The Metropolitan Revolution: How Cities and Metros Are Fixing Our Broken Politics and Fragile Economy by Bruce Katz, Jennifer Bradley
Executive Summary

Overview

In the wake of the Great Recession, local leadership has taken on increasing responsibility. City officials are less willing to rely on federal government. Matters of immigration, transit, and economic development require extensive understanding of a city's identity – its strengths, weaknesses, landscape, culture, and residents. As Katz and Bradley put it, "city and metropolitan networks are stepping up in the absence of federal leadership to grapple with the big challenges before the country."

The authors draw a clear line between federal/state governments and cities and metro areas. The former "establish laws and promulgate rules," while the latter are "action oriented. [Cities and metros] reward innovation, imagination, and pushing boundaries […] Metros are integrated rather than compartmentalized." Cities, strongholds of immigration, are also prepared for the demographic changes in the pipeline. "Diversity is [the nation's] greatest competitive advantage and strength," Katz and Bradley write.

They describe their book as "a manifesto for change and action." They write, "We intend […] to chronicle a revolution in motion by exploring metropolitan areas that illustrate a mix of individual leadership and institutional heft, of idealism and pragmatism, of affirmative vision and realpolitik. We will look […] at economy shaping [and] society building." They use exemplar cities as a "repudiation of the current national myth that America lacks leadership.” Their outlook on the future is clear: “It is time […] for a national policy in the service of cities and metropolitan areas in order to fully realize and leverage the competitive assets and advantages of our national engines.”

Part One – “The Living Laboratory: The Metropolitan Revolution Unleashed” – takes a close look at metropolitan-area action in New York, Denver, Northeast Ohio, and Houston. The authors begin with New York in the wake of the Lehman Brothers collapse. The New York City Economic Development Corporation undertook an extensive brainstorming exercise, gathering information from a wide range of leadership and inviting proposals from international competitors. Katz and Bradley chart the development of New York’s Applied Sciences project from its earliest stage to its newly-built campuses. They also shed light on the importance of exportation. “[W]hat makes a place prosper is what it offers to people who don’t live there,” they write.

After New York, they turn their attention to Denver, a metropolitan area that struggled to define the relationship between the city and its suburbs. The struggle, Katz and Bradley suggest, is the manifestation of “philosophical issues: How do people with different dreams and aspirations live together and create a culture that nurtures and an economy that supports them?” “Four critical votes” acted as the determining factors. The first vote put Denver at the mercy of the suburbs during a contentious era of annexation; the second, backtracking on the first vote, allowed for the building of Denver International Airport; the third vote increased taxes in order to fund cultural amenities; the fourth approved a major transportation initiative. In addition to the votes, which signified reconciliation, local governments began to act collectively.

Chapter Four looks at Northeast Ohio's "slow decline" and the networks created to strengthen its economy. Katz and Bradley focus on a 2004 organization called the Fund for Our Economic Future, which "circulated a […] 'Call to Arms'…" encouraging philanthropies to see economic growth as part of their mission, regardless of the organization's nominal focus. The Fund is an example of a carefully curated network that draws on a rich pool of expertise. Katz and Bradley examine two economic development organizations supported by the Fund – BioEnterprise and NorTech – which "show how critical networks are to the economies of the twenty-first century." The Fund's actions illustrate the necessity – and challenge – of collaboration.

Chapter Five explores Houston's immigrant hubs, specifically the neighborhoods of Gulfton and Pasadena. Katz and Bradley study Neighborhood Centers, Inc., a nonprofit providing education and other essential services to Houston's immigrants. Neighborhood Centers is a model for "build[ing] a new workforce." Through a process known as "appreciative inquiry," they learned about their constituents by acknowledging their achievements. This chapter also stresses the relationship between education and a viable workforce.

Chapter Six opens Part Two, "The Future of the Metropolitan Revolution: Ushering in the Metro Age." The authors describe the ways that an "open innovation model" is reshaping the workspace, literally. Innovation sector industries are finding ways to increase physical proximity among firms. This mirrors the current trend of young Americans living close to their jobs and their sources of recreation. Katz and Bradley look at examples of both established and emerging innovation clusters, including Cambridge, Boston, and Detroit.

In Chapter Seven, they turn their attention to “global urbanization,” in which cities take on a more prominent role in matters of global trade. As the worlds’ cities grow, the authors suggest, American cities should start to expand their exportation capabilities. Chapter Eight includes a history of federalism, as well as a critical look at Washington bureaucracy. The authors recommend a “re-sorting of the roles and responsibilities of government” in order to empower metros. In their final chapter, they imagine what a fully “realized” revolution could achieve for the American economy.

Chapter One: A Revolution Unleashed

"Cities and metropolitan areas are the engines of economic prosperity and social transformation in the United States," Katz and Bradley write. Two-thirds of the U.S. population live in the nation's top 100 metropolitan areas, generating 75% of America's GDP. Our "national economy" is a pastiche of smaller "metropolitan economies."

