

THE EVOLVING GEOGRAPHY
OF OPPORTUNITY:
LEADING CITIES OF THE PAST, PRESENT, AND FUTURE

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THE GEORGE W. BUSH INSTITUTE-SMU ECONOMIC GROWTH INITIATIVE
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The *Blueprint for Opportunity* series advances a policy agenda for improving economic mobility to help Americans flourish. It focuses on strengthening America's cities in their vital role as engines of upward mobility. Cities and neighborhoods make a powerful difference to people's opportunities, and the local level is where most of the policy energy is in the United States today. America has numerous metro areas that score relatively high as cities of opportunity, but the Nation needs more.

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EXECUTIVE SUMMARY

Cities which rise up as centers of prosperity and opportunity are places that ensure an emphasis on learning and innovation, a culture of openness to newcomers and unorthodox ideas, a favorable environment for commerce, a relatively good quality of life for residents, and a strong sense of shared community. The geography of opportunity is always evolving, as some cities emerge as centers of opportunity while others decline, with enormous consequences for people, places, and, indeed, civilizations.

Technological progress, globalization, shifting preferences, and public policy differences are driving transformative changes in America today. The COVID-19 crisis has accelerated powerful trends that were already underway, magnifying the role of local community and quality-of-life features in shaping people's location choices and thus driving shifts in many local economies. A diverse array of thriving, high-opportunity metropolitan areas offers lessons on how to expand opportunity and economic mobility, while emerging turnaround stories are also developing in struggling regions of the Nation.

Lessons from history and from the relative success stories of the present point to clear priorities for today's cities:

- Get the urban basics right: schools, safety, livability.
- Strengthen local anchor institutions in higher education, health care, and other areas.
- Invest aggressively in local quality-of-life amenities.
- Rebuild and expand critical infrastructure.
- Work toward openness, diversity, inclusion, and a welcoming approach to newcomers.
- Ensure a high degree of economic freedom.
- Emphasize housing affordability and work to build an opportunity-rich physical environment.



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I. INTRODUCTION

Cities have long been humanity's most powerful engines of upward mobility. But why do certain places emerge as leading cities of opportunity, leaving other cities behind?

The George W. Bush Institute-SMU Economic Growth Initiative's *Blueprint for Opportunity* series aims to present a policy agenda for expanding economic mobility in America's cities and towns. The first report in the series, "[Cities and Opportunity in 21st Century America](#)," explores why cities and neighborhoods play such an important role and where America's best "cities of opportunity" are today. This report, second in the series, focuses on how the geography of opportunity in cities has evolved through history and how new forces are likely to reshape it in coming decades.

History teaches that cities which rise up as centers of prosperity and opportunity are places that emphasize education and innovation, offer openness to newcomers and nonmainstream ideas of all kinds, sustain a supportive environment for commerce, provide a relatively good quality of life, and achieve a robust sense of shared community. Leading cities have maintained their positions over decades or even centuries. Over the long term, however, cities have continued to rise and decline as centers of opportunity, with massive consequences for people, places, and whole nations.

Powerful tectonic shifts are now transforming the geography of opportunity in 21st century America:

- Rapid technological progress is strengthening the position of cities with relatively high education levels and of highly skilled people who live in them.
- Globalization is reinforcing the advantages of cities that are positioned to coordinate complex cross-border flows of goods and ideas but weakening many manufacturing-dependent places.
- As income levels have grown in America, people are putting higher priority on quality-of-life considerations, gravitating to culturally open and diverse cities, and demanding more residential space. These trends are driving domestic migration patterns more than ever, fueling prosperity in some cities and causing increased housing segregation on income lines in metropolitan areas throughout the United States.
- Public policy differences across localities in areas like business regulation, land use rules, and taxation are creating new opportunities for some cities to pull ahead of others.
- Geographic mobility has declined in recent decades, reflecting sky-high housing costs and other barriers to opportunity in certain cities as well as growing desires for rootedness.
- New technologies, coupled with the COVID-19 crisis, have spurred growing geographic dispersion of people and businesses away from some of America's largest cities and toward other cities that score high for education levels, quality of life, and openness – as well as for economic freedom and affordability.

The overall effect of these shifts is that factors historically associated with the rise of great cities are operating as powerfully as ever. Our quantitative analysis confirms this conclusion. Education levels, strong knowledge-generating institutions, social capital measures, immigrant population shares, economic freedom measures, and reasonable housing affordability all generally predict success on indicators of prosperity and economic mobility in U.S. metropolitan areas. Cities that score high for these attributes are well positioned to capitalize on today's trends and thrive for decades to come.

A companion report to this one, "[The New Geography of Opportunity: Case Studies from a Changing Economic Landscape](#)," profiles four very different regional patterns that account for most of America's high-opportunity metro areas today: (1) large "star" cities of the Northeast and West coasts, (2) midsized and smaller cities in

what we call the “Northwest 13” states,* (3) fast-growing cities in the Sun Belt, and (4) emerging turnaround cities in the Midwest. It also explores two emerging geographic patterns within metropolitan areas: (1) the rise of “urbanizing suburban cities,” and (2) growing bifurcation of core cities into have and have-not areas.

Our analysis points to clear priorities for America’s cities. Cities, with federal and state help, should pursue several broad goals, each of which we explore in this and future reports:

- Get the urban basics right: schools, safety, livability.
- Strengthen local anchor institutions.
- Invest aggressively in quality-of-life amenities.
- Invest in rebuilding and expanding vital infrastructure.
- Emphasize openness and inclusion, including a welcoming approach to immigrants.
- Ensure a high degree of economic freedom.
- Promote housing affordability and an opportunity-rich built environment.

