and, increasingly, the Southeast) is neither as reliable nor frequent as consumers demand. The result is that additional pressure is placed on our already over-burdened air and rail networks, with severe economic and environmental consequences. The contrast with Europe's network of high-speed rail could not be starker.

In view of this state of affairs, the federal government needs to craft both a vision for a national inter-modal transportation system that moves people and goods in an energy efficient manner and new institutional vehicles for carrying it out.[10] In both cases, the design and implementation of the national vision should be taken completely "out of politics" to ensure that federal investments are made in a rigorous fashion with the greatest likelihood of maximum return.

To create the national vision, the federal government should authorize a permanent **Strategic Transportation Investments Commission (STIC)**. This commission would—based on the best evidence available—identify, map, and prioritize the core nation-shaping projects that require federal investment. This commission would break

INFRASTRUCTURE

The federal government also has a special responsibility for ensuring the nation maintains a world-class network of roads, rail and air links, and electricity and broadband lines—one capable of connecting the nation to the world, linking its markets together, and doing it in a way that shapes sustainable metropolitan areas. However, federal infrastructure policy (most notably in the transportation realm) remains an unaccountable free for all, geared more towards building bridges to nowhere rather than maintaining the ones we have, developing world-class air, sea, or transit hubs, or, for that matter, disseminating high-speed broadband coverage. The collapse of the Minneapolis bridge last summer was a tragic reminder that many national policies are misplaced and unfocused.

Consequently, as in other areas of policy, the federal government should adopt a three-pronged strategy to lead the nation's efforts to provide top-quality infrastructure of all kinds, empower metropolitan areas to solve problems and make connections, and maximize performance across the nation. Along those lines, the following pages highlight important *Blueprint* proposals addressing the nation's beleaguered surface transportation system, which accounts for nearly three-quarters of the nation's capital investment on infrastructure. Future *Blueprint* papers will make proposals for improving the provision of water, sewer, energy, and broadband infrastructure.

radically from the current pork-barrel practices currently employed by Congress, state legislatures, and state departments of transportation. Instead, STIC would move to insert three critical priorities into federal programming decisions: the maintenance and preservation of the interstate-highway system, the development of a national intermodal freight agenda, and a comprehensive national plan for inter-metro area passenger travel. (See "A Bridge to Somewhere.")

To match the vision with adequate investments, the federal government should create a **National Infrastructure Corporation (NIC)**—a concept that has gained traction in this year's presidential race. Through such an entity, the nation would gain a much-needed new financing authority that would identify, evaluate, and help finance infrastructure projects of substantial regional and national significance. Such an entity could, over time, actually replace the existing dedicated highway and possibly aviation trust funds, as well as address new visions for America's transportation system that weren't thinkable 50 years ago when the current system came into being. (See "A Bridge to Somewhere.")

In sum, the national government needs to roust itself from business-as-usual and move from writing blank checks to asserting a purposeful vision of transportation problem-solving.

EMPOWER

INFRASTRUCTURE

But the federal government must also empower major metropolitan areas where it should by giving them direct transportation funding and the autonomy to make unbiased decisions about what sorts of transportation systems to build.

This means going further than the federal experiment that began in 1991 did by devolving more decisionmaking power and funding to MPOs which have been dealt a weak institutional hand and have not substantially altered the power of state or federal partners at the regional level.

To this end, a new **METRO** (Metropolitan EmpowermenT pROgram) program should be established to provide MPOs in major metropolitan areas with a steady stream of predictable, reliable, and flexible funding. (See "A Bridge to Somewhere.")

The creation of METRO would constitute an important change in the allocation of federal transportation resources. Currently, metropolitan areas receive only about 6 percent of federal funding, through specially focused programs like Congestion Mitigation and Air Quality (CMAQ) and Transportation Enhancements (TE). In the *Blueprint's* scheme, direct allocations would rise to about 15 percent of federal funding to recognize the economic primacy of metropolitan areas, their concentration of transportation assets and challenges, and the growing ability of major MPOs to make good, evidence based decisions at the regional level.

To ensure that states and metros can innovate by programming the modes of transportation suited to their needs, federal transportation policy needs also to become "modally agnostic." In other words, the U.S. Department of Transportation should treat highway and transit projects equally, prioritizing metros based on their commitment to the project rather than on the specific mode. Similarly, transportation, housing, and land-use should be joined up through a new set of federally funded **Sustainability Challenge Contracts** intended to facilitate and incentivize integrated approaches to metropolitan development. These contracts are described in greater detail below in the context of a federal steer toward more integrated place-making.

MAXIMIZE PERFORMANCE

INFRASTRUCTURE

Finally, the federal government should optimize the performance of the nation's entire system by committing itself (and recipients of federal funds) to an evidence-based, outcome-driven and performance-measured way of doing business.

Experience shows the power of using federal standards, incentives, and performance measures to drive state and metropolitan performance. For example, the National Highway Traffic Safety Administration (NHTSA) used funding incentives to promote seatbelt laws, which now exist in 49 states.

Given the current state of the system, however, there is much work to do.

To start with, the federal government must create the information foundation to drive sound policy decisions across the nation. To that end, the federal government should launch a new **TransStat** initiative to erect a 21st century platform of data, metrics, analytic tools, and spatial planning techniques to enhance transparency and civic engagement, promote decisions based on fact rather than political horse-trading and measure our progress towards clear national priorities. (See "A Bridge to Somewhere.") TransStat will be modeled on analogous efforts currently underway by the nation's competitors in Europe.

The creation of TransStat would enable good performance to be recognized and rewarded. To capitalize on that, therefore, the *Blueprint* recommends that the federal government create an **incentive pool** of funds to reward states and metros that consistently achieve standards of excellence. Accreditation standards for state DOTs and greater MPO certification processes could also enhance accountability.

The federal government should also provide strong incentives for the adoption of market mechanisms like congestion pricing that allow for better management of metropolitan road networks. For example, the federal government would establish a national policy for road pricing to help metros contend with capacity constraints, climate challenges, and revenue allocation.

QUALITY PLACES

Dense, distinctive communities that are rich in amenities and transportation choices enable metros to attract and retain innovative firms and talented workers, promote energy security, and grow in environmentally sustainable ways. And yet, in ways large and small, federal housing, transportation, energy, and tax policies today generally support low-density development patterns that sap energy, dissipate resources, and undermine the cores of metropolitan areas.

Given the built environment's enormous contribution to national carbon emissions and role in accommodating massive future growth, the federal government must radically restructure its approach to place-making.

LEAD

QUALITY PLACES

The federal government should lead where it must by establishing a national framework for the kind of smart development that produces sustainable, quality places.

This leadership should begin with the implementation of a national approach to climate change that begins with a tax on carbon emissions or a "cap-and-trade" system for its pricing and reduction. **Pricing carbon** holds great promise for reorienting all sorts of undesirable development trends by altering their cost structure. Getting the price right, for example, would raise the cost of coal- and petroleum-generated power and enhance the relative attractiveness of alternatives and energy-efficient development practices. Getting the price right would also stimulate markets and regions to more freely figure out which carbon-reduction strategies make the most sense. And there are past federal successes to draw on. Just as the EPA's successful Acid Rain Program caps and trades sulfur dioxide emissions, a carbon cap-and-trade system, for example, would place an absolute limit on carbon emissions and then allocate tradable permits—ideally through an auction—that could be bought and sold by firms in the open market. Revenues from the initial sale of permits could generate between $50 and $300 billion of revenue, annually, which could in turn fund other programs. Likewise, economic analysis suggests a modest $15 per ton charge on carbon would net more than $80 billion annually in revenues—revenues that could be applied to all sorts of worthy climate change responses or tax reductions for those who would be inordinately impacted.[11] (See "Shrinking the Carbon Footprint of Metropolitan America," by Marilyn A. Brown, Frank Southworth, and Andrea Sarzynski, available at www.blueprintprosperity.org.)

Correcting energy prices will go a long way toward stimulating demand for more low-carbon, energy-efficient technologies. Because R&D causes spillover benefits that cannot be fully captured by firms, however, the amount of R&D will still be lower than optimal at a time when the nation needs to press for a "step change" in the level of innovation on energy efficiency. And so the federal government must urgently ramp up its investment in R&D activities that will increase energy efficiency innovations and bring such innovations to market faster.

Proposals for increasing energy R&D range from the modest to the provocative. John Holdren suggests a three-fold increase in federal energy R&D funding could be achieved through a two-cent hike in the federal gasoline tax.[12] Meanwhile, a forthcoming *Blueprint* paper will urge combining significant investment outlays with a bold new organizational experiment that would explore the potential of nimble, highly networked, translation-oriented **"discovery innovation institutes" (DIIs)** to expedite the transfer of highly innovative technologies into the marketplace. Ideally, investment in an array of DIIs would help scale up national energy R&D spending to a level that matches the seriousness of the nation's energy efficiency and climate challenges. Today, federal R&D expenditures total around $30 billion annually for health care and $80 billion for defense but less than $10 billion for energy. Increasing energy research investments to $40 or $50 billion would be consistent with investments being made on other urgent national priorities. (See "Shrinking the Carbon Footprint of Metropolitan America" and "Creating a National Energy Research Network: A Step Toward America's Energy Sustainability," by James Duderstadt, forthcoming at www.blueprintprosperity.org.) The federal government should move in this direction.

Beyond carbon pricing and R&D, federal policy should also alter the myriad tax, spending, regulatory and administrative policies that currently distend metropolitan development and subsidize the building of large homes on large lots at the periphery of existing communities. With suitable transition rules, a wide array of federal investments—particularly major real estate related tax expenditures—should be conditioned upon compliance with minimum sustainability requirements.

Finally, the federal government could be instrumental in creating a private-sector market for energy efficiency retrofits of existing buildings, thereby lowering energy consumption on a grand scale. In this respect, the prospect of harvesting substantial energy savings from retrofitting makes it conceivable that massive amounts of existing-structure renovation work can be self-financed, if markets can be structured to make it easy for consumers to pay the up-front retrofit costs over time using monthly utility bill savings. And so a future *Blueprint* paper outlines how the federal government could intervene strategically to encourage ratepayers, utility companies, banks, municipalities, housing agencies, and consumer groups to collaborate in order to create meter-secured, "on-bill financing" options for home energy efficiency. (See "Shrinking the Carbon Footprint of Metropolitan America" and "Greening the American Dream: Transforming the Residential Energy Marketplace to Reduce the Nation's Carbon Footprint and Build Savings for Middle-class Families," by Lori Bamberger and Joel Rogers, forthcoming at www.blueprintprosperity.org.) With on-bill financing broadly in place, millions of ratepayers would enjoy the prospect of seeing their utility bills decline even as they paid for efficiency improvements. What is more, a large new energy retrofit market would likely grow up (and with it, new jobs) even as the nation made progress at reducing its carbon emissions. To that extent, federal action to catalyze widespread adoption of "on-bill financing" could well emerge as one of the true "killer apps" of government in the climate-change era. Such a stroke would epitomize the idea of lean, sophisticated, and catalytic leadership that must become the norm in Washington.

EMPOWER

QUALITY PLACES

The federal government, however, wields mostly indirect influence over metropolitan place-making, which is largely the province of state and local planning and zoning regimes and so often fragmented. In view of that, a federal drive to promote top-quality place-making should empower metropolitan area actors by challenging them to join up disparate housing, transportation, energy, and other funding streams in the service of growing more smartly and reducing carbon emissions.

Along these lines, the federal government should issue a national **Sustainability Challenge**, perhaps originating in ongoing congressional climate discussions or in the housing or transportation appropriations processes. (See "A Bridge to Somewhere" and "Shrinking the Carbon Footprint of Metropolitan America.")

Such a challenge would seek to assist states and metropolitan areas in one of their hardest tasks: that of transcending the stovepiping of disparate transportation, housing, education, energy, and environmental programs that remains a serious cause of undesirable development outcomes. To that end, the new challenge would entice metropolitan-area leaders to design and implement truly integrated transportation, land use, housing, and economic development plans aimed at promoting quality regional place-making and environmental sustainability in fresh, deep-going, and even radical new ways.

In terms of its form, potential models for the challenge exist in the Department of Transportation's Urban Partnership program to reduce congestion and in the Department of Interior's Water 2025 program.

Following these models, significant grant money—perhaps as much a $100 million or more for each challenge—would be awarded in a competitive process to the partnerships of states, metropolitan areas, localities, or regional business alliances that devised the boldest, most interdisciplinary proposals for improving regional development patterns or reducing carbon emissions. Selected proposals—which might involve, for example, transit-oriented development plans, congestion pricing schemes, energy efficiency retrofit projects, regional workforce housing initiatives, or other region-scale ideas—would be provided additional resources (on top of regular block grant allocations) as well as new powers and flexibility to align disparate federal programs in support of their vision. The federal government would also fund most of the development of the plans in exchange for formal endorsement by state legislatures and/or the local MPO. In this fashion, a bold new Sustainability Challenge holds real promise for stimulating a powerful wave of creative, place-based problem-solving in metropolitan America. Washington would incite innovation and program integration at once.

Related to this, meanwhile, is one other *Blueprint* idea: what Robert Puentes calls the **Smart Transportation Partnership.** This new idea leverages for the benefit of metropolitan America the billions of dollars that have already been invested in rail and other fixed-transit projects. (See "A Bridge to Somewhere.") Congress, in this vein, should direct the Department of Transportation to work with HUD on a special interagency effort to help metropolitan areas realize the real estate potential of transit stations and then figure out a way to capture that value. This public-private initiative could involve a range of activities (such as research, technical assistance, and joint agency planning). Beyond that, the partnership would also provide a useful forum for the productive interaction of metropolitan officials, transit operators, private sector developers, financial institutions, and secondary mortgage market entities. Once again, with a supportive, catalytic, and light touch, Washington would facilitate metropolitan creativity rather than frustrate it.

MAXIMIZE PERFORMANCE

QUALITY PLACES

Finally, to maximize performance on creation of quality places, federal policy should provide more sophisticated information and pricing tools to stimulate and scale up higher-quality decisionmaking on issues relating to development, energy, and land use.

Effective action first and foremost requires quality data in order to accurately measure performance, costs, and benefits. Thus, the federal government could stimulate more effective efforts to build sustainable, quality places by collecting and disseminating far more data on energy, transportation, and emissions at the critical county and metropolitan area level—the geographies most relevant to regional land use, housing, and transportation planning. (See "Shrinking the Carbon Footprint of Metropolitan America.")

Innovative pricing can also bring about improved information that leads to better decisionmaking. The aforementioned cap-and-trade system, for example, would reveal the true cost of fossil fuel use, thus realigning incentives across all sectors of the economy. Similarly, market mechanisms like real-time pricing could enable energy customers to manage home consumption in order to save energy and save on their utility bills. (See "Greening the American Dream.")

The potential for smart federal information policy to trigger market changes in service of sustainability and place-making can be seen in a forthcoming *Blueprint* proposal to modestly adjust federal oversight of real estate transactions to encourage energy efficiency retrofitting. According to this proposal, Washington would **amend the Real Estate Settlement Procedures Act (RESPA)**—the federal law that regulates home-purchase transactions to ensure their transparency—to require the disclosure of home energy costs and any energy-efficient certifications so that buyers have a better sense of the true economic and environmental costs of their purchase. (See "Greening the American Dream.") By improving home-purchase decisions, this modest intervention in real estate markets could well serve to reorient real estate transactions significantly and expedite retrofitting by boosting the demand for energy efficiency. This prospect makes it a worthy example of how limited, smart federal deployment of information and pricing tools has the power to catalyze major improvements in U.S. place-making.

* * *

BUILDING METROS: CAN THE FEDERAL GOVERNMENT HELP?

Finally, there remains the matter of encouraging more cohesive regional and cross-boundary collaboration in metropolitan America.

Quite simply, the nation's strong interest in well-functioning metros—combined with the internal fragmentation of most metro areas—necessitates a new national push to help regions develop more ways of working across intra-metro lines.

Ensuring that metropolitan areas arrange themselves well internally is crucial if metros are to collaborate to compete: that is, if they are to effectively aggregate and align the crucial drivers of their own, and America's, prosperity.

However, state and local movement toward metropolitan cohesion remains sporadic and uneven. Moreover, roughly one-third of the 100 largest metropolitan areas sprawl across states lines, posing a thorny interstate governance problem. And so, Washington needs to catalyze progress on metro governance, because without progress, the jurisdictional fragmentation in U.S. metros will almost certainly continue to undermine all other national efforts to leverage the assets of the MetroNation.

Gerald Benjamin and Richard Nathan, in this respect, confirm the overarching need for the U.S. federal government to facilitate metropolitan cohesion—and stress the possibility of Washington doing that.[13]

They note that federal jurisdiction is allocated such that "Congress and the president have the authority to provide assistance to states that act regionally…by providing financial aid designated to encourage interstate regional cooperation and by reducing bureaucratic barriers and disseminating information about regional success stories." And they indicate that similar discretion exists in dealings with localities. So, in essence, the federal government could promote and incentivize regionalism and regional planning within the existing constitutional structure of federalism, just as it did through the 1960s and 1970s through, for example, HUD's "701" Comprehensive Planning Assistance Program and numerous statutes on transportation, wastewater, air quality, health, public safety, and job training.[14]

And so the federal government should again provide leadership, encouragement, and powerful incentives for the emergence of more and bolder cross-boundary collaboration within U.S. metropolitan areas, the hubs of U.S. prosperity.