It is increasingly apparent that mayors, heads of companies, and heads of universities play integral roles in the nation's economic health. They understand the "distinctive strengths and starting points in the real economy: manufacturing, innovation, technology, advanced services, and exports."

"Cities like New York are making sizable commitments to attract innovative research institutions, commercialize research, and grow innovative firms. With human capital the necessary ingredient for successful firms and places, metros like Chicago are overhauling their community college systems to ensure that students are trained for quality jobs that offer good wages and benefits […] Metros like Miami and Jacksonville are modernizing their air, rail, and sea freight hubs to position themselves for an expansion in global trade." LA, Denver, Chicago are investing in transit systems; Portland, Syracuse, and Minneapolis-St. Paul are "reorienting economic development strategies." Seattle and Philadelphia are working on energy-efficiency. Since "national immigration reform [is] seemingly impossible to achieve," Houston is "taking innovative steps" on its own to address the issue. Cities are tending to "the core elements that drive economies: innovation, human capital, infrastructure, advanced industry."

Katz and Bradley suggest that this “revolution” is logical, since local leaders are “close to the ground.” They are better positioned to understand their communities’ challenges than “institutions that are remote, removed, and far from home.” The authors list reasons that cities are best equipped to lead themselves: “They focus not just on a singular transaction, firm, or solution but rather on building effective structures, institutions, intermediaries, and platforms to give dozens of entrepreneurs and firms what they need: skilled talent, strategic capital, stable governance, reliable rules, functioning infrastructure, collective branding, and marketing.” The outcomes are more immediate on the metro level: “Problems […] are experienced rather than studied. Leaders live daily with the consequences of their decisions.”

Local does not necessarily mean *limited.* Changes taking place on the metro level have national implications: “innovations naturally replicate ‘horizontally’ across multiple cities and metros, adapted and tailored to the unique circumstances of disparate places.” The spread of new ideas is augmented by technology: “Metropolitan ideas and practices are leapfrogging state and even national borders, moving across borders with the speed of a click or the concision of a tweet.” Another way they have national implications is that “[l]ocal and metropolitan innovations […] scale up vertically, at the state and then the national level.”

The following chapters take a close look at action undertaken in the interest of economic growth. Katz and Bradley enumerate the things metropolitan areas have the power to do: “situate themselves economically,” “innovate locally,” “network globally,” and “advocate nationally.”

Chapter Two: New York: Innovation and the Next Economy

The second chapter opens with a look at New York in 2009, still reeling from the Lehman Brothers "implosion" the year before. "By the end of [2008], 7 million Americans had lost their jobs, and an additional 8.8 million were involuntarily working part-time. The unemployment rate had reached 10 percent nationwide." New York, home to a financial services cluster, lost jobs in both finance and other sectors. "In the fifteen months between August 2008 and November 2009, New York lost 36,000 jobs from its financial services sector alone." The city lost considerable tax revenue in 2009 and 2010, "exacerbating a budget gap of more than $4 billion."

The city's response was tailored to its circumstance: it "expand[ed] workforce training and business loan programs and start[ed] a job-search and information-sharing website for [the] suddenly unemployed." New York had already noticed "the city's overreliance on the financial industry," but the Lehman collapse served as a catalyst.

The mayor's office joined forces with the New York City Economic Development Corporation (NYCEDC), "a nonprofit corporation that works closely with the city government to catalyze economic growth." They determined that "[i]nnovation and entrepreneurship could be a path to reinventing the city's overall economy." The "game-changers initiative" began by imagining they could innovate without "funding constraints. What can or should we do to increase economic activity? All ideas, no matter how impractical or far-fetched, were welcome."

NYCEDC reached out to local leaders, including company executives and university presidents. They asked, "How can New York City best retain and attract the talented people who make it thrive?" The feedback was consistent: "The city and the region needed more – much more – science and technology talent to drive its future," and leaders were concerned about where to find it. New York spent far less on R&D than cities like Boston and San Francisco. There were "too few engineers and similar technical professionals." This deficit mattered in all sectors, high-tech and otherwise; once a traditional business expanded online, for example, a demand for high-tech talent would arise.

"[F]rom late 2009 to 2010, the NYCEDC researched how the city could best expand its pipeline of technological talent." They observed that technology clusters were often near universities. They noticed the importance of proximity among innovative firms (to be discussed in detail in Chapter Six). Such clusters were opportunities to "learn from one another, trade ideas, and hop between companies, bringing innovations with them and creating new ones that then spread out to other companies."

NYCEDC chose its "game-changer" based on some of the clusters the local community already had, and some of the common needs it shared. The city had biotech companies, a digital media sector, and fashion and health care sectors, all of which called for science and engineering talent. The nonprofit decided to look for "a new science and engineering graduate campus." They agreed that "building a brand-new institution from scratch was too risky," and "the city's best bet was to find a capable and highly ranked institution or group of institutions that wanted to come to or expand in New York." They assembled an advisory board of executives from various universities and high-tech companies.