The outlines of much of this "steer" toward more joined-up metros will be familiar given the pent-up nature of the agenda after a period of inaction in Washington.

In fact, a 1998 report by the National Academy for Public Administration (NAPA) offered an array of tactful, modest ways the federal government could reverse its drift away from promoting regional collaboration that remain salient a decade later.[15] In that document, NAPA explored how the federal government could deploy money, flexibility, the bully pulpit, and information to support cross-boundary coordination and suggested, among other strategies, that the federal government:

- Build more incentives into its programs to encourage regional collaboration
- Conduct demonstrations by providing technical

assistance or funding to individual regions ready to test innovative collaborative efforts
- Stimulate and facilitate a national conversation on the importance of regional cohesion
- Invest in building a top-quality information base for regions

Now, the urgency of the moment calls for again taking up such approaches but with a harder push in which the nation sets the agenda, catalyzes more regional problem-solving, and seeks to maximize the results of efforts to facilitate the emergence of more cohesive metropolitan governance.

LEAD

METROPOLITAN GOVERNANCE

Because only it can give a broad 50-state nudge, the federal government should lead in the work of establishing a general policy preference in the nation for cohesive, cross-boundary local governance.

To that end, the federal government should apply a sort of **regionalism "steer"** to essentially all of its activities, including especially dozens of the nation's scores of categorical, block, and other grant flows. In this respect, a federal nudge toward regional collaboration might be one of the very few justifiable intrusions of federal stipulation at a moment when federal grant making requires more flexibility. But at any rate, the federal government can and should, as Robert Yaro and Bill Fulton argue in memos prepared for the *Blueprint*, begin to build more and more incentives for regional collaboration into its ongoing programs, much as Bruce Babbitt, in his book *Cities in the Wilderness,* suggests that Washington should use what he calls "conditionality"—modest, but consistently applied incentives—to protect important natural areas.[16] Such incentives could be used to promote more effective metropolitan governance systems and problem-solving at very low cost.[17]

The federal government should, for example, provide strong financial incentives for MPOs to incorporate regional land use or energy strategies into federally subsidized transportation projects. Regions wanting to receive additional federal incentive funds would have to adopt effective inter-governmental transit and land use strategies designed to reduce long-distance commuting, attack congestion, promote transit and transit-oriented development, or implement energy-efficient land use and building codes. States or regions that choose not to buy into these programs could opt out.[18] The same approach could be used to promote regional affordable housing initiatives or other forms of coordination. (Alternately, a small portion of a region's entitlement to federal funds could be subtracted if they choose not to embrace the regionalism nudge.) Ultimately, as Yaro writes, any number of other categorical and block grant programs, ranging from economic development to education to waste water grants, could be used in similar ways to promote regional collaboration, with additional dollars flowing to recipients that pursue such coordination (and perhaps a small deduction applied to those that do not).

In this way, the diffusion throughout the domestic budget of a series of modest but clear payoffs for cross-boundary cooperation would likely go surprisingly far in advancing the cause of effective metropolitan governance.

EMPOWER

METROPOLITAN GOVERNANCE

But again: A large, bold challenge may also be needed to complement broad, incremental nudging across the budget.

For that reason, the federal government should build on the notion and architecture of the Sustainability Challenge to lay down, working closely with state governments, a similar **Governance Challenge**—this one aimed at the general promotion of deep-going, path-breaking experiments in metropolitan governance.

Smaller in award size, the Governance Challenge would differ from the Sustainability Challenge in that it would stipulate no particular "sustainability" goal but instead solicit coordination across any wide swath of program areas, from social services and education to law enforcement, fiscal management, and tax policy. In addition, the Governance Challenge—unlike the Sustainability Challenge—would *require* the participation of state government in proposals, given that localities and even MPOs remain legally "creatures of the state."

But in other respects, the Governance Challenge would resemble its sustainability companion. Once again, significant grant money would be awarded in a competitive process to the partnerships of states, localities, MPOs, regional business alliances, and other entities that devised the boldest, most multi-jurisdictional proposals for improving cross-boundary coordination, service and program integration, or regional decisionmaking.[19] Once again, winning proposals—which might involve, for example, major regional education reforms, tax-base sharing, or deep-going local government restructuring—would be rewarded with special prize resources (on top of regular block grant allocations) as well as new powers and flexibility to align disparate federal programs in support of the new vision. Again, too, the federal government would fund most of the development of the plans in exchange for local achievement of the requisite state and local legal approvals.

In this fashion, adoption of a bold new Governance

Diffusing Metropolitan Governance and Planning Innovations in Europe: METREX

Metrex, the network of European metropolitan regions and areas, describes itself as a forum within which key European decision-makers can "share their knowledge, experience, and expertise" in the interest of developing good planning and governance on the metro level. Founded in 1996, with support from the European Commission, Metrex now includes representatives from 50 of Europe's 120 city-regions and serves equally as a vehicle for members to exchange knowledge and best practices and as an advocate for the importance of metropolitan regions as functional units for planning and governance.

Metrex holds trans-national conferences and coordinates a variety of research undertakings. Significantly, the network has also developed (through the "InterMETREX" project), a "Practice Benchmark" to aid metropolitan regions in assessing their practices, progress, and continuing needs. Begun in 1999, this program now includes 29 specific benchmarks to help guide different areas of metropolitan development and governance. Individual components of the Practice Benchmark tackle a wide array of concerns and in each area offer concrete goals and criteria for evaluating success. For example, the first benchmark calls for national guidance on spatial planning and recommends key specifications of sound planning.

The Practice Benchmark also promotes the empowerment of metropolitan-level governance bodies, as well as governmental cohesion and partnership within metros and the building of consensus among metropolitan stakeholders. Specifically, Metrex encourages participants to vest metropolitan planning bodies with the authority to:

- Allocate resources
- Set standards for data collection and spatial analysis
- Require cooperation on the part of local cities, towns, and other communal jurisdictions

Similarly, Metrex encourages cities, towns, and communities to actively collaborate on the planning and implementation of sustainable development within their metro regions.

For a large and decentralized nation like America, Metrex offers a compelling model for shaping a systematic vehicle for identifying and diffusing "best in class" innovations through a large number of often inward-looking metropolitan areas.

Sources: For an overview of Metrex, see their core brochure at www.eurometrex.org/Docs/About/EN_Brochure.pdf; information on the Metrex Practice Benchmark on spatial planning can be accessed at www.eurometrex.org/Docs/InterMETREX/Benchmark/EN_Benchmark_v4.pdf.

Challenge would give the nation a major new tool for testing—and promoting—new variants of integrative thinking and action in metropolitan America. Once and for all, Washington would demonstrate its urgency about empowering local innovators who want to move beyond the fragmented, localistic responses that hold many metropolitan areas back.

MAXIMIZE PERFORMANCE

METROPOLITAN GOVERNANCE

Finally, the nation—in its role as a performance optimizer for the entire decentralized system of American federalism—should adopt a catalytic stance that seeks to stimulate metro governance invention by supporting state-of-the-art knowledge-building and best practice diffusion.

To that end, the *Blueprint* urges both enhanced federal investment in information and a systematic, networked effort to identify, support, and share the best cross-border governance collaborations.

Relevant, accurate, and timely information, to begin with, "should be at the center" of any federal effort to promote regional collaboration, as the NAPA report declared.[20]

Any deep-going governance reform that focuses on aligning federal, regional, state, and local programs, goals, and performance will necessarily require a substantial information base in order to diagnose problems, analyze reform options, and measure outcomes. What is more, information remains one of the cheapest, most cost-effective policy tools available for stimulating game-changing innovation.

Of late, however, the federal engagement in information provision has been ad hoc, uneven, and deteriorating. So for that reason, a future *Blueprint* policy paper will advance principles and recommendations on how to **rebuild the nation's government statistics infra-**

structure as well as how to enhance other dimensions of federal information policy. (See "Knowledge That Motivates: Using Information to Catalyze Metropolitan Problem-Solving," by Andrew Reamer, forthcoming at www.blueprintprosperity.org.)[21] Central to this agenda will be appropriation of the funding necessary to develop the small-area demographic and economic statistics needed by public and private decisionmakers and a call for the Office of Management and Budget to issue guidance to promote and describe how federal agencies should design and implement more effective information policies, programs, and tools. For knowledge *does* motivate: Without the right statistics, technical knowledge, or analytics, key actors may well overlook important opportunities to identify regional problems and respond to them.

But there is one more piece of a federal agenda for maximizing the spread of more cohesive metro governance. The nation badly needs a systematic, networked vehicle for sharing and disseminating the most integrated local governance innovations and supporting a national conversation about such work.

To fill the gap here, the *Blueprint for American Prosperity* proposes the development of a new national forum—a **Metro Innovations Network**—tasked specifically with assessing, diffusing, and promoting the best and most innovative regional governance and policy integration breakthroughs.

This new partnership would build on the new forms of network building that are now part of the European Union landscape (where city leaders are routinely exposed to "best in class" innovations on, say, neighborhood revitalization or the economic recovery of industrial cities) and past U.S. efforts like the Welfare to Work Partnership (created to diffuse corporate hiring innovations in the aftermath of welfare reform).

Like those antecedents, the new partnership would serve as a strategic, focused learning network charged with identifying, disseminating, replicating, and scaling up local innovations that support goals such as, in this case, effective metropolitan governance and prosperous cities, suburbs, and metropolitan areas. Like those prior models, the new exchange would seek to save metropolitan leaders from repeatedly "reinventing the wheel" by speeding the spread of innovations through a network designed to introduce them quickly to many practitioners and replicate them in broad groups of metros.

In terms of its operation, the Metro Innovations Network—like the Welfare to Work Partnership—would be a partnership with the federal government and would exist outside traditional bureaucracies. Most likely, the effort would be headed by leading corporate, civic, and political innovators at the metropolitan scale. In addition, the effort would work closely with a range of Washington-based constituencies including the National Governors Association, the National Council of State Legislatures, the U.S. Conference of Mayors, the National League of Cities, and the National Association of Counties to ensure a broad reach of ideas and practices. As to the ideas and practices the network would share, they would span a broad spectrum of innovations, ranging from metropolitan mayors' caucuses and shared municipal services to regional tax sharing and city-county consolidation efforts. In this way, a MetroNation would gain something it badly needs: an effective way to reveal, disseminate, and roll into a national movement the cross-boundary innovation that is now taking place within the isolated spheres of individual metros or particular program areas. Ultimately, nothing may be more important than that, as America needs all 363 of its metropolitan areas to collaborate internally in order to ensure America can compete in the world.

* * *

So those are some glimpses.

MetroPolicy, as will be apparent by now, is no single plan, no single rigid agenda, but instead a general style of problem-solving. Its general approach to policymaking aims not at some final "sorting out" of responsibility for metropolitan America but instead at maximizing the effectiveness of the whole intermingled system of *shared* responsibility. In that fashion, the exemplary applications of MetroPolicy gathered here point to the future emergence of a purposeful, broadly supportive, and effective national policy framework that comports with the reality that America's prosperity depends overwhelmingly on the success of its metropolitan areas.

VI. CONCLUSION

In the end, America and its federal government must put the prosperity of U.S. cities and suburban areas—the nation's crucial metropolitan hubs—at the center of a broad new effort to renovate American governance.

The facts and the argument are clear:

- America's cities, suburbs, and metropolitan systems more than ever drive national prosperity
- Washington seems largely unattuned to that reality
- Therefore, America needs a new partnership between federal, state, local, private sector, and nonprofit leaders that modernizes Washington's relations with all of those actors to help metro area leaders innovate so America will prosper

And so these pages have suggested, that federal policy needs to respond—as it has in past eras of change—to the organizational (and economic, social, and environmental) imperatives of a new moment in history.

Quite simply, globalization has changed the game.

No longer can the nation make do with a drifting, outmoded assemblage of federal programs, policies, and rules that fails to take into account the truth that national competitiveness and prosperity increasingly equals the sum of its metropolitan parts. Instead, America needs a purposeful, broadly supportive, and effective national policy framework that comports with the reality that America's prosperity emanates overwhelmingly from its metropolitan areas.

Along these lines, America—the MetroNation—requires the patient, wide-ranging development and implementation of MetroPolicy: a body of renovated policies, stances, and programs that would reestablish Washington as a steady, empowering, and accountable partner with states, localities, and the private and voluntary sectors in support of metropolitan prosperity.

Such a body of stances would amount to a new compact among the myriad national, state, local, public, private-sector, and nonprofit actors whose interactions strongly influence metropolitan fortunes. By its terms, Washington needs once more to *lead where it must, empower where it should,* and otherwise *maximize its own performance* so it can improve the effectiveness of the nation's whole interconnected governance system.

In this way, MetroPolicy holds out hope of providing the nation what it badly needs but now lacks: a focused, flexible, and enterprising partnership aimed at unleashing the full potential of the varied, dynamic, and interrelated localities that—added up—*are* the nation.

In short, America is a metropolitan nation. It's time to start acting like one.

ENDNOTES

I: INTRODUCTION (PAGES 10–15)

1. See Alan Berube, "MetroNation: How U.S. Metropolitan Areas Fuel American Prosperity" (Washington: Brookings Institution, 2007). The terms "MetroNation" and "MetroPolicy" employed by the *Blueprint for American Prosperity* very respectfully echo terms coined by Myron Orfield in his excellent book, *American MetroPolitics: The New Suburban Reality* (Washington: Brookings Institution Press, 2002), as well as by Peter Drier, John Mollenkopf, and Todd Swanson in *Place Matters: Metropolitics for the Twenty-First Century* (Lawrence: University Press of Kansas, 2001).
2. Berube, "MetroNation."
3. For more on the idea of metros as a national system of interdependent economies, see William R. Barnes and Larry C. Ledebur, *The New Regional Economies: The U.S. Common Market and the Global Economy* (Thousand Oaks, CA: Sage Publications, 1998).
4. Brookings analysis of data from the U.S. Census, Economy.com, the United States Patent and Trademark Office, the Federal Aviation Administration, and Thomson Financial.
5. Brookings analysis of data from the Bureau of Economic Analysis and the World Bank.
6. A variant of this argument in the economic sphere runs through Barnes and Ledebur, *The New Regional Economies.*

II: WHAT THE TRENDS SAY (PAGES 16–33)

1. While gross domestic product (GDP) per capita provides a good summary indicator of standard of living, it fails to include important factors like externalities from pollution and congestion, the value of leisure, informal market production, and other non-market goods and services.
2. World Bank World Development Indicators database and Brookings analysis of Bureau of Economic Analysis GDP by Metropolitan Area data. Figures are in year 2005 dollars and are adjusted to account for differences in purchasing power among countries. An analysis using market exchange rates instead of purchasing power parities revealed no major difference in rankings. It is worth noting that over a longer time span—1991 to 2005—U.S. GDP per capita grew at a slightly slower rate than it did in Spain, the UK, and Canada.
3. Organization for Economic Cooperation and Development, "Competitive Cities in the Global Economy" (Paris, 2006).
4. Alan Berube, "MetroNation: How U.S. Metropolitan Areas Fuel American Prosperity" (Washington: Brookings Institution, 2007).
5. Paul Krugman, *The Age of Diminished Expectations* (Cambridge: MIT Press, 1997).
6. Brookings analysis of Bureau of Economic Analysis GDP by Metropolitan Area data.
7. GDP per hour and GDP per hour growth rates are recent up to the year 2006 and were obtained from the OECD StatExtracts database.
8. For instance, James Kahn and Robert Rich of the New York Federal Reserve Bank recently incorporated revised productivity data in their model and forecasted five-year annual productivity growth of about 2 percent with an 80-percent probability that the nation's long-term productivity growth has reverted to a low-growth regime of 1.2 percent per year. See the August 2007 Kahn-Rich Productivity Model Update, available at www.newyorkfed.org/research/national_economy/richkahn_prodmod.pdf. This update revises the productivity forecast discussed in James Kahn and Robert Rich, "Tracking Productivity in Real Time" (New York: Federal Reserve Bank of New York, 2006).
9. See, for example, Edward Glaeser and Albert Saiz, "The Rise of the Skilled City" (Cambridge: National Bureau of Economic Research Working Paper 10191, 2003); and Edward Glaeser, "Smart Growth: Education, Skilled Cities, and the Future of Cold-Weather Cities" (Cambridge: Rappaport Institute for Greater Boston and Taubman Center for State and Local Government, 2005).
10. Brookings analysis of National Science Foundation Science and Engineering Indicators 2008 data. Population data from the World Bank Word Development Indicators database was used to calculate per capita degree-granting rates. Because 2005 data on science and engineering degrees was not available for China and South Korea, their growth rates represent change between 1985 and 2004.
11. Brookings analysis of National Science Foundation Science and Engineering Indicators 2008 data.
12. Analysis of Economy.com data by Ned Hill, Cleveland State University. Scholars have found research and development to be a significant driver of productivity growth. For instance, Charles Jones finds that research and development accounts for up to 1.4 percentage points of annual GDP growth. See Charles I. Jones, "Sources of U.S. Economic Growth in a World of Ideas." *American Economic Review* 92 (2002): 220–239. Several economists further estimate the social rate of return for research and development in the range of 30 percent. On this point, see Charles I. Jones and John Williams, "Measuring the Social Return to R&D." *Quarterly Journal of Economics* 113 (1998): 1119–1135.
13. Council on Competitiveness, "Competitiveness Index: Where America Stands" (Washington: Council on Competitiveness, 2007). The U.S. share of global GDP, meanwhile, was virtually unchanged between 1986 and 2003, according to the World Bank World Development Indicators database.
14. Brookings analysis of data from the United States Patent and Trademark Office. Per capita patenting calculations utilized population data from the U.S. Census Bureau and from the World Bank World Development Indicators database.
15. Robert Atkinson, "Framing a National Broadband Policy," *Commlaw Conspectus* 16 (1) (2007): 145–177.
16. Brookings analysis of American Community Survey 2005 Public Use Microdata Sample (PUMS) data.
17. Organization for Economic Cooperation and Development, "OECD Employment Outlook 2007" (Paris, 2007).
18. This definition of the middle class comes from Jason Booza, Jackie Cutsinger, and George Galster, "Where Did They Go? The Decline of Middle-Income Neighborhoods in Metropolitan America, 1970–2000" (Washington: Brookings Institution, 2006).
19. Brookings analysis of U.S. Census Bureau decennial census data and 2005 American Community Survey data.
20. Booza, Cutsinger, and Galster, "Where Did They Go? The Decline of Middle-Income Neighborhoods in Metropolitan America, 1970–2000." Empirical work also shows that increased income segregation is due in part to rising income inequality, suggesting a link between increased inequality and dwindling middle-class neighborhoods. See Tara Watson, "New Housing, Income Inequality, and Distressed Metropolitan Areas" (Washington: Brookings Institution, 2007).
21. For a discussion of the negative social and human impacts of concentrated poverty see Alan Berube and Bruce Katz, "Katrina's Window: Confronting Concentrated Poverty Across America" (Washington: Brookings Institution, 2005).
22. Paul A. Jargowsky, "Stunning Progress, Hidden Problems: The Dramatic Decline of Concentrated Poverty in the 1990s" (Washington: Brookings Institution, 2003).
23. Brookings analysis of Internal Revenue Service data. Families receiving the EITC typically have incomes below 200 percent of the poverty line. See Steve Holt, "The Earned Income Tax Credit At 30: What We Know" (Washington: Brookings Institution, 2006).
24. A rich literature on the private returns to schooling finds a significant relationship between years of education and income. For earlier, seminal works on this topic see Gary S. Becker, *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to*

Education (New York: Columbia University Press, 1967); and Jacob Mincer, *Schooling, Experience, and Earnings* (New York: National Bureau of Economic Research, 1974). For a summary of the returns-to-schooling literature, including an overview of studies that find the schooling-income link holds even after controlling for innate ability and selection bias, see Lisa Barrow and Cecilia Elena Rouse, "The Economic Value of Education by Race." *Economic Perspectives* 30 (2006): 14–27. An empirical analysis by Barrow and Rouse in that same article also finds no difference in the returns to schooling between whites and African Americans or between whites and Hispanics. They conclude that—because African Americans and Hispanics are disproportionately low-income—improving educational attainment in low-income areas can increase economic welfare across society while decreasing inequality. Beyond private returns to schooling, research has also established a link between increased educational attainment and wider social benefits.

25. Organization for Economic Cooperation and Development, "PISA 2006 Science Competencies for Tomorrow's World" (Paris, 2007).
26. Brookings analysis of U.S. Census Bureau 2006 American Community Survey PUMS data. Margins of error for these estimates are quite small, all less than 1 percentage point. Note that a large difference exists between educational attainment rates of native-born and foreign-born Hispanics. On high school attainment, native-born Hispanics age 25 to 34 in the 100 largest metros recorded an 82.9 percent attainment rate versus just 53.7 percent for foreign-born Hispanics. On bachelor's degree attainment, native-born Hispanics exceeded foreign-born Hispanics in the same age group, 18.3 percent to 8.9 percent.
27. United Nations Educational, Scientific, and Cultural Organization, *Global Education Digest* 2006. *Comparing Education Statistics Across the World* (Montreal: UNESCO Institute for Statistics, 2007).
28. Brookings analysis of U.S. Census Bureau decennial census data and American Community Survey data; Ohio Board of Regents, "Adult Educational Attainment by Age Group, 1990 and 2000 Census Results" (Columbus, 2003).
29. U.S. Department of Education, "A Test of Leadership: Charting the Future of U.S. Higher Education" (Washington, 2006).
30. Brookings analysis of housing density GIS data from David Theobald, Colorado State University.
31. Brookings analysis of population data compiled by the Department of Housing and Urban Development's State of the Cities Data Systems program.
32. See Berube, "MetroNation;" and Mark Muro and Robert Puentes, "Investing In a Better Future: A Review of the Fiscal and Competitive Advantages of Smarter Growth Development Patterns" (Washington: Brookings Institution, 2004).
33. Brookings analysis of U.S. Census Bureau ZIP Code Business Patterns data. For more on the potential link between sprawl and employment decentralization and increases in VMT, see Eric J. Miller and Amal Ibrahim, "Urban Form and Vehicle Usage." *Transportation Research Record* 1617 (1998): 10–17; Randall Crane and Daniel G. Chatman, "Traffic and Sprawl: Evidence from U.S. Commuting, 1985 to 1997." *Planning and Markets* 6 (1) (2003); and Selima Sultana and Joe Weber, "Journey-to-Work Patterns in the Age of Sprawl: Evidence from Two Midsize Southern Metropolitan Areas," *The Professional Geographer* 59 (2) (2007): 193–208.
34. Marilyn Brown, Frank Southworth, and Andrea Sarzynski, "Shrinking the Carbon Footprint of Metropolitan America" (Washington: Brookings Institution, 2008).
35. David Schrank and Tim Lomax, "The 2007 Urban Mobility Report" (College Station: Texas Transportation Institute, 2007). Economists confirm the significance of the economic drag associated with traffic congestion, as reflected in billions of dollars in additional insurance and environmental costs. For example, see Aaron Edlin and Pinar Mandic, "The Accident Externality from Driving." *Journal of Political Economy* 114 (5) (2006): 931–955; and Richard Tol, "The Marginal Costs of Carbon Dioxide Emissions: An Assessment of the Uncertainties." *Energy Policy* 33 (16) (2003): 2064–2074.
36. Brown, Southworth,and Sarzynski, "Shrinking the Carbon Footprint of Metropolitan America."
37. U.S. Department of Energy, Oak Ridge National Laboratory, Carbon Dioxide Information Analysis Center. According to the World Resources Institute's Climate Analysis Indicators Tool (CAIT), transportation accounts for a substantially larger share (31 percent) of the United States' total carbon emissions than it does in the European Union (23 percent) and around the globe as a whole (20 percent).
38. Robert Puentes, "A Bridge to Somewhere: Rethinking American Transportation for the 21st Century" (Washington: Brookings Institution, 2008).
39. See, for example, Edward Hill and others, "Slanted Pavement: How Ohio's Highway Spending Shortchanges Cities and Suburbs" (Washington: Brookings Institution, 2003); Brookings Institution Center on Urban and Metropolitan Policy, "Back to Prosperity: A Competitive Agenda for Renewing Pennsylvania" (Washington: Brookings Institution, 2003); and Puentes, "A Bridge to Somewhere."
40. The Road Information Project, "Rough Ride in the City" (Washington, 2006). The geographies used in the analysis were urbanized areas, which differ slightly from metropolitan areas.
41. Puentes, "A Bridge to Somewhere."
42. Brookings analysis of American Community Survey 2005 PUMS data.
43. Brookings analysis of U.S. Census Bureau 2006 American Community Survey PUMS data. Because the ACS PUMS used in this analysis represents a 1-percent sample of the U.S., estimates for individual metros suffer from sampling error. The margins of error are virtually negligible for the quintile estimates provided; however, for individual metros, the margins of error at the 90 percent confidence level range from very small (less than half a percentage point) to quite large. Yet, even after taking into account the margin of error, most metros—especially those in the worst-performing quintile—had enormous gaps in both high school and college educational attainment. No metros in the most disparate high school attainment quintile, for instance, had a minimum attainment gap (after accounting for margins of error) below 15 percent and many suffer from a minimum gap of over 20 percent.
44. Brown, Southworth, and Sarzynski, "Shrinking the Carbon Footprint of Metropolitan America."
45. Brookings analysis of U.S. Census Bureau decennial census data and 2005 American Community Survey data.
46. Brookings analysis of housing density GIS data from David Theobald, Colorado State University. The rural threshold used here is one housing unit per 40 acres of developable land. The analysis excludes Honolulu, Hawaii, as the data are only available for the continental U.S.
47. For this exercise, metros were ranked on productivity, inclusion, and sustainability. They were then categorized as "high performance," "mixed performance," and "low performance" based on their relative standing within those groups. For instance, places that ranked in the top third of all metros on two indicators and the middle third on another were considered "high performance." Conversely, metros that were ranked uniformly low on the three indicators were considered "low performance." Metros exhibiting inconsistent rankings—such as those that ranked in the top third on one indicator and the bottom third on another—were considered "mixed performance."

III. RESPONDING TO CHANGE (PAGES 34–53)

1. Alan Berube, "MetroNation: How U.S. Metropolitan Areas Fuel American Prosperity" (Washington: Brookings Institution, 2007).
2. Other regional efforts to improve the competitiveness of traditional industries include Milwaukee's Wisconsin Regional Training Partnership (www.wrtp.org); Cleveland's WIRE-Net (www.wire-net.org); the Charlotte Regional Partnership (www.charlotteusa.com); and Greenville, SC's Clemson University International Center for Automotive Research (www.clemson.edu/autoresearch).
3. "WIRE-Net Annual Report," available at www.wire-net.org/annlrept.htm (November 2007).
4. For more information on metro Detroit's Automation Alley, see www.automationalley.org.
5. For more on targeted cluster development efforts, see the Kansas City Area Life Sciences Institute (www.kclifesciences.org) and Fresno's Regional Jobs Initiative (www.fresnorji.org).
6. Greater Louisville, Inc. (www.greaterlouisville.com) is the consolidated economic development agency for the greater Louisville region and Metro Charleston Chamber is the Charleston region's chamber of commerce (www.charlestonchamber.net).

7. For more information on metro St. Louis' business development efforts, see the St. Louis Regional Chamber and Growth Association's website at www.stlrcga.org.
8. More information about the Fund for Our Economic Future is available at www.futurefundneo.org.
9. Personal communication from Chris Thompson, Fund for Our Economic Future, November 5, 2007.
10. For more information on Southeast Michigan's "New Economy Initiative" see Daniel Howes, "$100 Million to Help Area Economy." *The Detroit News*, September 14, 2007, p. 1A.
11. More information on Research Triangle Park is available at www.rtp.org. Also see information on the Research Triangle Regional Partnership at www.researchtriangle.org.
12. Personal communication from Angela Cummings, Marketing Communications Manager, CONNECT, August 27, 2007. More information about CONNECT is available at www.connect.org.
13. More information on Joint Venture: Silicon Valley Network is available at www.jointventure.org.
14. For more information on Arizona's benchmarking effort, see the Arizona Indicators Project at www.asu.edu/indicators. More information on Science Foundation Arizona is available at www.sfaz.org.
15. Seattle's International Benchmarking Consortium is managed by the Prosperity Partnership (www.prosperitypartnership.org).
16. Annete Bernhardt, Laura Dresser, and Joel Rogers, "Taking the High Road in Milwaukee: The Wisconsin Regional Training Partnership." In David Reynolds, ed., *Partnering for Change: Unions and Community Groups Build Coalitions for Economic Justice* (New York: M.E. Sharpe, 2004): 230–248.
17. More information about the efforts of the Lancaster County Workforce Investment Board is available at www.jobs4lancaster.com.
18. BTW Consultants and Abt Associates, "The Bay Area Workforce Funding Collaborative: Outcomes and Early Lessons from the First Funding Cohort" (Berkley: BTW Consultants, 2007).
19. More information on Louisville's Metropolitan College is available at www.metro-college.com.
20. Personal communication from Randy Clark, Metropolitan College, October 5, 2007.
21. More information on Philadelphia's Welcoming Center for New Pennsylvanians is available at www.welcomingcenter.org.
22. In 2003, projections estimated that absent FasTracks some 326,000 area residents would live within one-half mile of a transit stop by 2025. With it built out, the figure rose to between 490,000 and 653,00 residents. See Elena Nunez and Rich McClintock, "Getting on the Fast Track to a Livable Denver Region" (Denver: Environment Colorado Research and Policy Center, 2003).
23. For information on the expansion of the Dallas light rail system (DART), see Margaret Allen, "DART Light Rail to More than Double Miles." *Dallas Business Journal*, July 3, 2006. For more information on the expansion of Salt Lake's TRAX light rail system, see, "Utah Transit Authority's TRAX Salt Lake City Light Rail," available at www.utahrails.net/uta/uta-trax.php (November 2007).
24. Personal communication from Jeff Zupan, Senior Fellow for Transportation, Regional Plan Association, December 17, 2007. For more information about these projects see the RPA website at www.rpa.org.
25. More information on Seattle's FAST Corridor is available from the Puget Sound Regional Council at www.psrc.org/fastcorridor.
26. More information on metro New York's program is available from The Tri-State Transportation Campaign at www.tstc.org.
27. More information on San Diego's I-15 FasTrak progam is available from the San Diego Association of Governments at www.sandag.org/index.asp?classid=29&fuseaction=home.classhome.
28. Patrick McGeehan, "Pennsylvania Tries to Sell Itself as Backup for Wall Street During a Disaster." *The New York Times*, June 8, 2007, p. B1. Also see the Wall Street West website at www.wallstreetwest.org.
29. Salt Lake City's regional organization Envision Utah (www.envisionutah.org) prepared and promoted Wasatch 2040, the federally-recognized regional transportation plan. Denver's Mile High Compact (www.drcog.org/index.cfm?page=MileHighCompact) is a joint effort between the Denver Regional Council of Governments and Metro Mayors Caucus to persuade local jurisdictions to adhere to principles of the regional plan MetroVision.
30. The state of Oregon established the Metro regional government for Portland in 1979 (www.metro-region.org), and the State of Minnesota created Minneapolis-St. Paul's governing Metropolitan Council in 1967 (www.metrocouncil.org). Both continue to provide coordinated services, infrastructure, and land use for their respective regions. See John Parr, Joan Riehm, and Christina McFarland, "Guide to Successful Local Government Collaboration in America's Regions" (Washington: National League of Cities, 2006).
31. More information on Kansas City's Mid-Atlantic Regional Council is available at www.marc.org.
32. Clean Air Counts is supported by the Metropolitan Mayors Caucus. More information is available on the Caucus is available at www.mayorscaucus.org/pages/Home/Issues/Clean_Air_Counts.
33. In the Los Angeles metro, fleet rules and grants for clean technology development are managed by the South Coast Air Quality Management District (www.aqmd.gov).
34. Efforts aimed at curbing emissions include Seattle's King County Climate Plan (www.kingcounty.gov/globalwarming); Miami-Dade's Urban CO_2 Reduction Plan (www.miamidade.gov/derm/climate_change_urban_CO2_reduction_plan.asp); and San Francisco's Bay Area Regional Agency Climate Protection Program (www.abag.ca.gov/jointpolicy/jpc_climate_change.htm).
35. Kenichi Ohmae, *The End of the Nation State: The Rise of Regional Economies* (New York: Free Press, 1995).
36. William R. Barnes and Larry C. Ledebur, *The New Regional Economies: The U.S. Common Market and the Global Economy* (Thousand Oaks: Sage Pubilcations, 1998).
37. Robert Atkinson and Howard Wial, "Boosting Productivity, Innovation, and Growth through a National Innovation Foundation" (Washington: Brookings Institution, 2008).
38. Brookings Institution analysis of U.S. Census Bureau data. The working-age population is defined as 25- to 64-year-olds. The shares of the population with postsecondary degrees are measured for those 25 years old and older.
39. Christopher Mazzeo and Erin Riley, "Smart Cities, Smarter Policies: How Federal Education Policy Can Support Metropolitan Economies" (Washington: Brookings Institution, forthcoming).
40. "Report Card for America's Infrastructure," available at www.asce.org/reportcard (November 2007).
41. Calculations by Arthur C. Nelson, Virginia Polytechnic; Also see Arthur C. Nelson, "Toward a New Metropolis: The Opportunity to Rebuild America" (Washington: Brookings Institution, 2004).
42. These paragraphs are informed by Gerald Frug, *City Making* (Princeton: Princeton University Press, 1999) and Gerald Frug, "Beyond Regional Government," 115 *Harvard Law Review* 1763. Also informative have been memos prepared for the authors by MarySue Barrett, Gerald Frug, William Fulton, Mark Alan Hughes, and Robert Yaro.
43. The U.S. constitutional framework grants all powers not delegated to the federal government and not prohibited by federal law to states. Among these state powers is the ability to establish and define the terms and limits of any sub-state (i.e., local or regional) governance structures via statutes for charters, incorporations, and home rule. See Kevin Smith, Alan Greenblatt, and John Buntin, *Governing States and Localities* (Washington: CQ Press, 2005).
44. James Wolf, Robert Puentes, Thomas Sanchez, and Tara Bryan, "Metropolitan Planning in the Post-ISTEA Era: What Happened, and What Do We Do Now?" in "The Future of Urban Transportation II" (Washington: ENO Transportation Foundation, 2007).
45. Brookings analysis of U.S. Census Bureau 2002 Census of Governments data.
46. Ohmae, *The End of the Nation State*.
47. Data on federal expenditures come from budget outlays reported in Federal Office of Management and Budget, Federal Budget FY08, Historical Table 3.2. This amount excludes federal spending on defense and international affairs. Data on state and local spending is the amount of "direct general expenditures" as reported from the U.S. Census Bureau for 2004–2005.
48. For a discussion of patent laws on innovation, see Julie Hedlund, "Patents Pending: Patent Reform for the Innovation Economy"

(Washington: Information and Technology Innovation Foundation, 2007). A number of laws cover federal technology transfer activities including the Stevenson-Wydler Technology Act of 1980 and the Technology Transfer Act of 1986. More information on these and other legislation is available from the Federal Laboratory Consortium for Technology Transfer at www.federallabs.org. For information on the role of tax credits on research and development, see Robert Atkinson, "The Research and Experimentation Tax Credit: A Critical Policy Tool for Boosting Innovation and Enhancing U.S. Economic Competitiveness" (Washington: Information and Technology Innovation Foundation, 2006).