Thus began the Applied Sciences NYC competition, through which universities could "enter a year-long contest to build a new campus in New York City." The city's contribution was a physical site and a $100 million investment. The competition was open to international entries, a decision that "fit with the city's understanding of itself as deeply engaged and enmeshed with the rest of the world." Furthermore, in the material NYCEDC prepared for the competition, it made a point of highlighting New York's immigrant population – a part of the city's identity and its rich human capital.

Cornell and Technion-Israel Institute of Technology won the competition to establish Cornell NYC Tech. The school's goal is to "help New York-based companies, nonprofits, and industries – ranging from hospitals to news companies, from museums to real estate developers – use new technologies to work better, more efficiently, or at a grander scale than they can with existing tools." The school's innovative services include a U.S. Patent and Trademark Office; legal support for start-ups, finance for research, and funds for start-ups in the city.

Having determined that "they could have more than one winner," the city's quest expanded. A second campus opened, known as the Center for Urban Science and Progress (CUSP). In 2012, Columbia University's Institute for Data Sciences and Engineering became the third Applied Sciences campus.

The innovations generated on the Applied Science campuses are well positioned to enter a global marketplace. The demand for innovation, "urban science," and energy-efficiency rises as more and more countries urbanize. "Metros grow by selling goods and services outside their borders," Katz and Bradley write. "Exports are going to be key to the next economy."

This puts American cities in the position of distinguishing themselves in yet another way: what does it make, and who wants to buy it? "What a metropolis exports becomes its economic raison d'être – the metropolis exists and thrives because it can do something better, faster, or cheaper than most other places." The benefits of exported goods are local: in addition to revenue, they "enable the creation of a more diversified and robust set of businesses and companies that meet purely local needs." Additionally, innovation borne of Applied Sciences will fulfill a demand that exists beyond the city. "[They] are, in essence, a major push for New York to create more things to sell to the rest of the country and the rest of the world."

Applied Sciences is a good example of city-level efforts to achieve economic growth, but it's also "tricky to use […] as a model." Other cities, for example, would not have access to then-Mayor Bloomberg's connections, nor to New York City's cultural identity. Part of the reason Applied Sciences succeeded is that it was specifically designed with New York in mind. "[N]o metropolitan area should blindly copy what New York City or any other metropolitan area does to advance its economy," the authors claim. "[E]ach metro manifests its strengths in a distinct way." Other cities should look to the Applied Sciences story to emulate "the process of inquiry" and to "build on [their] strengths." In short, cities have to understand themselves.

"The second lesson other places can take from Applied Sciences is to ask the right people the right questions." The NYCEDC's approach acknowledged the limitations of individual sectors: “None of these sectors can do the work of economy shaping by themselves, but all have valuable roles to play. Recognizing this crucial fact, the NYCEDC designed a process that allowed for the input of all these sectors.” The importance of asking questions, Katz and Bradley tell us, cannot be overemphasized.

Chapter Three: Denver: The Four Votes

Denver's metropolitan area "spent thirty years working out the tension between the common and competing needs of different communities" – in essence, determining "how closely the city would be tied to the suburbs." Katz and Bradley point to "four critical votes" that shaped the metropolitan area. These votes "represented the culmination of decades of effort to build Greater Denver, literally."

The first of the "four critical votes" was fueled by demographic change. In 1969 a federal court "insisted on [school] desegregation," and the board formed "an unpopular" busing plan. Four years of violent contention followed, with a mass exodus of "middle- and upper-class whites" to the suburbs. "Denver city leaders embarked on an effort to bring the suburban population into Denver by expanding the city and county's boundaries through the process of annexation […] the city planned to go to where the growth was happening, or was likely to happen, and capture it." This created a divide between the city and the people outside it.

In 1974, a state constitutional amendment put Denver at a significant disadvantage: "instead of getting the approval of a majority of landowners in the territory it sought to gain, Denver would have to get the approval of a majority of voters in the entire county in which the territory was located." Katz and Bradley interrupt their Denver story to keep a rush of possible assumptions at bay. "[I]n the decades since busing battles [….] a different story about cities and suburbs has emerged […] The truth is, cities and suburbs share an economy and social ties." Furthermore, "a handful of recent studies have found that city and suburban fortunes tend to rise and fall together." The notion of cities and suburbs as inherently oppositional entities is a fallacy.

The second of the "four critical votes" was in 1988. A "nationwide recession and then an energy bust" had left Greater Denver with a weakened economy. "By the mid-1980s it was abundantly clear to the region's business leaders that their communities had a shared economic fate, and it was not looking like a pleasant one." The Denver Metro Chamber of Commerce formed the Greater Denver Corporation "to lead an $8 million, four-year effort to advance its agenda." Its agenda included building an airport, creating jobs, and planning for economic development. Building the airport required annexation, which "Colorado voters had made almost impossible" in 1974. The 1988 vote "allow[ed] Denver to take control of a portion of Adams County and build Denver International Airport." The success is partially attributed to the Governor's "deep involvement" and "to the solid support of the region's business community." Negotiations determined that "the city would […] share economic benefits (including jobs) that would result from construction." Though social and political opposition may have lingered, the economic interdependence of city-and-suburb was undeniable.