49. The Environmental Protection Agency provides information on the Clean Air Act, the Clean Water Act, and Superfund regulations at www.epa.gov/epahome/laws.htm and information on brownfields statutes at www.epa.gov/brownfields/gdc.htm.
50. A sample of federal agencies producing relevant data include Bureau of Labor Statistics and Bureau of Economic Analysis on economic statistics; Department of Education and Housing and Urban Development on societal issues; and the Department of Transportation and Environmental Protection Agency on sustainability concerns.
51. Pari Sabety and Andrew Reamer, "Federal Statistics: Robust Information Tools for the Urban Investor" (Washington: Brookings Institution, 2005).
52. Ibid.
53. More information on the Manufacturing Extension Partnership is available from the Department of Commerce's National Institute of Standards and Technology at www.mep.nist.gov/about-mep/overview.html.
54. For a discussion of the federal government creating networks, see Stephen Goldsmith and William Eggers, *Governing by Network: The New Shape of the Public Sector* (Washington: Brookings Institution, 2004). Information on the Workforce Investment in Regional Economic Development (WIRED) program is available from the Department of Labor at www.doleta.gov/WIRED.
55. For a classic discussion about the public goods rationale for different levels of government involvement, see Edward M. Gramlich, "The Economics of Fiscal Federalism and Its Reform" in Thomas Swartz and John Peck, eds., *The Changing Face of Fiscal Federalism* (Armonk: M.E. Sharpe, Inc., 1990).
56. For a discussion about the capacity of national and sub-national governments to engage in redistribution, see Paul Peterson, *The Price of Federalism* (Washington: Brookings Institution, 1995).
57. See, for example, Alan Berube, David Park, and Elizabeth Kneebone, "MetroRaise: Boosting the Earned Income Tax Credit to Help Metropolitan Workers and Families" (Washington: Brookings Institution, 2008).
58. For a brief discussion on the weakness of sub-national governments in protecting rights and addressing certain negative environmental externalities, see, Pietro Nivola, "Rediscovering Federalism" (Washington: Brookings Institution, 2007).
59. For overviews of national innovation strategies, see Rob Atkinson and Howard Wial, "Boosting Productivity, Innovation, and Growth through a National Innovation Foundation" (Washington: Brookings Institution, 2008). Also see Organization for Economic Cooperation and Development, "Competitive Regional Clusters: National Policy Approaches" (Paris, 2007).
60. John Kao, *Innovation Nation* (New York: Free Press, 2007).
61. For more information, see the TEKES website: www.tekes.fi/eng.
62. OECD, "Competitive Regional Clusters."
63. Ibid.
64. United States Government Accountability Office, "Women and Low-skilled Workers: Other Countries Policies and Practices That May Help These Workers Enter and Remain in the Labor Force" (Washington, 2007).
65. Kao, *Innovation Nation.*
66. Ibid.
67. Robert D. Atkinson, Daniel K. Correa, and Julie A. Hedlund, "Explaining International Broadband Leadership" (Washington: Information Technology and Innovation Foundation, 2008).
68. Urban Land Institute and Ernst & Young, "Infrastructure 2007: A Global Perspective" (Washington: Urban Land Institute, 2007).
69. Ibid.
70. "A High-speed Revolution." *The Economist*, July 5, 2007.
71. Cynthia Garber, "High-Speed Railways in Spain." *Technology Review,* November 7, 2007.
72. Roger Bay, "Europe's Great Trains Serve as a Reminder of UK Underinvestment." *Financial Times*, November 12, 2007, p. 5; "High-speed Rail Link for Airport." *The Independent*, September 26, 2007, p. 30.
73. Information on Dutch plans comes from communication with Erik Bouwmeester, Deputy Head of International Affairs, Dutch Ministry Transport, Public Works, and Water Management, December 4, 2007.
74. More information on the Transportation Innovation Fund is available from the UK Department for Transport at www.dft.gov.uk/press/speechesstatements/statements/stattif080207.
75. Chris Webber and Dermot Finch, "Building Stronger City-Regions: U.K. Lessons for U.S. Policy" (Washington: Brookings Institution and Center for Cities, 2008).
76. Council on Competitiveness, "The Energy-Competitiveness Relationship" (Washington, 2007); United States Government Accountability Office, "Department of Energy: Key Challenges Remain for Developing and Deploying Advanced Energy Technologies to Meet Future Needs" (Washington, 2006).
77. Ibid.
78. Cynthia Garber, "Solar Energy in Spain." *Technology Review,* August 15, 2007.
79. Adam Marshall, "`Centralized Devolution:' The English Experience," unpublished manuscript, Center for Cities, March 13, 2008; and HM Treasury, "Review of Sub-national Economic Development and Regeneration" (London: HMSO, 2007).
80. For more information on UK's Regional Development Agencies, see www.dti.gov.uk/regional/regional-dev-agencies/funding-financial-gov/page20136.html.
81. Adam Marshall, "'Centralized Devolution.'"
82. Organization for Economic Cooperation and Development, "Linking Regions and Central Governments: Contracts for Regional Development" (Paris, 2007).
83. United States Government Accountability Office, "Inter-city Passenger Rail: National Policy and Strategies Needed to Maximize Public Benefit from Federal Expenditures" (Washington, 2006).
84. "Next Step Towards Devolution." *The Japan Times.* November 30, 2007; "Parliament Enacts Law to Promote Decentralization of Government." *Japan Economic Newswire,* December 8, 2006.
85. Ehitsam Ahmad, "Big, or Too Big." *Finance and Development* 44 (3) (2007): 20–23.
86. OECD, "Competitive Cities in the Global Economy."
87. Ibid.
88. OECD, "Linking Regions and Central Governments."
89. Ibid.
90. OECD, "Competitive Cities in the Global Economy."
91. Personal communication from Marc Weiss, chairman and CEO, Global Urban Development, June 24, 2007.
92. OECD, "Competitive Cities in the Global Economy."
93. Ibid.
94. Adam Marshall, "`Centralized Devolution.'"
95. More information about Brazil's Ministry of Cities is available at www.cidades.gov.br/index.php?option=content&task=section&id=189.
96. More information about Germany's Ministry of Transport, Building, and Urban Affairs is available at www.bmvbs.de/en. Information on Japan's Ministry of Land, Infrastructure, and Transport is available at www.mlit.go.jp/english.
97. More information on UK's Department of Innovation is available at www.dius.gov.uk/role.html.
98. More information on Germany's spatial planning available from the Ministry of Transport, Building, and Urban Affairs at www.bmvbs.de/en/-,1876/Spatial-development.htm.
99. More information on the Irish National Spatial Strategy is available at www.irishspatialstrategy.ie.
100. More information the Dutch National Spatial Strategy is available at www2.vrom.nl/pagina.html?id=7348.
101. Organization for Economic Cooperation and Development, "Modernising Government: The Way Forward" (Paris, 2005).

102. HM Treasury, "Devolving Decision Making: Delivering Better Public Services—Refining Targets and Performance Management" (London: HMSO, 2004); OECD, "Modernising Government."
103. Ibid.
104. Ibid.
105. Council on Competitiveness, "The Energy-Competitiveness Relationship."
106. Ibid.

IV. FALLING BEHIND (PAGES 54-67)

1. That more than three-quarters of the $29 billion of the federal R&D dollars that flowed to academic institutions in 2005 flowed to institutions in the 100 largest metros underscores the importance of federal leadership in contributing to metropolitan areas' innovation capacity. All told, moreover, the federal government spent over $140 billion in 2007 on R&D of the sort that has over time yielded a long list of commercial applications, including fiber optics, magnetic resonance imaging, and the Internet. Data on research expenditures come from the National Science Foundation, National Institutes of Health, and the American Association for the Advancement of Science. On commercial applications see Paul Light, *Government's Greatest Achievements: From Civil Rights to Homeland Security* (Washington: Brookings Institution Press, 2002); and the National Science Foundation's list of the top 50 NSF-funded discoveries that have become common products or ideas at www.nsf.gov/about/history/nifty50. The metropolitan share of R&D flows comes from a Brookings analysis of National Science Foundation Division of Science Resources Statistics data.
2. Light, *Government's Greatest Achievements;* and the U.S. Department of Education.
3. Bruce Katz and others, "Getting Transportation Right for Metropolitan America." In Bruce Katz and Robert Puentes, eds., *Taking the High Road: A Metropolitan Agenda for Transportation Reform* (Washington, Brookings Institution Press, 2005).
4. For two reviews of the HOPE VI experience, see Susan Popkin and others, "A Decade of HOPE VI: Research Findings and Policy Challenges" (Washington: The Urban Institute and the Brookings Institution, 2005); and Mindy Turbov and Valerie Piper, "HOPE VI and Mixed-Finance Redevelopments: A Catalyst for Neighborhood Renewal" (Washington: Brookings Institution, 2005).
5. See, for example, Robert Atkinson, "Network Government for the Digital Age" (Washington: Progressive Policy Institute, 2003); and Robert Atkinson, *The Past and Future of America's Economy: Long Waves of Innovation that Power Cycles of Growth* (Northhampton: Edward Elgar, 2005). This and the next few paragraphs draw extensively on Atkinson.
6. For more on Progressive Era governmental responses, see Gabriel Kolko, *Triumph of Conservatism* (New York: Free Press, 1977); James Weinstein, *The Corporate Idea in the Liberal State, 1900–1918* (New York: Greenwood Press, 1981); and Robert Wiebe, *The Search for Order: 1877–1920* (New York: Hill and Wang, 1967).
7. Key readings on the New Deal and Great Society era of "big government" include John Kenneth Galbraith, *The New Industrial State* (Boston: Houghton Mifflin, 1985); and Otis L. Graham, *Toward a Planned Society* (New York: Oxford University Press, 1967).
8. Alan Berube, "MetroNation: How U.S. Metropolitan Areas Fuel American Prosperity" (Washington: Brookings Institution, 2007).
9. See, for example, Robert Reich, *Supercapitalism: The Transformation of Business, Democracy, and Everyday Life* (New York: Knopf, 2007); Gary Hamel, *The Future of Management* (Boston: Harvard Business School Press, 2007); and Michael J. Piore and Charles F. Sabel, *The Second Industrial Divide: Possibilities for Prosperity* (New York: Basic Books, 1984). Hamel cites recent research by G. Thomas and Richard D'Aveni that suggests that industry leadership is changing hands more frequently, and competitive advantage is eroding more rapidly, than ever before.
10. Hamel, *The Future of Management.*
11. Joseph Pine, *Mass Customization: The New Frontier in Business Competition* (Boston: Harvard Business School Press, 1993). Also see R. Scott Fosler, "Working Better Together: How Government, Business, and Nonprofit Organizations Can Achieve Public Purposes through Cross-Sector Collaboration, Alliances, and Partnerships" (Three-Sector Initiative, 2001). Fosler writes that today's technology driven, "turbo-charged business climate has ratcheted up the performance expectations for all institutions" and ensured that "people have become accustomed to generally higher levels of customer service."
12. Atkinson, *The Past and Future of America's Economy.*
13. Michael C. Dorf and Charles F. Sabel, "A Constitution of Democratic Experimentalism." *Columbia Law Review* 2 (1998): 267–473; Piore and Sabel, *The Second Industrial Divide.*
14. Significant questioning of the mid-century bureaucratic model and exhortations to rethink the rule-bound hierarchical organization date at least to the work of the management scholar and consultant Peter Drucker, who coined the term "knowledge worker" in 1959. Drucker's book, *The Age of Discontinuity: Guidelines to Our Changing Society* (New York: Harper & Row, 1968), declared that new technologies, changes in the world's economy, pluralism, and the rise of the knowledge economy were disrupting an "Age of Continuity" defined by "stable industry structures," "big business," and large managerial organizations. Drucker predicted that organizations would need to "decentralize" and learn to "innovate" in order to grow more responsive and "agile." Such ferment has been constant and frenetic over the last 30 years in the business literature. Key examples of this ferment include: Thomas J. Peters and Robert Waterman, *In Search of Excellence: Lessons from America's Best-Run Companies* (New York: Harper & Row, 1982), which concluded that "excellent firms" tend to have "lean" but focused top-level staffs, "almost radical decentralization and autonomy," and a simultaneous "loose-tight" hybrid of "central direction" and local discretion; Rosabeth Moss Kanter, *The Change Masters: Innovation for Productivity in the American Corporation* (New York: Simon and Schuster, 1983), which called for "integration" to replace "segmentalism" in organizations; Michael Hammer and James Champy, *Reengineering the Corporation: A Manifesto for Business Revolution* (New York: HarperBusiness, 1993), which called for "process reengineering" and declared war on "narrow functional silos" in companies; Pine, *Mass Customization,* which urged the reorganization of organizations, processes, and production chains to allow "flexible and quick responsiveness" to "fulfill the ever-changing needs of customers;" and Hamel, *The Future of Management,* which argues that "experimentation beats planning" and so calls for replacing hierarchy in organizations with continuous, radical experimentation accompanied by assessment in the light of clear metrics of impact.
15. See, for example, Atkinson, *The Past and Future of America's Economy;* and Dorf and Sabel, "A Constitution of Democratic Experimentalism." For examples of these trends, see Piore and Sabel, *The Second Industrial Divide,* which in 1984 surveyed efforts by manufacturing companies to "break with rigid habits" and "restore the freedom to respond to shifting markets," in part by giving divisions within companies "greater autonomy in setting and pursuing goals;" and Hamel, *The Future of Management,* which describes the decisionmaking freedom of small, self-managing, often front-line teams at Whole Foods Market, W.L. Gore and Associates, and Google.
16. See, for example, Peters and Waterman, *In Search of Excellence;* Dorf and Sabel, "A Constitution of Democratic Experimentalism;" and Robert Kramer, "Organizing for Global Competitiveness: The Global Headquarters Design" (New York: The Conference Board, 1999). Peters and Waterman note that few of the profiled "excellent" billion-dollar companies had more than 100 people in the corporate headquarters. In *The Future of Management,* Hamel reports that Whole Foods' lean headquarters dispenses few "motivation-sapping, bureaucratic controls" but exerts discipline by providing store-based work teams abundant performance data. Analogous trends have been noted within holding companies and production networks. BTR, one of Great Britain's most successful industrial conglomerates in the 1990s, for example, was known for maintaining a small headquarters focused intensely on maintaining rigorous budgeting and financial reporting systems for its companies. See Andrew Campbell, Michael Goold, and Marcus Alexander, "Corporate Strategy: The Quest for Parenting Advantage." In *Harvard Business Review on Corporate Strategy* (Boston: Harvard Business School Press, 1999). Others have described similarly focused leadership in electronics

production, where companies like Cisco Systems and Apple have sought to assert rigorous leadership on core matters like R&D or marketing while outsourcing other more routine activities.

17. In *The Age of Paradox* (Boston: Harvard Business School Press, 1994), the British management writer Charles Handy remarks that "every organization of any size can be thought of in federal terms" and writes that "federalism is an old idea, but its time may have come again." For related discussion and examples, see, for example: Peters and Waterman, *In Search of Excellence;* Hammer and Champy, *Reengineering the Corporation;* Dorf and Sabel, "A Constitution of Democratic Experimentalism;" Gary Herrigel, "Flexibility and Formalization: Rethinking Space and Governance in Corporations and Manufacturing Regions" (the text of this forthcoming publication is available on the author's website at home.uchicago.edu/~gherrige/publications/flexibility_formalization.pdf); and Hamel, *The Future of Management.* Hamel celebrates the exceptional autonomy of small, self-managing teams or work groups at Whole Foods Market, W.L. Gore and Associates, and Google to try things and make key decisions about project choice and product offerings. Another example is BTR, the British conglomerate. During the 1990s, BTR maintained rigorous financial controls from the center but extended to companies in its portfolio a "decentralization contract" that gives profit-center managers extensive freedom to make their own decisions, as long as their profit-planning and bottom line are satisfactory (Campbell, Goold, and Alexander, "Corporate Strategy").
18. The private sector's growing awareness in recent decades of the need to consider customer demands has led to the rise of a formal business discipline: "customer relations management" (CRM). In 2001, a report by McKinsey Marketing Solutions ("Rediscovering the Customer") estimated that the market for CRM software reached $5 billion in 2000 and had the potential to more than double within five years. In *Reengineering the Corporation,* Hammer and Champy describe the shift to customer-driven business relationships over the last couple decades while Ranjay Gulati names responsiveness to customer needs as the core rationale for corporate process reform in "Silo-Busting: How to Execute on the Promise of Customer Focus." *Harvard Business Review* 85 (5) (2007): 98–111.
19. In *The Change Masters*, Kanter identified "segmentalism"—the compartmentalization of business and organization activities—as a major "anti-change" block on innovation and flexible response and described ways some firms were seeking to transcend or work around stovepiping to foster "integrative" behavior. In *Reengineering the Corporation,* Hammer and Champy reported how IBM Credit, Ford Motor Company, and Kodak achieved major results gains not by working within predefined organizational boundaries but by tending to entire processes that cut across those boundaries. For a more recent discussion see Gulati, "Silo Busting." Gulati describes how improving customer responsiveness at firms like GE Medical Systems, Best Buy, and Cisco Systems required systematic drives to transcend existing product-based, departmental, or geographic silos.
20. For instance, in "Who Captures Value in a Global Innovation System? The Case of Apple's iPod" (Irvine, CA: University of California, Irvine, 2007), authors Greg Linden, Kenneth Kraemer, and Jason Dedrick document the supply chain for the popular Apple gadget, finding that the seven most expensive components are supplied by seven companies headquartered in four nations with manufacturing locations in five countries. Also see Larry Huston and Nabil Sakkab, "Connect and Develop: Inside Procter and Gamble's New Model for Innovation." *Harvard Business Review* 84 (3) (2006): 2–10. Huston and Sakkab discuss Procter and Gamble's "connect and develop" strategy of increasing R&D productivity by aiming to acquire nearly half of all innovations from outside the company. By 2006, over 35 percent of Procter and Gamble's new products—and 45 percent of projects in the company's development portfolio—contained features developed externally, a statistic the authors credit in driving down the company's innovation costs while increasing R&D productivity by 60 percent. And in a March 30, 2008 *New York Times* article ("Thinking Outside the Company's Box"), Pascal Zachary documents the ways in which companies like Sun Microsystems, Google, and Cisco look beyond their offices for new technological innovations.
21. An early source of the metrics and benchmarking revolution was Robert Camp, *Benchmarking: The Search for Industry Best Practices that Lead to Superior Performance* (Milwaukee: ASQR Quality Press, 1989). Metrics and benchmarking have become a standard way to achieve accountability in decentralized systems or networks. In *The Future of Management,* for example, Hamel observes that the radical freedom to "try things" enjoyed by Whole Foods' in-store teams is linked to strong accountability that focuses decentralized free action on outcomes.
22. Timothy Sturgeon, "Modular Production Networks: A New American Model of Industrial Organization." *Industrial and Corporate Change* 11 (3) (2002): 451–496.
23. Herrigel, "Flexibility and Formalization."
24. Hamel, *The Future of Management.*
25. On numerous issues, states have assumed leadership on matters that transcend the jurisdictional reach of their localities. States including California, Connecticut, Florida, Kentucky, Michigan, New Jersey, and others have invested hundreds of millions of dollars in their communities' R&D capacity in such areas as advanced manufacturing, bioscience, and alternative energy. Likewise, Pennsylvania's Keystone Innovation Zones and Texas's Regional Centers of Innovation aim to stimulate the commercialization of R&D by concentrating research activity and creating partnerships between research institutions and industry. For more, see the National Governors Association (NGA) and the Pew Center on the States, "Innovation in America: Investing in Innovation" (Washington, 2007). On climate change, meanwhile, over 25 states have entered into at least one of the six major multi-state climate initiatives as a means of taking action on reducing carbon emissions. Furthermore, all but nine states have committed to documenting their emissions through emissions registries, and 26 states plus the District of Columbia have enacted renewable portfolio standards—standards that require states to generate a certain share of electricity from renewable sources. For more information, see the Pew Center on Global Climate Change, "Climate Change 101: State Action" (Washington, 2007). On growth management, states as varied as Florida, Georgia, Maryland, Oregon, and the New England states have taken the lead in addressing complex cross-boundary land use and development challenges by sorting out responsibilities and "matching" the policy response to the appropriate geographic scale. For more, see John M. DeGrove, *Planning Policy and Politics: Smart Growth and the States* (Cambridge: Lincoln Institute of Land Policy, 2005). On health care, Illinois, Massachusetts, New York, Pennsylvania, Vermont, and Washington have all passed legislation that achieved some level of universal health coverage—either for all residents or for all children residing in the state. Continued efforts to ramp up health coverage proceed in other states such as California, Connecticut, Indiana, Minnesota, North Carolina, New Mexico, Oregon, and Wisconsin. For more, see an analysis of state actions compiled by the Progressive States Network and the Universal Health Care Action Network. Finally, states as diverse as California, Iowa, Indiana, Maine, Pennsylvania, and New York have taken the lead in efforts to sort out and streamline the roles and responsibilities of state and local government with government reform initiatives. For more, see California's website on the "Little Hoover" Commission on California State Government Organization and the Economy at www.lhc.ca.gov; Alan Greenblatt, "Little Mergers on the Prairie." *Governing*, July, 2006, p. 48; the Indiana Commission on Local Government Reform website at indianalocalgovreform.iu.edu; Maine's school administrative reorganization website at www.maine.gov/education/supportingschools; and New York's State Commission on Local Government Efficiency and Competitiveness website at www.nyslocalgov.org.
26. A number of state efforts reflect the decentralizing impulse. In addition to the Minnesota and West Virginia waivers, Washington state recently amended its constitution to give school districts more autonomy and flexibility by allowing them to levy taxes with a simple majority vote. More decentralization is taking place *within* governments. For example, Iowa's "Charter Agencies" program offers participating agencies expanded budgetary authority, exemptions from broad budget cuts, and management flexibility in exchange for agreeing to be held accountable for measured results. Similarly,

Alabama and Utah have replaced rule-bound, "command-control" child and family services programs with a more flexible, individuated approach in which the state sets general goals, provides support, and monitors success while the "front line" is given wide discretion in case management. For more information, see David Osborne, "Bureaucracy Busting." *The Osborne Letter,* August 29, 2006, available at www.psg.us/resources/pdfcontent/DOletter8-29-06.pdf; Minnesota's cooperative waiver process website at www.osa.state.mn.us/default.aspx?page=coopWaiver; Washington state's constitutional amendment at www.leg.wa.gov/documents/Senate/SCS/Initiatives/R4204Summary.pdf; David Osborne, "Charter Agencies." *The Osborne Letter,* January 30, 2006, available at www.psg.us/resources/pdfcontent/DOletter1-30-06.pdf; Iowa's government website on charter agencies at charter.iowa.gov; and Dorf and Sabel, "A Constitution of Democratic Experimentalism."

27. One of the hallmarks of a "high-performance government organization" is that it "restructures its work processes to meet customer needs," according to Mark Popovich, ed., *Creating High-Performance Government Organizations: A Practical Guide for Public Managers* (San Francisco: Jossey-Bass, 1998). He reports that high-performance governments emphasize "customer satisfaction, and results rather than compliance with rules and regulations." San Antonio's "Neighborhood Sweep" program, along with 311 systems in Albuquerque, Baltimore, Chicago, Dallas, New York City, and other cities represent local, customer-focused attempts at improving service delivery.
28. In "Urgent Business for America" (Washington, 2003), the National Commission on the Public Service recommended that the federal government bring together agencies with similar goals in order to stimulate cooperation around a broad mission instead of perpetuating turf wars. This idea has been embraced by many states—including Arizona, Iowa, and Massachusetts—in their attempts to take advantage of synergies and begin process of "silobusting." Arizona's Growth Cabinet brings together the directors of the departments of transportation, game and fish, housing, environmental quality, economic security, health services, water resources, commerce, real estate, state land, state parks, school facilities, tourism, and agriculture to better collaborate with municipalities in developing improved, integrated land use and development plans. Iowa's Department of Administrative Services merged the state's personnel, IT, general services, and revenue and finance accounting departments to streamline activities, improve customer service, and reduce spending. Massachusetts' Office of Commonwealth Development—a "superagency"—attempted to bring together the state's transportation, environment, housing, and energy agencies to better shape development policies.
29. The aim of a network government model is to engage and interact with partners across public and private sectors to define goals and gain buy-in for mutually-beneficial initiatives, writes Paul Posner, "Accountability Challenges of Third-Party Government" in Lester Salamon, ed., *The Tools of Government* (New York: Oxford University Press, 2002). Government can support conditions for successful partnerships by acting as head manager and facilitator. San Diego and Washington provide examples of cities that have taken advantage of partnerships, the private-sector, and networks to improve performance. San Diego's "Bid to Goal" program harnesses the benefits of competition by challenging the unions that represent labor in the city's Metropolitan Wastewater Department to meet or beat third-party "mock bids" for projects based on private sector rates. If the union cannot match the offer, the private sector can be utilized. Former Washington mayor Anthony Williams also capitalized on the private sector by closing the DC general hospital and investing the savings in bringing together a network of private hospitals and health clinics. For more on San Diego's "Bid to Goal" program, see www.innovations.harvard.edu/awards.html?id=53311. For more on Washington's efforts, see Stephen Goldsmith and William Eggers, *Governing by Network: The New Shape of the Public Sector* (Washington: Brookings Institution Press, 2004).
30. See David Osborne and Ted Gaebler, *Reinventing Government* (New York: Penguin Books, 1993). Osborne and Gaebler underscore the necessity of metrics and performance measurement in government with one simple phrase: "What gets measured gets done." Cities like New York, Baltimore, Fort Wayne, and Las Vegas—along with states such as Washington and Virginia—have embraced this creed in their implementation of data-driven, performance-based management and evaluation to empirically assess and solve key problems. New York City catalyzed this wave of performance-based management in the mid-1990s with the New York Police Department's introduction of CompStat as a way to better attack the city's crime problems. Other cities then began their own performance-based management initiatives, including Baltimore's CitiStat program, Fort Wayne's Six Sigma efforts, and Las Vegas' Neighborhood Indicators program. Virginia's "Virginia Performs" and Washington state's Government Management Accountability and Performance program (as well as its Priorities of Government performance-based budgeting initiative) represent similar efforts at the state level.
31. This was the argument of Alice Rivlin in her important book, *Reviving the American Dream: The Economy, the States, and the Federal Government* (Washington: Brookings Institution Press, 1992).
32. Robert Atkinson and Howard Wial contend that key innovation inputs are public goods that require targeted, strategic development in Robert Atkinson and Howard Wial, "Boosting Productivity, Innovation, and Growth through a National Innovation Foundation" (Washington: Brookings Institution, 2008). Likewise, Robert Puentes observes that interstate commerce remains a long-time province of national engagement and leadership and notes that only the national government can supervise and maintain the interstate system, develop a network of cross-jurisdictional freight corridors, and create a comprehensive plan for inter-metro area travel. See Robert Puentes, "A Bridge to Somewhere: Rethinking American Transportation for the 21st Century" (Washington: Brookings Institution, 2008).
33. Income support, for example, has long been viewed as a federal obligation, given the need to match national resources to gaping need, and to avoid the negative impacts of varied state or local action. See Paul Peterson, Barry Rabe, and Kenneth Wong, *When Federalism Works* (Washington: Brookings Institution Press, 1986).
34. Numerous authorities have endorsed these notions, beginning with the need for national response to multi-state or large-scale "inter-jurisdictional" problems. Relevant writings in the environmental field are: Richard Stewart, "Pyramids of Sacrifice? Problems of Federalism in Mandating State Implementations of National Environmental Policy." *Yale Law Journal* 86 (6) (1977): 1196–1272; Henry Butler and Jonathan Macey, "Externalities and the Matching Principle: The Case for Reallocating Environmental Regulatory Authority." *Yale Law and Policy Review* 14 (1996); Daniel Esty, "Revitalizing Environmental Federalism." *Michigan Law Review* 95 (3) (1996): 570–653; Jonathan H. Adler, "Jurisdictional Mismatch in Environmental Federalism," *NYU Environmental Law Journal* 14 (1) (2005): 130–178; and Pietro Nivola, "Rediscovering Federalism" (Washington: Brookings Institution, 2007).
35. See Atkinson and Wial, "Boosting Productivity, Innovation, and Growth through a National Innovation Foundation"; Karen Mills, Elisabeth Reynolds, and Andrew Reamer, "Clusters and Competitiveness: A New Federal Role for Stimulating Regional Economies" (Washington: Brookings Institution, 2008); and Puentes, "A Bridge to Somewhere."
36. On standard-setting on income support see Alan Berube, David Park, and Elizabeth Kneebone, "Metro Raise: Boosting the Earned Income Tax Credit to Help Metropolitan Workers and Families" (Washington: Brookings Institution, 2008); and Jason E. Bordoff, Jason Furman, and Paige L. Shevlin, "A Hand Up: A Strategy to Reward Work, Expand Opportunity, and Reduce Poverty" (Washington: Brookings Institution, 2007).
37. For discussions of the situation on carbon emissions see, for example, Marilyn Brown, Frank Southworth, and Andrea Sarzynski, "Shrinking the Carbon Footprint of Metropolitan America" (Washington: Brookings Institution, 2008); and Barry G. Rabe, "Beyond Kyoto: Climate Change Policy in Multilevel Governance Systems." *Governance: An International Journal of Policy, Administration, and Institutions* 20 (3): 423–424. For reports on the fall-out from federal gridlock on immigration reform see Audrey Singer, "Reforming U.S. Immigration Policy: Open Pathways to Integration" (Washington: Brookings Institution, 2007); Anthony

Faiola, "States' Immigrant Policies Diverge; In Differences, Some See Obstacles for a National Law," *Washington Post,* October 15, 2007, p. A1; Miriam Jordan, "Arizona Squeeze on Immigration Angers Business," *Wall Street Journal*, December 14, 2007, p. B1; and Randal Archibold, "Arizona Seeing Signs of Flight by Immigrants," *New York Times,* February 12, 2008, p. A1.