The third vote was to restore funding to important cultural institutions – museums, gardens, and a zoo – that lost backing in 1982 when energy prices dropped. The following year, "the big institutions and other smaller groups started an effort to create a new tax district – called the Scientific and Cultural Facilities District (SCFD) and encompassing seven counties in the metropolitan area – that could levy a sales tax of one-tenth of 1 percent." Five years later, "voters were asked to create a roughly $40 million fund to help pay for cultural facilities." The SCFD vote was considered a "turning point" in the area, a collaboration that hinted at reconciliation. The following year, "voters agreed to another small sales tax […] to fund the construction of a baseball stadium in downtown Denver." Katz and Bradley note that "stadiums and convention centers" are often held up as "economic engines," which "is rarely the case." Nonetheless, "Denver was lucky. Buildings its sports stadiums also built social capital and a shared feeling of community."

The Greater Denver Corporation "kept pressing for more collaboration" and "invited local economic development entities to join an entirely new kind of business-attraction network […] local entities would compete together to bring a company to the Greater Denver metropolitan area." Instead of competing against each other, the local corporations saw themselves as part of a region that "would benefit no matter where in the region the company chose to locate." The competition among local governments is due to state law, which "makes them largely dependent on locally raised tax revenues." As Katz and Bradley noted earlier, "leaders in cities […] are close to the ground," with a clearer sense of what will benefit them and their neighbors.

The fourth vote came after the formation of the Metropolitan Mayors Caucus in 1993. "[M]ayors started to wonder whether perhaps they, too, could work together on a more regular basis and gain from cooperation." Transportation was a pressing subject, especially in the face of expected growth. "Throughout the 1990s, the Metro Mayors Caucus supported the creation of a modern mass transit system in the metropolis."

Projected cost was $6 billion, though at times the estimate was $16 billion. In 1997, their "Guide the Ride" campaign failed.

Gleaning what lessons they could from the failure, the mayors recalibrated and "start[ed] behaving like politicians, in the good sense: making deals and meeting people." They spoke not only to constituents who would benefit from the proposal but also to those who saw less need for it. In 2003 the mayors "threw their unanimous support behind a new massive transportation plan," which voters approved the following year.

Katz and Bradley describe "the main lesson that Greater Denver has for metropolitan-area peers." The description is brief – "understand the importance of compromise" – but the process can be long and complex. They list "several reasons that compromise fuels collaboration in Denver. First, over time, people have come to expect their political leaders to compromise – which is completely the opposite of what seems to be the case at the federal level. [There], compromise is regarded with suspicion." The second reason: "mayors have built strong relationships of trust and respect." Networks are crucial, as Katz and Bradley discuss in Chapter Four.

Chapter Four: Northeast Ohio: The Post-Hero Economy

In the 1990s, Northeast Ohio suffered "a slow decline – and because it was slow, it remained invisible for years." Katz and Bradley give a brief history of the region's mill closures and job loss. "By 1983, one-quarter of […] manufacturing jobs that existed in Cleveland in 1979 had vanished," and 5,000 more were lost in the next four years. Akron's economy saw a loss of "more than a billion dollars" in the 1980s with changes in the tire industry.

Cleveland attempted to revitalize its downtown with sleek buildings and cultural

attractions, but its efforts were not enough. Reactions to change in technology were slow: "The region suffered from a manufacturing hangover of sorts, slow to realize that the sector was forever changed and would no longer be a source of secure lifetime employment for people with high school diplomas but little other formal education." This problem was exacerbated by the region's sense of its own leadership: "[T]here was no single, overarching entity charged with creating a plan for Cleveland and its neighbors in the northeast corner of Ohio. It was hard to imagine any single entity that could take on the task."

Katz and Bradley focus on an organization called the Fund For Our Economic Future. "The Fund is one node in overlapping layers of networks […] One layer consists of the network of foundations that created and still operate the Fund. Another layer is made up of the organizations that the Fund supports, which themselves operate as networks. Yet another layer is the network that these organizations have created among themselves."

In 2003, "a handful of program officers from foundations in Cleveland, Akron, and elsewhere […] started talking about how the region's philanthropies […] could play a bigger role in rebuilding the Northeast Ohio economy." Their discussions lead them to innovation and technology, including new uses for outmoded manufacturing entities. The state already provided some grants and loans for this type of advancement. "Perhaps foundations could be both catalyst and connective tissue – providing critical funding to help these new organizations grow and win highly competitive state grants and connecting disparate economic development efforts in a way that would benefit the region as a whole."

In 2004, "a small group of foundations circulated a document" that "made the case that all philanthropies, whether they supported fine arts or environmental health, had an enormous stake in the economic health of the region." This paper invited philanthropies to join the newly established Fund. As a result, "Fund members vowed to raise a $30 million pool of money to support economic development efforts throughout Northeast Ohio." Its "broader promise" had to do with the design of the network itself, as a member described it: "'By agreeing to collaborate on a mutual agenda, we would create a model for collaborative behavior that might be replicated within a number of sectors within the community.'"

Creating a network took time and patience. "First of all, Fund leaders felt that creating a strong, shared regional identity had to precede the development of a shared agenda." The philanthropies, "most of which had no experience in giving grants to fire up economic growth, were themselves learning how to operate as a network." By agreeing to a "one member, one vote" policy, the organization "empower[ed] much smaller foundations to influence the Fund's work." The Fund's task could not be completed simply by making a grant – "no grant, however big, was going to reorder a $178 billion regional economy" – which meant the Fund had "to get its own network in order, creating its own culture of collaboration for the sake of change." As agents of regional change, members had "to think, plan, and act regionally."

Ultimately, "The Fund for Our Economic Future has been more successful at bolstering a network of economic development organizations that are changing the economy of Northeast Ohio." Katz and Bradley single out two such organizations – BioEnterprise and NorTech – because their stories "illustrate the intricacies of redirecting major sectors of a regional economy, and because these organizations also operate as networks, they show how critical networks are to the economies of the twenty-first century."

BioEnterprise is "a nonprofit that helps inventors connect with experienced managers, venture capitalists, production facilities, other inventors, state and federal grants, and whatever else they need to build their companies." BioEnterprise invests its resources in locally-made products – in this case, new technologies generated by regional hospitals and universities. Typically, "universities and hospitals have special offices for technology transfer […] In practice, this often means letting the highest bidder develop these inventions […] somewhere in the United States or the world. This arrangement […] does not necessarily do much to advance the regional economy."

BioEnterprise keeps the innovation and development in the region, creating jobs in the process.

NorTech “specializes in technology-based economic development, that is, economic growth through the intelligent cultivation of technology industries. It has developed a specific technique to build and develop technology clusters […] in Northeast Ohio. In addition, NorTech helps set an overall direction for the growth of clusters, identifies new overseas markets for exports, seeks out public funds to support research or business development, and figures out how to train people for jobs in these clusters.” NorTech’s industries include flexible electronics, “key components” of which “were developed or improved on by companies and research institutes in the region.” Both BioEnterprise and NorTech are known as “intermediaries. They provide the links between entrepreneurs and manufacturers, between suppliers and customers, between workers and jobs.” Finally, “intermediaries are the glue that holds networks and long-term collaborations together.”

As it matured, the Fund began to direct its grantees to build their own networks and collaborations. Additionally, “the state of Ohio […] was increasingly insisting that entities apply for grants as members of a collaboration rather than individually.” The emphasis on collaboration appears to be gaining momentum regardless of region or industry. Even within industries, places where collaboration may not seem likely are starting to emerge. One example is innovation and manufacturing: “once thought to be two entirely different aspects of the U.S. economy, turn out to be closely intertwined. Production teams and invention teams need to collaborate with each other.”

As they impress the prevalence of networks upon their readers, Katz and Bradley note the importance of oversight. With the urge to collaborate comes “a classic collective action problem: what is good for one organization in one instance may not be what is best for the network and therefore for the organization in the long term. Some entity has to protect the network itself and steer it toward broader regional goals.” The Fund is an example of effective network management.

Chapter Five: Houston: El Civics

Neighborhood Centers, Inc., a non-profit "founded in 1907 to provide care to children from immigrant and low-income families," works extensively in Houston's immigrant enclaves. Katz and Bradley offer two perspectives on the neighborhood of Gulfton, which receives a range of Neighborhood Centers services. "Viewed through one lens, Gulfton concentrates all the challenges that many immigrants and low-income people in general face." Alternatively, "the people at Neighborhood Centers don't see Gulfton that way. They see it as a place of promise […] 'The poverty is real, but their hopes and dreams are just as real. Crime is high, but so is the sense of community and mutuality that exists.'"

The Baker-Ripley Neighborhood Center is a major resource for local immigrants. It includes schools, a health clinic, tax preparation, recreational opportunities, and transportation services. In spite of its location in an area with high crime rates, "Baker-Ripley has no security guards or fences […] no traces of vandalism or graffiti." According to Neighborhood Centers, the people of Gulfton feel "a sense of ownership and pride" about Bakery-Ripley. The CEO of Neighborhood Centers describes it this way: "'If you invest in people, they'll solve things, they'll do things for themselves.'"

Neighborhood Centers is effective, in part, because of its magnitude. It is "one of the largest nonprofit service providers in the United States, with a budget of $275 million a year and an enormous presence throughout Texas. Through its Public Sector Solutions division, the agency manages child-care eligibility and assistance funds and workforce assistance payments for 67 of the 254 counties in the state. " The nonprofit "runs twenty-six head Start sites" and "operates five charter elementary schools and one middle school," as well as "a statewide child-care service." It sponsors the Promise Credit Union and offers free tax preparation. Its additional services include "a financial aid office that administers eight different federal programs that help 85,000 Texans find and keep work," and "it serves as a single point of contact for financial assistance for veterans and their families in four counties."