38. National Academy of Public Administration, "Building Stronger Communities and Regions: Can the Federal Government Help?" (Washington, 1998).
39. See Richard B. Freeman and Joel Rogers, "The Promise of Progressive Federalism" in Joe Soss, Jacob Hacker, and Suzanne Mettler, eds., *Remaking America: Democracy and Public Policy in an Age of Inequality* (New York: Russell Sage, 2007). Brandeis' famous remark about states as test-beds for "novel social and economic experiments" came in New State Ice Co. v. Leibmann, 285 U.S. 262 (1932).
40. Puentes, "A Bridge to Somewhere."
41. For a general rundown on how federal (and state) policies set "rules of the development game" that tend to facilitate the decentralization of the economy and the concentration of urban poverty, see Bruce Katz and Jennifer Bradley, "Divided We Sprawl," *The Atlantic Monthly* (December, 1999). On the many disastrous side-effects of the nation's low-income housing policies see Bruce Katz, "Neighborhoods of Choice and Connection: The Evolution of American Neighborhood Policy and What it Means for the United Kingdom" (Washington: Brookings Institution, 2004). See, also, Michael Schill and Susan Wachter, "The Spatial Bias of Federal Housing Law and Policy: Concentrated Poverty in Urban America." *University of Pennsylvania Law Review* 143: 1285–1342; Joseph Persky and Haydar Kurban, "Do Federal Funds Better Support Cities or Suburbs? A Spatial Analysis of Federal Spending in the Chicago Metropolis" (Washington: Brookings Institution, 2001); Lance Freeman, "Siting Affordable Housing: Location and Neighborhood Trends of Low Income Housing Tax Credit Developments in the 1990s" (Washington: Brookings Institution, 2004); and Margery Austin Turner, "Moving Out of Poverty: Expanding Mobility and Choice through Tenant-Based Housing Assistance." *Housing Policy Debate* 9 (2): 373–394.
42. On federal interventions that contributed to the sub-prime mortgage crisis see Nicholas Bagley, "Subprime Safeguards We Needed," *Washington Post,* January 25, 2008; and Eliot Spitzer, "Predatory Lenders' Partner in Crime," *Washington Post,* February 14, 2008. On the government's rejection of California's petition to limit GHG emissions from cars more strictly than the nation see Juliet Eilperin, "EPA Chief Denies California Limit on Auto Emissions," *Washington Post*, December 20, 2007, p.A1; and John Broder and Felicity Barringer, "EPA Says 17 States Can't Set Emission Rules," *The New York Times,* December 20, 2007. For context see Barry Rabe, "Environmental Policy and the Bush Era: The Collision Between the Administrative Presidency and State Experimentation." *Publius: The Journal of Federalism* 37 (3): 413–431.
43. In fact, understanding and "focusing on the needs of clients and customers" is one of the four hallmarks of a high-performing organization as delineated by a series of reports by the Government Accountability Office. See, for example, U.S. Government Accountability Office, "High-Performing Organizations: Metrics, Means, and Mechanisms for Achieving High Performance in the 21st Century Public Management Environment," GAO-04-343SP (Washington, 2004).
44. See National Commission on the Public Service, "Urgent Business for America." "Joined up government" was also a signature agenda of Prime Minister Tony Blair's Labor government. The government's push to deliver more integrated, user-focused services was encapsulated in Minister for the Cabinet Office, "Modernizing Government: The White Paper" (1999).
45. See Popovich, ed., *Creating High-Performance Government Organizations.*
46. See Salamon, ed., *The Tools of Government.*
47. See Osborne and Gaebler, *Reinventing Government.*
48. See Atkinson and Wial, "Boosting Productivity, Innovation, and Growth" and Mills, Reynolds, and Reamer, "Clusters for Competitiveness." See, also, Mark Drabenstott, "A Review of the Federal Role in Regional Economic Development" (Kansas City: Federal Reserve Bank of Kansas City, 2005).
49. Puentes, "A Bridge to Somewhere." See, also, Robert Puentes and Linda Bailey, "Increasing Funding and Accountability for Metropolitan Transportation Decisions" in Katz and Puentes, eds., *Taking the High Road.*
50. Bruce Katz and Margery Austin Turner, "Rethinking U.S. Rental Housing Policy" (Washington: Brookings Institution, 2007); Alan Berube and Elizabeth Kneebone, "Two Steps Back: City and Suburban Poverty Trends: 1999–2005" (Washington: Brookings Institution, 2006).
51. Janice Brown, Paul Dimond, Britany Affolter Caine, Chuck Wilbur, Randy Eberts, and John Austin, "Promise of Prosperity: Community Compacts for Economic Renewal and Human Capital Growth" (Washington: Brookings Institution, forthcoming).
52. Bruce Katz, Andy Altman, and Julie Wagner, "An Urban Agenda for an Urban Age," Presentation for the Urban Age Conference, Berlin, Germany, November 10, 2006.
53. Puentes, "A Bridge to Somewhere."
54. Popovich, ed., *Creating High-Performance Organizations*. See, also, Paul C. Light, *Monitoring Government: Inspectors General and the Search for Accountability* (Washington: Brookings Institution Press, 1993); Atkinson, "Network Government for the Digital Age;" and Goldsmith and Eggers, *Governing by Network.*
55. These were central ideas in Osborne and Gaebler, *Reinventing Government.* Osborne tracks the spread of performance management in the last decade in David Osborne and Peter Hutchinson, *The Price of Government: Getting the Results We Need in an Age of Permanent Fiscal Crisis* (New York: Basic Books, 2004). Such a vision also underlies the "progressive federalism" outlined in Freeman and Rogers, "The Promise of Progressive Federalism."
56. Rachel Gragg, "Testimony Submitted to the U.S. House of Representatives Committee on Education and Labor Subcommittee on Higher Education, Lifelong Learning, and Competitiveness." Available at edlabor.house.gov/testimony/062807RachelGragg Testimony.pdf.
57. See Danielle Ewen, Elizabeth Lower-Basch, Julie Strawn, and Vicki Turetsky, "Congress Should Take Action to Restore Flexibility and Funding Lost in 2006 Welfare Reauthorization and HHS Regulations" (Washington: Center for Law and Social Policy, 2007); Elizabeth Lower-Basch, "Improving Access to Education and Training for TANF Participants" (Washington: Center for Law and Social Policy, 2007); and Sharon Parrott, "Changes in Federal TANF Rules could Help States Meet Welfare Reform Goal" (Washington: Center on Budget and Policy Priorities, 2007).
58. Communication with MaryJean Ryan, Director, Seattle Office of Policy and Management.
59. See, for example, Atkinson, "Network Government for the Digital Age;" Goldsmith and Eggers, *Governing by Network;* U.S. Government Accountablity Office, "High-Performing Organizations;" Mark D. Abramsom, Jonathan Bruel, and John M. Kamensky, "Six Trends Transforming Government (Washington: IBM Center for the Business of Government, 2006); and Donald M. Kettl, "The Next Government of the United States: Challenges for Performance in the 21st Century" in "Reflections of 21st Century Government Management" (Washington: IBM Center for the Business of Government, 2007).
60. Puentes, "A Bridge to Somewhere."
61. Atkinson and Wial, "Boosting Productivity, Innovation, and Growth;" and Mills, Reynolds, and Reamer, "Clusters for Competitiveness."
62. Andy Rotherham and Sara Mead, "A Federal Agenda to Unleash Innovation and Entrepreneurialism in Urban Schools" (Washington: Brookings Institution, forthcoming); and Janice Brown, Paul Dimond, Britany Affolter Caine, Chuck Wilbur, Randy Eberts, and John Austin, "Promise of Prosperity: Community Compacts for Economic Renewal and Human Capital Growth" (Washington: Brookings Institution, forthcoming).
63. David M. Walker, "How Key National Indicators Can Improve Policymaking and Strengthen Democracy," Presentation to the OECD's Second World Forum on Statistics, Knowledge, and Policy, June 26, 2007. See also U.S. Government Accountability Office, "Informing Our Nation: Improving How to Understand and Assess the U.S.A.'s Position and Progress" (Washington, 2005).

64. Tony Danker and others, "How Can American Government Meet its Productivity Challenge" (Washington: McKinsey & Company, 2006).
65. Atkinson and Wial, "Boosting Productivity, Innovation, and Growth."
66. Ibid.
67. See Atkinson and Wial, "Boosting Productivity, Innovation, and Growth;" Mills, Reynolds, and Reamer, "Clusters for Competitiveness;" and Drabenstott, "A Review of the Federal Role in Regional Economic Development."
68. See Mills, Reynolds, and Reamer, "Clusters for Competitiveness;" and Michael Porter, "Clusters and Economic Policy: Aligning Public Policy with the New Economics of Competition," White Paper, Harvard Business School, 2007.
69. Drabenstott, "A Review of the Federal Role in Regional Economic Development."
70. Atkinson and Wial, "Boosting Productivity, Innovation, and Growth."
71. Ibid.
72. Drabenstott, "A Review of the Federal Role in Regional Economic Development."
73. James Duderstadt, "Creating a Natural Energy Research Network: A Step to America's Energy Sustainability" (Washington: Brookings Institution, forthcoming).
74. Atkinson and Wial, "Boosting Productivity, Innovation, and Growth."
75. Mills, Reynolds, and Reamer, "Clusters for Competitiveness."
76. See Atkinson and Wial, "Boosting Productivity, Innovation, and Growth;" and Mills, Reynolds, and Reamer, "Clusters for Competitiveness."
77. Gragg, "Testimony Submitted to the U.S. House of Representatives Committee on Education and Labor Subcommittee on Higher Education, Lifelong Learning, and Competitiveness."
78. Personal communication from Steve Johnson, City of Seattle Office of Economic Development, November 20, 2007.
79. National Governors Association, "Policy Position ECW-15. Principles of Federal Preschool-College (P–16) Alignment" (Washington: 2007); Julie Strawn, "Policies to Promote Adult Education and Postsecondary Alignment" (Washington: Center for Law and Social Policy, 2007); U.S. Government Accountability Office, "21st Century Challenges: Reexamining the Base of the Federal Government" (Washington, 2005).
80. Ewen, Lower-Basch, Strawn, and Turetsky. "Congress Should Take Action to Restore Flexibility and Funding Lost in 2006 Welfare Reauthorization and HHS Regulations;" Lower-Basch, "Improving Access to Education and Training for TANF Participants;" Parrott, "Changes in Federal TANF Rules could Help States Meet Welfare Reform Goal."
81. Rotherham and Mead, "A Federal Agenda to Unleash Innovation and Entrepreneurialism in Urban Schools."
82. Brown and others, "Promise of Prosperity."
83. Berube, "MetroNation."
84. Puentes, "A Bridge to Somewhere."
85. Ibid.
86. Ibid. See, also, National Surface Transportation Policy and Revenue Study Commission, "Transportation for Tomorrow: Report of the National Surface Transportation Policy and Revenue Study Commission" (Washington, 2008); and Everett Ehrlich, "Public Works, Public Wealth: New Directions for America's Infrastructure" (Washington: Center for Strategic and International Studies, 2005).
87. Puentes, "A Bridge to Somewhere." See, also, Edward Beimborn and Robert Puentes, "Highways and Transit: Leveling the Playing Field in Federal Transportation Policy" (Washington: Brookings, 2003).
88. Personal communication from Ric Ilgenfritz, Seattle Sound Transit, December 6, 2007. See, also, Dan Rivera, "Streetcar Bumps Into Federal Bias for Buses," *The Oregonian*, September 25, 2007, p. A1.
89. Puentes, "A Bridge to Somewhere." See, also, Puentes and Bailey, "Increasing Funding and Accountability for Metropolitan Transportation Decisions."
90. National Surface Transportation Policy and Revenue Study Commission, "Transportation for Tomorrow."
91. Puentes, "A Bridge to Somewhere."
92. Ibid.
93 Ibid.
94. Berube, "MetroNation."
95. See Mindy Turbov and Valerie Piper, "HOPE VI and Mixed-Finance Redevelopments" (Washington: Brookings, 2005). See, also, Erik Eckholm, "Washington's Grand Experiment to Rehouse the Poor," *The New York Times,* March 21, 2008.
96. See, for example, Brown, Southworth, and Sarzynski, "Shrinking the Carbon Footprint of Metropolitan America;" and Rabe, "Beyond Kyoto."
97. Forthcoming *Blueprint* policy paper by Lori Bamberger and Joel Rogers.
98. See, for example, Nathaniel Baum-Snow, "Did Highways Cause Suburbanization?" *Quarterly Journal of Economics* 122 (2) (2007): 775–805; Marlon G. Boarnet and Andrew F. Haughwout, "Do Highways Matter?: Evidence and Implications of Highways' Influence on Metropolitan Development" (Washington: Brookings, 2000); and Real Estate Research Corporation (RERC), "The Costs of Sprawl: Environmental and Economic Costs of Alternative Residential Development Patterns at the Urban Fringe" (Washington, 1974).
99. Katz, "Neighborhoods of Choice and Connection." See, also, Schill and Wachter, "The Spatial Bias of Federal Housing Law and Policy;" Persky and Kurban, "Do Federal Funds Better Support Cities or Suburbs?;" Freeman, "Siting Affordable Housing;" and Turner, "Moving Out of Poverty."
100. Freeman, "Siting Affordable Housing."
101. William Gale, Jonathan Gruber, and Seth Stephens-Davidowitz, "Encouraging Homeownership Through the Tax Code" (Washington: Urban-Brookings Tax Policy Center, 2007); Richard Voith and Joseph Gyourko, "Capitalization of Federal Taxes, the Relative Price of Housing, and Urban Form: Density and Sorting Effects." *Regional Science and Urban Economics* 32 (6) (2002): 673–790; Joseph Gyourko and Todd Sinai, "The Spatial Distribution of Housing-Related Tax Benefits in the United States," NBER Working Paper 8165, March 2001.
102. Katz and Turner, "Rethinking U.S. Rental Housing Policy;" Berube and Kneebone, "Two Steps Back."
103. Katz and Turner, "Rethinking U.S. Rental Housing Policy."
104. Puentes, "A Bridge to Somewhere."
105. ICF Consulting, "Study of HUD's Site Contamination Policies" (Fairfax, VA: 2003); Great Lakes Environmental Planning, "Field Survey of HUD Site Contamination Policy" (Chicago: 2007).
106. For a discussion of the federal government's retreat from initial engagement in support of regional governance, see National Academy of Public Administration, "Building Stronger Communities and Regions: Can the Federal Government Help?" (Washington, 1998).

V. METROPOLICY (PAGES 68–87)

1. Once again, the term "MetroPolicy" echoes terms used in Myron Orfield, *American MetroPolitics: The New Suburban Reality* (Washington: Brookings Insitution Press, 2002); and Peter Dreier, John Mollenkopf, and Todd Swanson, *Place Matters: Metropolitics for the Twenty-First Century* (Lawrence: University Press of Kansas, 2001).
2. Calculations by Arthur C. Nelson, Virginia Polytechnic Institute and State University; also see Arthur C. Nelson, "Toward a New Metropolis: The Opportunity to Rebuild America" (Washington: Brookings Institution, 2004).
3. Richard Nathan describes the constant evolution of the so-called "federalism bargain" in Richard P. Nathan, "The Evolution of Devolution in American Federalism in the Twentieth Century," a chapter prepared for the National Governors Association.
4. It should be noted that the various movements over the course of the last four decades to transfer power from Washington to states varied significantly in their rationales and ultimate ends. In particular, Nixon's "New Federalism" and Reagan's (and eventually House Speaker Newt Gingrich's) federalism "revolutions" derived from fundamentally different motivations and beliefs about the role of federal government. Whereas Nixon's government reforms were primarily intended to restructure the relationships between different levels of government to improve inter-governmental management, the Reagan brand of "devolution" aimed mainly to limit the scope and power of the federal government, with less regard to the management of either national or state-local affairs. See Timothy Conlan, *From New Federalism to Devolution: Twenty-Five Years of Intergovernmental Reform* (Washington: Brookings Institution Press, 1998).