Katz and Bradley point to "networks" and to "continually seeking input and feedback" as part of the reason Neighborhood Centers is such a success. The act of asking questions played a major role in other initiatives, such as New York's Applied Sciences project, and the same can be seen in Houston, where "Neighborhood Centers conducts extensive interviews and listening sessions […] to find out what residents want from and can give to their community."

The Neighborhood Centers approach is focused on changing the negative dialogue about areas like Gulfton. CEO Angela Blanchard asserts that "People in Gulfton are not broken and do not need to be 'fixed.'" In her view, "[t]raditional social services and the way they are delivered […] 'have turned every form of help into a demeaning experience.'" She set out to learn about community needs through "appreciate inquiry." "Rather than honing in on what is broken or deficient and trying to change it, appreciate inquiry starts with what an organization is good at or has done well in the past."

Before they built the community center the residents wanted, Neighborhood Centers sought more information. "Rather than asking Gulfton residents, 'What do you need?' they asked, 'What's good about this neighborhood?'" Responses in Pasadena differed from those in Gulfton, despite some of the surface similarities between the two. "Appreciative inquiry is hyperlocal," Katz and Bradley write, "but the systems that realize the dreams and aspirations that it uncovers work best when they are big in reach and resources." The organization "has that large scale, in part because of its history of operating all over the Houston region but also because its leaders insist that it be a big, professionally run organization." They are capable of juggling "seventy separate funding sources," including state and federal, without folding under "the administrative complexity." Neighborhood Centers is not "overly dependent on a single agency or program." Their existence relies on their ability to manage the range of requirements and expectations from so many different entities.

Katz and Bradley outline "the challenge" for Houston and its counterparts – "metropolitan areas that are becoming rapidly more diverse and metropolitan areas that are home to a large group of people who have persistently been overlooked or poorly served by education institutions: a large share of their present and future workforce are members of groups who as a whole are less likely to reach high levels of education when compared with native-born whites." The consequences of this discrepancy are far-reaching: "A better-educated metropolitan workforce tends to be more productive and command higher salaries […] By contrast […] a shortage of educated workers in a metropolitan area leads to higher unemployment."

From their research on Neighborhood Centers, Katz and Bradley identify "several important lessons in how to help people realize their own assets and raise their education level, their income, and their sense of efficacy and connection to their community." One of these lessons will be familiar to readers from previous chapters: "ask the right questions." Other lessons include the importance of utilizing networks and "operat[ing] at a very large geographic scale." Appreciative inquiry, Katz and Bradley write, "is a form of crowd sourcing with a crowd that is all too often talked at rather than talked with." Additionally, the Neighborhood Centers themselves form the kinds of networks on which the economic future lies. These networks are comprised of Center members as well as funders, who are "not only giving money but also providing expertise in certain fields and intellectual guidance."

Chapter Six: The Rise of Innovation Districts

Katz and Bradley shift their attention from "revolutionary" activity to their expectations for the future. They write, "This chapter and the next focus on the revolution to be: how megatrends will drive cities and metros to reshape their physical and social landscape within as well as forge new connections with their trading partners abroad."

Our economy is "open, innovative" and "collaboration-oriented." These qualities are changing the way Americans work – "how firms and people interact, how ideas flow, and how places [such as offices and labs] are actually designed."

The authors define innovative districts as entities that "cluster and connect leading-edge anchor institutions and cutting-edge innovative firms with supporting and spin-off companies, business incubators, mixed-use housing, office and retail, and twenty-first century amenities and transport." These districts vary – some are near universities, while others repurpose "underused […] industrial areas" – but they share a common goal. "[A]ll of them draw from the best innovations in both industry cluster and place-making strategies to create well-defined communities packed with resources for firms, entrepreneurs, innovators, researchers, and residents."

Katz and Bradley explain: "The theory behind business clusters is that the geographical concentration of interconnected firms and supporting institutions leads to more innovation and production efficiencies, shared inputs, thicker labor markets, and collective problem solving; the theory behind walkable urbanism is that dense, mixed-use neighborhoods with cultural, recreational, and retail amenities will attract highly educated, innovative, entrepreneurial individuals and benefit the neighborhood's existing residents. Innovation districts are the physical synthesis of these two ideas, a new nexus between innovation and urbanism."

Industrial districts developed "in the nineteenth and early twentieth centuries" to accommodate the cutting-edge technology of the era. "In the last half of the twentieth century, [numerous cities] built science and research parks, characterized by spatially isolated corporate campuses, accessible only by car, that put little emphasis on the quality of place or on integrating work, housing, and recreation. These physical forms were products of their times."

It follows that a product of our current time would reflect the cultural interest in collaboration, the emphasis on human capital, the eagerness to network and the desire to capture the outcomes of "spillovers." "Innovation districts […] respect the growing penchant for companies in leading-edge sectors to practice open innovation and collaborate with networks of firms, universities, and supporting institutions. They provide the physical and social platform for entrepreneurial growth-incubator space, collaborative venues, social networking, product competitions, technical support, and mentoring." This new model of place making is extremely place-specific: "[I]nnovation districts are being driven from the ground up, primarily through the actions of local actors. There is no federal or state program or multinational corporation stamping out innovation districts across the country."