5. See Pietro Nivola, "Rediscovering Federalism" (Washington: Brookings Institution, 2007).
6. Numerous scholars have propounded bold and attractive "sortings out," none of them more compelling than Alice Rivlin's in her 1991 book, *Reviving the American Dream.* Rivlin's proposal for "dividing the job" between federal government and state governments would separate responsibility by policy area. For instance, her proposal would charge the federal government with a portfolio that included national security, social insurance, health care, while states would become solely responsible for a "productivity agenda" that included education and skills training, childcare, most infrastructure, and economic development. Federal and state government would cooperate on select issues like the environment and welfare. See Alice Rivlin, *Reviving the American Dream* (Washington: Brookings Institution Press, 1991). The idea of a grand, rational sort-out remains compelling as a means to improve government organization and establish accountability, but the idea of sorting assignments by policy area appears problematic from the perspective of this paper given the fundamentally integrated nature of contemporary conditions and metropolitan realities and needs.
7. Against the background of expanded post-war grants-in-aid, Daniel Elazar, Morton Grodzins, and others stressed the centrality to the federal system of "shared responsiblity" and cooperative "partnership." "If you ask the question, `Who does what?' the answer is...that officials at all `levels' do everything together," wrote Grodzins. See Morton Grodzins, *The Federal System* (Chicago: Rand McNally, 1966) and Daniel J. Elazar, *The American Partnership* (Chicago: University of Chicago Press, 1962). Dwindling intergovernmental aid flows and decades of narrowed federal engagement do not erase the deep-set reality of pragmatic intergovernmental cooperation going back even before the Constitution was ratified.
8. William Barnes and Larry Ledebur, *The New Regional Economies: The U.S. Common Market and the Global Economy* (Thousand Oaks: Sage Publications, 1998).
9. The legal scholar Gerald Frug writes in a personal communication with the authors: "The nation is interested in everything, and so are the states. There is no way to divide the functions between the two."
10. It bears noting that this charge and vision was declared almost verbatim in the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) but was subsequently removed in 1998 from the Transportation Equity Act for the 21st Century (TEA-21). See Robert Puentes, "A Bridge to Somewhere" (Washington: Brookings Institution, 2008).
11. Gilbert E. Metcalf, "A Proposal for a U.S. Carbon Tax Swap" (Washington: Brookings Institution, 2007).
12. John P. Holdren, "The Energy Innovation Imperative: Addressing Oil Dependence, Climate Change, and Other 21st Century Energy Challenges." *Innovations* 1(2)(2006): 3–23.
13. Gerald Benjamin and Richard P. Nathan, *Regionalism and Realism: A Study of Governments in the New York metropolitan Area* (Washington: Brookings Institution Press, 2001).
14. For an account of the rise and then ebbing of federal efforts to promote regionalism see National Academy of Public Administration, "Building Stronger Communities and Regions: Can the Federal Government Help?" (Washington, 1998).
15. Ibid.
16. Yaro and Fulton explore this approach in recent memos prepared for the author. The following paragraphs rely heavily on Yaro's essay especially. See, also, Bruce Babbitt, *Cities in the Wilderness: A New Vision of Land Use in America* (Washington: Island Press, 2005).
17. Dreier, Mollenkopf, and Swanstrom report in *Place Matters* that in the Clinton administration senior officials at the Office of Management and Budget and a working group involving many different departments crafted proposals to set aside funds from federal grant programs for a bonus pool that would reward regions that fashioned new metropolitan solutions to urban problems. See Dreier, Mollenkopf, and Swanstrom, *Place Matters.*
18. Yaro observes, however, that the country's experience with national drinking age and seatbelt laws suggests that few jurisdictions would opt out of the incentive funds.
19. The proposed Governance Contract concept draws variously on American experience with demonstration projects and waiver granting and European experiments at promoting regionalism through contractual incentives. France has promoted regionalism in large part by embracing a contractual system in which localities and groups of localities formed contracts with the national government in which the local government received guaranteed federal resources in exchange for committing to carry out a particular urban development agenda. The second generation of French contracts, initiated between 1998 and 2000, promoted the explicit regionalist objective of "inter-communal cooperation." France continues to move towards state legislation that promotes inter-jurisdictional cooperation through contracts. In 2003–4, France passed "Act II" to follow up on decentralization "reform laws" passed in 1982 which moved power away from Paris but resulted in problems of fragmentation. The new, regionally focused legislation created "public action contracts" to incentivize the breaking of jurisdictional barriers. For its part, England has begun a slow but steady movement toward greater devolution combined with moves to promote greater intra-region coordination. Thirteen English areas, including cities like Manchester, Leeds, Newcastle, Bristol and Birmingham, are now working with Whitehall on 'Multi-Area Agreements,' which would allow them to pool transport, regeneration, and planning budgets and powers at the metropolitan level—and use them to address cross-boundary priorities. The first of these agreements is expected this summer. In addition, London's Center for Cities has urged city leaders to go further, and formalize "City-Region Contracts" that would "coordinate and devolve" funding to regions. Under this scheme, city-regions would propose a "blueprint" for goals to improve and coordinate transportation infrastructure provision, service delivery, economic performance, and administrative efficiency. The blueprint would serve as a performance contract—a financial framework that would allow for the devolution of "bundles" of more than £600 million annually. However, such radical governance changes are unlikely in the short term. Devolution, like so many other political reforms in England, is a long-term process. A more gradual approach to metropolitan working—beginning with cross-boundary issues such as public transport—is likely to emerge with the active support of central government. For information on France see: Organization for Economic Cooperation and Development, "OECD Territorial Reviews France: Chapter 3. Multi-Level Governance Geared Towards Cooperation" (Paris, 2006) and Christopher Cadell, Nicholas Falk, and Francesca King, "Regeneration in European Cities" (London: Joseph Rowntree Foundation, 2008). For background on England, this note relies on a memo by Adam Marshall prepared for the authors, and Adam Marshall and Demot Finch, "City Leadership: Giving City Regions the Power to Grow" (London: Center for Cities, 2006).
20. National Academy of Public Administration, "Building Stronger Communities and Regions."
21. "Rebuild the government statistics infrastructure" is also the call of Yolanda Kodzycki in Yolanda Kodzycki, "Rebuilding the Government Statistics Infrastructure" (Albany: Rockefeller Institute of Government, 2008).

SELECTED REFERENCES

BLUEPRINT FOR AMERICAN PROSPERITY

Blueprint Signature Publication

Berube, Alan. 2007. "MetroNation: How U.S. Metropolitan Areas Fuel American Prosperity." Washington: Brookings Institution. Available at www.blueprintprosperity.org

Blueprint Policy Series

Atkinson, Robert, and Howard Wial. 2008. "Boosting Productivity, Innovation, and Growth through a National Innovation Foundation." Washington: Brookings Institution. Available at www.blueprintprosperity.org

Berube, Alan, David Park, and Elizabeth Kneebone. 2008. "Metro Raise: Boosting the Earned Income Tax Credit to Help Metropolitan Workers and Families." Washington: Brookings Institution. Available at www.blueprintprosperity.org

Brown, Marilyn, Frank Southworth, and Andrew Sarzynski. 2008. "Shrinking the Carbon Footprint of Metropolitan America." Washington: Brookings Institution. Available at www.blueprintprosperity.org

Katz, Bruce, and Margery Austin Turner. 2007. "Rethinking U.S. Rental Housing Policy: Build on State and Local Innovations." Washington: Brookings Institution.

Mills, Karen, Elisabeth Reynolds, and Andrew Reamer. 2008. "Clusters and Competitiveness: A New Federal Role for Stimulating Regional Economies." Washington: Brookings Institution. Available at www.blueprintprosperity.org

Puentes, Robert. 2008. "A Bridge to Somewhere: Rethinking American Transportation for the 21st Century." Washington: Brookings Institution. Available at www.blueprintprosperity.org

* * *

Bamberger, Lori, and Joel Rogers. Forthcoming. "Greening the American Dream: Transforming the Residential Energy Marketplace to Reduce the Nation's Carbon Footprint and Build Savings for Middle-class Families." Washington: Brookings Institution.

Brown, Janice, and others. Forthcoming. "Promise of Prosperity: A New American Community Compact for Economic Renewal and Education Attainment." Washington: Brookings Institution.

Duderstadt, James. Forthcoming. "Creating a National Research Network: A Step Toward America's Energy Sustainability." Washington: Brookings Institution.

Mazzeo, Christopher, and Sara Goldrick-Rab. Forthcoming. "Smart Cities, Smarter Policies: Supporting Metropolitan Economies by Building Urban Community College Success." Washington: Brookings Institution.

Reamer, Andrew. Forthcoming. "Knowledge that Motivates: Using Information to Catalyze Metropolitan Problem-Solving." Washington: Brookings Institution.

Rotherham, Andrew, and Sara Mead. Forthcoming. "Changing the Game in Metropolitan Education: A Federal Role in Supporting 21st Century Education Innovation." Washington: Brookings Institution.

Singer, Audrey. Forthcoming. "Advancing Immigrant Integration with a New American Initiative. Washington: Brookings Institution.

Blueprint Regional Reports

Lang, Robert E., Andrea Sarzynski, and Mark Muro. Forthcoming. "The Intermountain West: America's Mega-Urban Future." Washington: Brookings Institution.

Austin, John, and Brittany Affolter-Caine. 2006. "The Vital Center: A Federal-State Compact to Renew the Great Lakes Region." Washington: Brookings Institution.

OTHER METROPOLITAN POLICY PROGRAM PUBLICATIONS

Berube, Alan. 2006. "Using the Earned Income Tax Credit to Stimulate Local Economies." Washington: Brookings Institution.

Berube, Alan, and Benjamin Forman. 2001. "A Local Ladder for the Working Poor: The Impact of the Earned Income Tax Credit in U.S. Metropolitan Areas." Washington: Brookings Institution, 2001.

Berube, Alan, and Bruce Katz. 2005. "Katrina's Window: Confronting Concentrated poverty Across America." Washington: Brookings Institution.

Berube, Alan, and Elizabeth Kneebone. 2006. "Two Steps Back: City and Suburban Poverty Trends: 1999–2005." Washington: Brookings Insitution.

Berube, Alan, and Thacher Tiffany. 2004. "The Shape of the Curve: Household Income Distributions in U.S. Cities, 1979–1999." Washington: Brookings Institution.

Berube, Alan, Bruce Katz, and Robert E. Lang. 2005. R*edefining Urban and Suburban America: Evidence from Census 2000,* Volume 2. Washington: Brookings Institution Press.

–. 2006. *Redefining Urban and Suburban America: Evidence from Census 2000,* Volume 3. Washington: Brookings Institution Press.

Berube, Alan, Audrey Singer, Jill H. Wilson, and William H. Frey. 2006. "Finding Exurbia: America's Fast-Growing Communities at the Metropolitan Fringe." Washington: Brookings Institution.

Bier, Thomas. 2001. "Moving Up, Filtering Down: Metropolitan Housing Dynamics and Public Policy." Washington: Brookings Institution.

Boarnet, Marlon G., and Andrew F. Haughwout. 2000. "Do Highways Matter?: Evidence and Policy Implications of Highways' Influence on Metropolitan Development." Washington: Brookings Institution.

Booza, Jason, and others. 2007. "Where Did They Go? The Decline of Middle-Income Neighborhoods in Metropolitan America, 1970–2000." Washington: Brookings Institution.

Center on Urban and Metropolitan Policy. 2000. "Moving Beyond Sprawl: The Challenge for Metropolitan Atlanta." Washington: Brookings Institution.

–. 2002. "Beyond Merger: A Competitive Vision for the Regional City of Louisville." Washington: Brookings Institution.

–. 2003. "Back to Prosperity: A Competitive Agenda for Renewing Pennsylvania." Washington: Brookings Institution.

Cortright, Joseph. 2006. "Making Sense of Clusters: Regional Competitiveness and Economic Development." Washington: Brookings Institution.

Cortright, Joseph, and Heike Mayer. 2002. "Signs of Life: The Growth of Biotechnology Centers in the U.S." Washington: Brookings Institution.

Fellowes, Matt. 2006. "From Poverty, Opportunity: Putting the Market to Work for Lower Income Families." Washington: Brookings Institution.

Fellowes, Matt, and Bruce Katz. 2005. "The Price is Wrong: Getting the Market Right for Working Families in Philadelphia." Washington: Brookings Institution.

Florida, Richard, and Gary Gates. 2001. "Technology and Tolerance: The Importance of Diversity to High-Technology Growth." Washington: Brookings Institution.

Frey, William H. 2001. "Melting Pot Suburbs: A Census 2000 Study of Suburban Diversity." Washington: Brookings Institution.

–. 2005. "Metro America in the New Century: Metropolitan and Central City Demographic Shifts Since 2000." Washington: Brookings Institution.

–. 2006. "Diversity Spreads Out: Metropolitan Shifts in Hispanic, Asian, and Black Populations Since 2000." Washington: Brookings Institution.

Fulton, William, Rolf Pendall, Mai Nguyen, and Alicia Harrison. 2001. "Who Sprawls Most?: How Growth Patterns Differ Across the U.S." Washington: Brookings Institution.

Glaeser, Edward, and Jesse M. Shapiro. 2001. "City Growth and the 2000 Census: Which Places Grew, and Why." Washington: Brookings.

Glaeser, Edward, Matthew Kahn, and Chenghuan Chu. 2001. "Job Sprawl: Employment Location in U.S. Metropolitan Areas." Washington: Brookings Institution.

Gyourko, Joseph, and Todd Sinai. 2001. "The Spatial Distribution of Housing-Related Tax Benefits in the United States." Washington: Brookings Institution.

Hill, Edward. 2003. "Slanted Pavement: How Ohio's Highway Spending Shortchanges Cities and Suburbs." Washington: Brookings Institution.

Holt, Steve. 2006. "The Earned Income Tax Credit at Age 30: What We Know." Washington: Brookings Institution.

Jargowsky, Paul A. 2003. "Stunning Progress, Hidden Problems: The Dramatic Decline of Concentrated Poverty in the 1990s." Washington: Brookings Institution.

Katz, Bruce. 2000. *Reflections on Regionalism.* Washington: Brookings Institution Press.

–. 2004. "Neighborhoods of Choice and Connection: The Evolution of American Neighborhood Policy and What It Means for the United Kingdom." Washington: Brookings Institution.

–. 2007. "Remaking Transportation and Housing Policy for the New Century: Testimony before the House Appropriations Committee, Subcommittee on Transportation, Housing and urban Development, and Related Agencies." Washington: Brookings Institution.

Katz, Bruce, and Robert E. Lang. 2003. *Redefining Urban and Suburban America: Evidence from Census 2000,* Volume 1. Washington: Brookings Institution Press.

Katz, Bruce, and Robert Puentes. 2005. *Taking the High Road: A Metropolitan Agenda for Transportation Reform.* Washington: Brookings Institution Press.

Katz, Bruce, Andy Altman, and Julie Wagner. 2006. "An Urban Agenda for an Urban Age." Presentation at the Urban Age Conference, Berlin, Germany, November 10, 2006.

Katz, Bruce, and others. 2003. "Rethinking Local Affordable Housing Strategies: Lessons from 70 Years of Policy and Practice." Washington: Brookings Institution.

Leinberger, Christopher B. 2005. "Turning Around Downtown: Twelve Steps to Revitalization." Washington: Brookings Institution.

Liu, Amy. 1999. "A Region Divided: The State of Growth in Greater Washington, D.C." Washington: Brookings Insitution.

Metropolitan Policy Program. 2005. "New Orleans after the Storm: Lessons from the Past, a Plan for the Future." Washington: Brookings Institution.

– 2006. "Charting Maine's Future: An Action Plan for Promoting Sustainable Prosperity and Quality Places." Washington: Brookings Institution.

Muro, Mark, and Robert Puentes. 2004. "Investing in a Better Future: A Review of the Fiscal and Competitive Advantages of Smarter Growth Development Patterns." Washington: Brookings Institution.

Muro, Mark, and others. 2007. "Reconnecting Massachusetts Gateway Cities: Lessons Learned and an Agenda for Renewal." Washington: Brookings Institution.

National Surface Transportation Policy and Revenue Study Commission. 2007. "Transportation for Tomorrow." Washington.

Nelson, Arthur C. 2004. "Toward a New Metropolis: The Opportunity to Rebuild America." Washington: Brookings Institution.

Nelson, Arthur C., Rolf Pendall, Casey J. Dawkins, and Gerrit J. Knaap. 2002. "The Link Between Growth Management and Housing Affordability: The Academic Evidence." Washington: Brookings Institution.

Puentes, Robert, and Myron Orfield. 2002. "Valuing America's First Suburbs: A Policy Agenda for Older Suburbs in the Midwest." Washington: Brookings Institution.

Puentes, Robert, and David Warren. 2006. "One Fifth of America: A Comprehensive Guide to America's First Suburbs." Washington: Brookings Institution.

Reamer, Andrew. 2007. "The Department of Commerce Budget Request for Fiscal Year 2008: Observations for Consideration: Testimony before the House Committee on Appropriations, Subcommittee on Commerce, Justice, Science, and Related Agencies." Washington: Brookings Institution.

–. 2007. "The Federal Role in Regional Economic Development: Testimony before the House Committee on Transportation and Infrastructure, Subcommittee on Economic Development, Public Buildings, and Emergency Management." Washington: Brookings Institution.

Singer, Audrey. 2004. "The Rise of New Immigrant Gateways." Washington: Brookings Institution.

–. 2007. "Reforming U.S. Immigration Policy: Open New Pathways to Integration." Washington: Brookings Institution.

Singer, Audrey, Susan W. Hardwick, and Caroline B. Brettell. 2008. *Twenty-First-Century Gateways: Immigrant Incorporation in Suburban America.* Washington: Brookings Institution Press.

Sohmer, Rebecca R., and Robert E. Lang. 2001. "Downtown Rebound." Washington: Brookings Institution.

Southern California Studies Center and the Center on Urban and Metropolitan Policy. 2001. "Sprawl Hits the Wall: Confronting the Realities of Metropolitan Los Angeles." Washington: Brookings Institution.

Stoll, Michael. 2005. "Job Sprawl and the Spatial Mismatch between Blacks and Jobs." Washington: Brookings Institution.

Taylor, Peter J., and Robert E. Lang. 2005. "U.S. Cities in the 'World City Network.'" Washington: Brookings Institution.

Turbov, Mindy, and Valerie Piper. 2005. "HOPE VI and Mixed-Finance Redevelopments: A Catalyst for Neighborhood Renewal." Washington: Brookings Institution.

Vey, Jennifer S. 2007. "Restoring Prosperity: The State Role in Revitalizing America's Older Industrial Cities." Washington: Brookings Institution.

General

Bradford, Neil. 2002. "Why Cities Matter: Policy Research Perspectives for Canada." Ottawa: Canadian Policy Research Networks.

Council on Competitiveness. 2007. "Competitiveness Index: Where America Stands." Washington.

Florida, Richard. 2005. "The World Is Spiky." *The Atlantic Monthly.* October. Volume 296, Number 3. Pp. 48–51.

Friedman, Benjamin. 2005. *The Moral Consequences of Economic Growth.* New York: Knopf.

Goldhagen, Sarah Williams, "American Collapse." *The New Republic,* August 27, 2007.

Howard, Philip K. 1994. *The Death of Common Sense: How Law is Sufffocating America.* New York: Random House.