One way to measure the benefits of proximity is patent production. Katz and Bradley cite research that "found that the number of patents per capita increases, on average, by 20 to 30 percent for every doubling of employment density.” The question of proximity applies within the walls of individual buildings. “Facebook and Google, for example, have embraced ‘hackable buildings’ […] These offices have open floor plans that can be easily reconfigured to create dense, collaborative spaces for new teams and projects.”

Innovation districts are the result of changing ideologies in the American workplace, but they are also the result of changes in private life: “the shift to smaller and more numerous households.” Among other factors, “younger women and men are […] delaying marriage and having fewer children.” This same group perceives “[q]uality of life […] to mean proximity to restaurants, retail […] and other urban amenities.” This interest in living close to amenities even has an effect of the number of driver’s licenses: only 29 percent of young Americans hold one (a drop from “nearly half of young Americans” in 1983). People and firms, “for distinct but reinforcing reasons, [are] embracing […] urbanism.”

Katz and Bradley point to “the power of anchor institutions” by looking at MIT. “In the mid-twentieth century, MIT was surrounded by acres of abandoned industrial properties and buildings.” In the 1960s, it created Technology Square, a “large-scale real estate development,” from an old factory. Neighboring Kendall Square “began to be redeveloped as biotech and info-tech start-ups emerged out of MIT and nearby Harvard.” A “mixed-use district” appeared in the 1980s, a “redevelopment” of “a former blighted industrial area.” Innovative companies became eager to find a foothold in Cambridge.

The story of Biogen Idec, a biotech firm, is a perfect example of the shift from isolated campuses to urban presence. “In 2010 Biogen completed an enormous campus […] in the suburb of Weston, while maintaining a research facility in Cambridge. Barely a year later, under new leadership, the company started the difficult process of abandoning the new Weston facility and moving the entire company back to Cambridge.” A brand-new building in a suburb simply does not compare to the benefits of a location among industry peers.

Katz and Bradley provide brief overviews of other examples, including Boston’s waterfront (building an “Innovation Center” and providing flexible housing to attract clusters); North Carolina’s Research Triangle Park, which plans to revise the isolation of its original design by including housing and retail; 22@Barcelona, “the first self-proclaimed innovation district”; and Detroit, using “the power of networks to crowd source and crowd fund a city and, in the process, transform a metropolis.”

Chapter Seven: Toward a Global Network of Trading Cities

Katz and Bradley look at the "metropolitan revolution" through an international lens. "With American consumers overextended and middle classes rising abroad, there is now an imperative for the United States to trade and globally engage as never before," they write. The globalization conversation is starting to change – from "countries and companies" to "cities and clusters." The authors refer to this as "global urbanization."

Why the urgency? Katz and Bradley ask. "The answer is quite simple: that is where markets are rising today and where they will disproportionately rise tomorrow." This growth is the result of changing politics and technological advances, along with "budding industrial sectors in emerging markets, and increased demand from [global] middle-class consumers." As the world's cities grow, so do their residents' needs and desires.

"The path of American metros to a true trading culture will not be an easy one," the authors write. "Until recently, [American cities] had far fewer incentives to internationalize because they were able to realize desired growth from domestic demand." This explains the "relatively small portion of the U.S. economy […] dedicated to exports." The cultural complement to this "relatively small portion" is American insularity. "Thirty years' obsession with the idea of consumer cities and 'Starbucks, stadiums, and stealing business' strategies have created confusion about what drives what in metropolitan economies."

The authors bemoan how unprepared American cities are for the predicted upsurge of trade (and for the opportunities it currently presents). “There is limited federal or state support for metropolitan trade and investment initiatives,” they write. “Separate but related, the United States has no national freight strategy. Our competitors know better.” There are, however, reasons for optimism. There are “hidden assets, ready to be leveraged and exploited for global purposes” – namely, the capacity for innovation.

Katz and Bradley aim to redefine exports as more than “goods that are manufactured, boxed, and shipped to foreign markets.” There are service exports, such as international student tuition or tourism. There is the benefit of a large immigrant population, which “helps ease the path to further internationalization,” based in part on “the behavior of the people who migrate.” Furthermore, the States are “a preferred destination for foreign direct investment of immense scale,” including foreign-owned manufacturing firms. Foreign equity investment is also on the rise. A distinctly American innovation is the way the nation solves its cities’ problems – problems that will surface for cities-in-formation across the globe. These solutions also have export potential.

Portland, Oregon serves as the authors’ example of an “export-oriented and globally integrated” economy. Portland is “the home of Silicon Forest, a robust cluster of computer and electronics firms.” The city’s proximity to Silicon Valley made it an ideal, less-expensive place for high-tech companies to set up teams. Intel did so, and its arrival spawned a cluster, including “specialized suppliers” and “competitors.” Ultimately, “Portland’s computer and electronics manufacturing cluster […] is the region’s top international export industry.”

The authors name several other cities that are mobilizing similarly: “Miami, Savannah, and Norfolk have made transformative investments in their seaports and related logistics infrastructure to accommodate the larger ships that will move goods after the expansion of the Panama Canal.” They explore the relationship between Miami and São Paulo, which includes both business and tourism. The key, Katz and Bradley say, is “differentiation” – distinct identities with specific drivers in each metro’s economy.

Chapter Eight: Metros as the New Sovereign

As essential as metros are to the national economy, they do not exist in isolation. “Their efforts depend on the support of federal and state governments […] State and federal governments are, through mandatory entitlements, tax incentives, and spending programs, the largest single investors in cities and metropolitan areas.” Katz and Bradley note that their exemplar stories from Part One, such as New York’s Applied Sciences, are heavily supported by federal funds (in this case, through “a foundation of hundreds of millions of federal research dollars that has made Cornell University the world-class research institution it is”).

State and federal action does not always yield positive outcomes – a problem Katz and Bradley blame on “balkanization.” Large and inefficient, these agencies inadvertently make it harder for cities to solve their own problems: they “have promulgated highly prescriptive rules intended more to prevent hypothetical wrongdoing […] than stimulate innovation.” In keeping with their revolutionary theme, the authors claim, “It is time to recognize that cities and metropolitan areas are actors, not subjects.”

Katz and Bradley deconstruct the concept of federalism to highlight the absence of metros in the schematic. “They do not have a place in the U.S. Constitution and are absent from state law, which recognizes municipalities, villages, cities, townships, and counties, but not the metropolitan areas of which they are a part.” A brief historical survey includes development projects such as canal systems and interstate roads that were spearheaded by cities and states, not by the federal government.

Federal involvement emerged “as a response to the upheavals brought about by rapid industrialization and growing corporate consolidation at the turn of the century and then the collapse caused by the Great Depression." Thus followed entitlements, the Federal Housing Administration, Fannie Mae and Freddie Mac, and investments in research and infrastructure. The relationship between state and federal government changed: "To receive funding during the New Deal and afterward, states basically had to align with the federal government, creating mirror image agencies and administrative processes."

In 1969, "[President] Nixon called for a reversal of the trend toward more centralization of power." By the time President Reagan was elected, "a period of state experimentation" was in place, wherein "[s]tates acted as the proving ground for policies that, if successful, were replicated at the federal level or by other states."

Now, Katz and Bradley write, "[w]e are on the cusp of what appears to be another historic shift in federalism [….] between these dual sovereigns and their subjects, cities and metropolitan areas." They explain: "we are considering the division of powers from an economic standpoint […] We are trying to advance a theory of federalism that asks how federal and state sovereigns, and other partners and networks in governance, should interact to coproduce the economy."

Not surprisingly, Katz and Bradley recommend " a form of collaborative federalism." They write, "We therefore identify the core things that federal and state governments should do to prime their metropolitan engines."

"The core things" include the following: metros could "[host] sessions several times a year with the people who represent that metro in the U.S. Congress and state legislature" to create "metropolitan caucuses." Additionally, "metropolitan leaders need federal and state governments to set a strong safety net for the nation's frail and disadvantaged citizens and a progressive tax system […] That means strengthening entitlement programs." It also means "making work pay by investing smartly at both the federal and state levels in the earned-income tax credit and the refundable child credit." Next, "metros need both states and the federal government to support the kind of economy they are trying to build."

As Moretti does in *The New Geography of Jobs*, Katz and Bradley call for investment in R&D and in education, and for immigration reform. They call for collaboration and conversation, for the eradication of "urban policy" in favor of "coequal" sovereignty. They call for metro leaders to be "[t]reated as peers" by government agencies. They call for "Metro Deals," inspired by a system in the United Kingdom through which cities "pursue their own development plans in their own way, and the central government grants them exceptions to normal oversight and restrictions."

They propose an innovative, productive partnership in lieu of hierarchy.

Chapter Nine: A Revolution Realized

Katz and Bradley ask their readers to “imagine” in this final chapter as they explore the potential of fully empowered metro areas. They describe a slew of possibilities: “friendly competition over the scope and ambition of innovation districts,” turning metros into “test beds.” They add, “[i]magine further if innovation in one metropolis spread quickly to others […] Soon we would experience a snowball effect of metropolitan transformation.” Imagine, they tell their readers, “if metros collectively used their economic power to shape markets, alter business and philanthropic practices, and catalyze new forms of innovative finance […] Imagine, finally, if metros aggregated their political power to bend state and federal policies and investment to their […] visions.”

The authors close with “five essential steps” for “any […] kind of metropolitan leader.” The five steps are “build your network,” “set your vision,” “find your game changer,” “bankroll the revolution,” and “sustain the gain.” The wording is simple, but the actions themselves require forethought, dexterity, and expertise.