Kahn, Matthew E. 2006. *Green Cities: Urban Growth and the Environment.* Washington: Brookings Institution Press.

Leighninger Jr., Robert D. 2007. *Long-Range Public Investment: The Forgotten Legacy of the New Deal.* Columbia: University of South Carolina.

Light, Paul. 2002. *Government's Greatest Achievements: From Civil Rights to Homeland Security.* Washington: Brookings Institution Press.

Marshall, Will, and Martin Schram. 1992. *Mandate for Change.* New York. Berkeley Books.

Rauch, Jonathan. 1994. *Government's End: Why Washington Stopped Working.* New York: Public Affairs Press.

Economics / Regional Economies

Atkinson, Robert. 2003. "The Innovation Economy: A New Vision for Economic Growth in the 21st Century." Washington: Progressive Policy Institute.

–. 2005. *The Past and Future of America's Economy: Long Waves of Innovation that Power Cycles of Growth.* Northhampton: Edward Elgar.

Barnes, William R., and Larry Ledebur. 1998. *The New Regional Economies: The U.S. Common Market and the Global Economy.* Thousand Oaks: Sage Publications.

Chapple, Karen, and Bill Lester. 2007. "Emerging Patterns of Regional Resilience." Working Paper for the building Resilient Regions Network. Institute of Urban and Regional Development. University of California, Berkeley.

Drabenstott, Mark. 2005. "A Review of the Federal Role in Regional Economic Development." Kansas City: Federal Reserve Bank of Kansas City.

European Economic and Social Committee. 2004. "European Metropolitan Areas: Socioeconomic Implications for Europe's Future." Brussels.

–. 2007. "European Metropolitan Areas: Socioeconomic Implications for Europe's Future." Brussels.

Hill, Edward W. (Ned), and others. Forthcoming. "Understanding the Determinants of Economic Performance of Metropolitan Areas." Draft manuscript.

HM Treasury. 2001. "Productivity in the UK: 3—The Regional Dimension." London.

–. 2004. "Long-Term Global Economic Challenges and Opportunities for the UK." London.

–. 2006. "Devolving Decisionmaking: 3—Meeting the Regional Economic Challenge: The Importance of Cities to Regional Growth." London.

–. 2007. "Review of Sub-national Economic Development and Regeneration." London.

Jones, Alexandra and others. 2006. "Enabling Cities in the Knowledge Economy: An Independent Report Prepared for the Department for Communities and Local Government." London: Department for Communities and Local Government.

Katz, Bruce. 2006. "Six Ways Cities Can Reach Their Economic Potential." New York.

National Academy of Public Administration. 1996. "A Path to Smarter Economic Development: Reassessing the Federal Role." Washington.

Nelson, Richard. 2005. *Technology, Institutions, and Economic Growth.* Cambridge: Harvard University Press.

Organization for Economic Cooperation and Development. 2006. "Competitive Cities in the Global Economy." Paris.

–. 2007. "Competitive Regional Clusters – National Policy Approaches." Paris.

Osborne, David. 1987. "Economic Competitiveness: The States Take the Lead." Washington: Economic Policy Institute.

Parkinson, Michael, and others 2004. "Competitive European Cities: Where Do the Core Cities Stand?" London: Office of the Deputy Prime Minister.

–. 2006. "State of the English Cities: A Research Study—Vols1 and 2." London: Office of the Deputy Prime Minister.

Piore, Michael, and Charles F. Sabel. 1984. *The Second Industrial Divide: Possiblities for Prosperity.* New York: Basic Books.

Porter, Michael. 2001. "Clusters of Innovation: Regional Foundations of U.S. Competitiveness." Council on Competitiveness.

–. 2003. "The Economic Performance of Regions." *Regional Studies* 37.6 & 7: 547–579.

PriceWaterhouseCoopers. 2007. "UK Economic Outlook—March 2007." London.

Reich, Robert. 2007. *Supercapitalism: The Transformation of Business, Democracy, and Everyday Life.* New York: Alfred A. Knopf.

Sabel, Charles. 1996. "Experimental Regionalism and the Dilemmas of Regional Economic Policy." Paper presented to the Institute of Fiscal and Monetary Policy, Tokyo, Japan.

Thornburgh, Richard L. and others. 1996. "A Path to Smarter Economic Development: Reassessing the Federal Role." Washington: National Academy of Public Administration.

Yellen, Janet L. 2006. "Economic Inequality in the United States." Speech to the Center for the Study of Democracy. November 6.

Federalism

Beam, David, Timothy Conlan, and David Walker. 1983. "Federalism: The Challenge of Conflicting Theories and Contemporary Practice" in Ada Finifter, ed. *Political Science: The State of the Discipline.* Washington: American Political Science Association.

Conlan, Timothy. 1998. *From New Federalism to Devolution: Twenty-Five Years of Intergovernmental Reform.* Washington: Brookings Institution Press.

Committee on Oversight and Government Reform—Minority Staff. 2006. "Congressional Preemption of State Laws and Regulation." Prepared for Rep. Henry Waxman. United States House of Representatives.

Deeg, Richard. 1996. "Economic Globalism and the Shifting Boundaries of German Federalism." *Publius* 26:1. 28–52.

Donahue, John. 1997. *Disunited States.* New York: Basic Books.

Dorf, Michael, and Charles F. Sabel. 1998. "A Constitution of Democratic Experimentalism." *Columbia Law Review* 98: 267.

Foer, Franklin. 2005. "The Joy of Federalism." *The New York Times.* March 6. Section 7; column 1.

Freeman, Richard, and Joel Rogers. 2007. "The Promise of Progressive Federalism." In Joe Soss, Jacob Hacker, and Suzanne Mettler, eds., *Remaking America: Democracy and Public Policy in an Age of Inequality.* New York: Russell Sage.

Gramlich, Edward M. 1990. "The Economics of Fiscal Federalism and Its Reform." In Thomas Swartz and John Peck, eds., *The Changing Face of Fiscal Federalism.* NY: M.E. Sharpe, Inc.

Kendall, Douglas, ed. 2004. *Redefining Federalism: Listening to the States in Shaping 'Our Federalism.'* Washington: Environmental Law Institute.

Nathan, Richard. 2006. "There Will Always Be a New Federalism." *Journal of Public Administration Research and Theory.*

—. Forthcoming. "The Evolution of Devolution in American Federalism in the Twentieth Century." Washington: National Governors Association.
Nivola, Pietro. 2002. *Tense Commandments: Federal Prescriptions and City Problems.* Washington: Brookings Institution Press.

—. 2005. "Why Federalism Matters." Policy Brief #146. Washington: Brookings Institution.

—. 2007. "Rediscovering Federalism." Issues in Governance Studies #8. Washington: Brookings Institution.

Noonan, Kathleen, Charles F. Sabel, and William Simon. Forthcoming. "The Rule of Law in the Experimentalist Welfare State: Lessons from Child Welfare Reform."

Oates, Wallace E. 1972. *Fiscal Federalism.* New York: Harcourt Brace Jovanovich.

Peterson, Paul E. 1995. *The Price of Federalism.* Washington: Brookings Institution.

Peterson, Paul E. and others. 1986. *When Federalism Works.* Washington: Brookings Institution.

Rabe, Barry. 2007. "Beyond Kyoto: Climate Change Policy in Multilevel Governance Systems." *Governance* 20 (3): 423–444.

—. 2007. "Environmental Policy and the Bush Era: The Collision Between the Administrative Presidency and State Experimentation." Publius 37 (3): 413–431.

Rivlin, Alice. 1992. *Reviving the American Dream: The Economy, the States, and the Federal Government.* Washington: Brookings Institution.

Simeon, Richard, and Katherine Swinton, "Introduction: Rethinking Federalism in a Changing World," in Knop and others, 1995. *Rethinking Federalism: Citizens, Markets, and Governments in a Changing World*. Vancouver: UBC Press.

Organization Management / Government Performance

Abramson, Mark A., and others. 2006. "Six Trends Transforming Government." Washington: IBM Center for the Business of Government.

Atkinson, Robert. 2003. "Network Government for the Digital Age." Washington: Progressive Policy Institute.

—. 2006. "Turbo Government: A Bold New Vision for E-government." Washington: The Information Technology and Innovation Foundation.

Chandler, Alfred D. 1977. *The Visible Hand: The Managerial Revolution in American Business.* Cambridge: Harvard Belknap Press.

United States Government Accountability Office. 2004. *High Performing Organizations: Metrics, Meanse, and Mechanisms for Achieving High Performance in the 21st Century Public Management Environment.* Pennsylvania: DIANE Publishing.

—. 2005. "21st Century Challenges: Reexamining the Base of the Federal Government." Washington.

—. 2007. "Forces That Will Shape America's Future: Themes from GAO's Strategic Plan." Washington.

Danker, Tony and Thomas Dohrmann, Nancy Killefer, Lenny Mendonca. 2006. "How Can American Government Meet its Productivity Challenge." New York: McKinsey & Company.

Drucker, Peter F. 1968. *The Age of Discontinuity: Guidelines to Our Changing Society*. New York: Harper & Row.

Eggers, William D. and Stephen Goldsmith. 2004. "Government by Network: The New Public Management Imperative." Boston: John F. Kennedy School of Government, Harvard University.

Fosler, R. Scott. 2001. "Working Better Together: How Government, Business, and Nonprofit Organizations Can Achieve Public Purposes through Cross-Sector Collaboration, Alliances, and Partnerships." Three Sector Initiative.

Frederickson, David G. 2001. "The Potential of the Government Performance and Results Act as a Tool to Manage Third-Party Government." Washington: PriceWaterhouseCoopers Center for the Business of Government.

Hamel, Gary, with Bill Breen. 2007. The Future of Management. Boston. Harvard Business School Press.

Hammer, Michael, and James Champy. 1993. *Reengineering the Corporation: A Manifesto for Business Revolution*. New York: HarperBusiness.

Handy, Charles. 1994. *The Age of Paradox*. Boston: Harvard Business School Press.

HM Treasury. 2004. "Devolving Decisionmaking: 1—Delivering Better Public Services: Refining Targets and Performance Management." London.

Kettl, Donald F. 2002. The Transformation of Governance: Public Administration for a 21st Century America. Baltimore: The Johns Hopkins University Press.

Kettl, Donald F., and Steven Kelman. 2007. "Reflections on 21st Century Government Management." Washington: IBM Center for the Business of Government.

Klitgaard, Robert and Paul C. Light. 2005. *High Performance Government: Structure, Leadership, Incentives.* Santa Monica: Rand Corporation.

Metzenbaum, Shelley. 2003. "Strategies for Using State Information: Measuring and Improving Program Performance." Washington: IBM Center for the Business of Government.

—. 2006. "Performance Accountability: The Five Building Blocks and Six Essential Practices." Washington: IBM Center for the Business of Government.

Naisbitt, John, and Patricia Aburdene. 1985. *Re-inventing the Corporation: Transforming Your Job and Your Company for the New Information Society.* New York: Warner Books.

Organization for Economic Cooperation and Development. 2007. "Modernising Government: The Way Forward." Paris.

Ormerod, Paul. 2005. *Why Most Things Fail: Evolution, Extinction, and Economics.* New York: Pantheon Books.

Osborne, David, and Ted Gaebler. 1992. *Reinventing Government: How the Entrepreneurial Spirit Is Transforming the Public Sector.* New York: Plume.

Osborne, David, and Peter Hutchinson. 2004. *The Price of Government: Getting the Results We Need in an Age of Permanent Fiscal Crisis.* New York: Basic Books.

Peters, Thomas J., and Robert H. Waterman. 1982. *In Search of Excellence: Lessons from America's Best-Run Companies.* New York: Harper & Row.

Tapscott, Don, and others. 2004. "Government 2.0: Transforming Government and Governance for the Twenty-First Century." *Toronto: New Paradigm.*

Walker, David M. 2003. "Results-Oriented Government: Shaping the Government to Meet 21st Century Challenges." Testimony from the Comptroller General of the United States before the Subcommittee on Civil Service and Agency Organization, Committee on Government Reform, House of Representatives. Washington: United States Government Accountability Office.

Walker, David M. 2005. "21st Century Challenges: Transforming Government to Meet Current and Emerging Challenges." Testimony from the Comptroller General of the United States before the Subcommittee on the Federal Workforce and Agency Organization, Committee on Government Reform, House of Representatives. Washington: United States Government Accountability Office.

Weinstein, James. 1968. *The Corporate Idea in the Liberal State: 1900–1918.* Boston: Beacon Press.

Wiebe, Robert H. 1967. *The Search for Order: 1877–1920.* New York: Hill and Wang.

Wren, Daniel A. 2005. *The History of Management Thought.* Hoboken: John Wiley & Sons

Regions and Regional Governance

Benjamin, Gerald, and Richard Nathan. 2001. *Regionalism and Realism: A Study of Governments in the New York Metropolitan Area.* Washington: Brookings Institution Press.

Carrier, Amy and Allan Wallis. 2005. "Regional Indicators: Telling Stories, Measuring Trends, Inspiring Action." Denver: Alliance for Regional Stewardship.

Dreier, Peter, John Mollenkopf, and Todd Swanstrom. 2001. *Place Matters: Metropolitics for the Twenty-first Century.* Lawrence: University Press of Kansas.

Foster, Kathryn. 2001. "Regionalism on Purpose." Cambridge: Lincoln Institute of Land Policy.

Frug, Gerald E. 1999. *City Making: Building Communities Without Building Walls.* Princeton: Princeton University Press.

Henton, Doug and others. 2000. "Regional Stewardship: A Commitment to Place." Denver: Alliance for Regional Stewardship.

HM Treasury. 2006. "Devolving Decisionmaking: 2—Meeting the Regional Economic Challenge: Increasing Regional and Local Flexibility." London.

Marshall, Adam and others. 2006. *City Leadership: Giving City-Regions the Power to Grow.* London: Center for Cities.

National Academy of Public Administration. 1998. "Building Stronger Communities and Regions: Can the Federal Government Help?" Washington.

Newhouse, John. 1997. "Europe's Rising Regionalism." *Foreign Affairs* 76 (1): 67–85.

Organization for Economic Cooperation and Development. 2007. "Linking Regions and Central Governments – Contracts for Regional Development." Paris.

Parr, John, Joan Riehm, and Chirstiana McFarland. 2006. "Guide to Successful Local Government Collaboration in American's Regions." Washington: National League of Cities.

Acknowledgments

Preparation of this paper has been an unusually collaborative undertaking, both among the primary and secondary authors—Mark Muro, Bruce Katz, Sarah Rahman, and David Warren—and among others.

MarySue Barrett, Tim Conlan, Gerald Frug, William Fulton, Mark Alan Hughes, and Robert Yaro all provided important early-stage "thought" memos. Also crucial early on were the conversations engendered by the Rockefeller Foundation's Global Urban Summit in the summer of 2007. At later stages valuable information and advice came from Rob Atkinson, Bill Barnes, Jennifer Bradley, Rich Bryden, Adam Marshall, Karen Mills, Jeremy Nowak, David Osborne, Neal Pierce, Joel Rogers, Mary Jean Ryan, and John Taylor. In addition, multiple authors of papers for the *Blueprint* Policy Series—including Atkinson, Lori Bamberger, Alan Berube, Marilyn Brown, Elizabeth Kneebone, Robert Puentes, Andrew Reamer, Elisabeth Reynolds, Andrea Sarzynski, Audrey Singer, Frank Southworth, and Howard Wial—provided invaluable exchanges ranging far beyond their writings. Atkinson, Alan Greenblatt, Steve Johnson, Shoshana Lew, David Kaz, Marshall, and Chris Webber helped with sidebars. Most recently, thoughtful comments were provided by Barnes, Barrett, Berube, Bradley, Stephen Crawford, Stephen Goldsmith, Amy Liu, John Monahan, Alice Rivlin, and Wial.

Finally, much appreciation goes to Sese-Paul Design for layout and design and to the tremendously energetic and supportive Brookings staff that contributed in many ways to this report, including Donna Buckley, Sarah Emmons, Jeanine Forsythe, Alec Friedhoff, David Jackson, Tara Kotagal, Carrie Kolasky, David Park, Michelle Ross Daniels, and Julie Wagner.

Thank you.

About the Authors

Mark Muro is the policy director
of the Metropolitan Policy Program at Brookings

Bruce Katz is vice president and director
of the Metropolitan Policy Program at Brookings

Sarah Rahman is a policy analyst
at the Metropolitan Policy Program at Brookings

David Warren is a research analyst
at the Metropolitan Policy Program at Brookings.

For More Information

Mark Muro
Policy Director
Metropolitan Policy Program at Brookings
(202) 797-6315
mmuro@brookings.edu

BROOKINGS

1775 Massachusetts Avenue, NW
Washington D.C. 20036-2188
telephone 202.797.6000
fax 202.797.6004
www.brookings.edu

Metropolitan Policy Program
at BROOKINGS

telephone 202.797.6139
fax 202.797.2965
www.brookings.edu/metro