The good news: The geography of opportunity is widening as more cities are emerging that are well positioned to capitalize on these new trends. America is successfully creating more cities of opportunity, sometimes in surprising places.

We intend in this report to correct a common narrative that, in our view, overestimates the economic outperformance of America’s largest cities, particularly the technology and finance centers on the coasts, relative to other cities. While the prevailing narrative has elements of truth, we hope to contribute new perspectives on how the geography of opportunity is changing in underdiscussed regions like the Sun Belt, the Great Plains, the mountain states, and the Midwest. We will also make the case throughout the *Blueprint for Opportunity* series that America’s tremendous geographic diversity and decentralization are among its greatest strengths and competitive advantages.



* The Northwest 13 states are Wisconsin, Minnesota, Iowa, North Dakota, South Dakota, Nebraska, Montana, Idaho, Wyoming, Colorado, Utah, Washington, and Oregon.

II. LEADING CITIES OF THE PAST: LESSONS FROM HISTORY

History teaches three lessons on cities:

- Thriving cities are humanity's greatest engines of upward mobility.
- The urban geography of prosperity and opportunity is always evolving, with some cities rising and others declining.
- The success or failure of individual cities as engines of opportunity is, to a significant extent, a matter of choice for city leaders and for the larger societies surrounding them.

Cities rise up and thrive because of what economists call “agglomeration economies” – that is, productivity gains that take place when people, firms, and ideas come together in a geographically concentrated place. These benefits include vibrant labor markets for workers with specialized skills, efficiency gains from operating at large scale, and knowledge spillovers from one successful company or skilled worker to the next. Workers in a thriving place have rich opportunities to learn and advance by watching others, forging connections, and working in a large, competitive marketplace.¹

Great cities are exceptionally productive places. They succeed because they create unusually favorable conditions for agglomeration economies to take root.

Urban historians such as Fernand Braudel and Joel Kotkin have shown that the most successful cities have nearly always followed a clear formula for promoting prosperity:

- An emphasis on learning and innovation.
- A high degree of personal freedom and openness toward newcomers and unorthodox ideas.
- A favorable environment for commerce.
- A reasonable degree of safety, security, and quality of life for residents.
- A strong sense of shared community, reinforced by what Kotkin calls “shared sacred spaces.”²

A city may emerge in a particular place based on serendipity – usually because of a favorable geographic location but sometimes through the vagaries of politics or random chance. But once it establishes a productivity lead over other places by adopting the classic formula for prosperity, its lead usually grows.³ Thriving cities generally remain successful for decades or even centuries.⁴

At the same time, cities are engaged in a never-ending competition for people and businesses. If they aren't moving forward in this competition, they inevitably fall behind. When leading cities lose their competitive edge, it's often because their public and private sector leaders undermine the very advantages that put their cities in leading positions. Sometimes, leading firms in a core location choose not to adopt new technologies. Or incumbent interests become so focused on manipulating the political system to protect their positions that the public sector becomes too sclerotic to address emerging problems.

Meanwhile, poorer places also have choices. Sometimes they choose to focus on catching up and even leapfrogging past dominant cities.⁵ Some famous examples: London prioritized catching up with Amsterdam in the 18th century through targeted trade and finance initiatives, and New York set out to move past London in the 19th through various policies aimed at becoming a leading global commercial center.

In other cases, less prosperous places sometimes choose not to emphasize economic growth. Many cities have pursued policies that had the predictable effect of keeping them relatively poor. Southern Methodist University economist Klaus Desmet and his colleagues point to various forces that tend to keep poorer places from catching up with wealthier competitors. Politically dominant players in lower-income locations may have

a strong interest in preserving the status quo, even though it holds back opportunities for most people living there. Remaining underdeveloped can also be a rational choice for a city or region if the central government subsidizes status quo industries there but provides no help in adopting newer technologies.⁶

While cities can remain prosperous for generations, they invariably face challenges from rising rivals. Over the very long term, the only constant is the endless cycle of rise and decline. As the ancient historian Herodotus wrote of the cities of his age: "...most of those which were great once are small today; and those that used to be small were great in my own time...Human prosperity never abides long in the same place."⁷

America's cities have experienced long-term patterns of rise and decline just like the patterns of other places in history. The major forces reshaping America's economic geography have been technological progress, national policy, and local choices. Prosperous cities have achieved long-term success because they followed the same formula as successful cities elsewhere: promotion of learning and culture, welcoming attitudes toward enterprising newcomers, commerce-friendly policies, and quality of life. And in America even more than in most other societies, people have always migrated toward high-opportunity cities and neighborhoods, to the extent that they can.

America's recurring success in creating a wide variety of fast-growing, innovative cities of opportunity has long been one of the Nation's great competitive strengths. Unlike countries in which innovative activity is concentrated in one or very few megacities, America's relatively dispersed and ever-changing economic geography has added dynamism and diversity to the Nation's economy. Even if some cities experience adverse trends, there have always been others on the rise.

LESSONS

Emphasis on learning and innovation

The great commercial cities of the past were invariably centers of learning and business innovation. Cities like Bologna (in modern-day Italy) and Paris rose to prominence in part by establishing some of Europe's first universities.⁸ Standout commercial cities of the early modern era like 16th century Venice and 17th century Amsterdam attracted enterprising people from all over Europe in part because of leading positions in intellectual life and innovation. In Amsterdam and other Dutch cities, the Reformed Church vigorously pursued elementary education for the children of ordinary families.⁹

Cities that emerged as great commercial centers were also leaders in building modern physical infrastructure, developing new models of business organization, and adopting innovative manufacturing and shipping technologies. High education levels and early adoption of new technologies in turn translated to relatively high real wages.¹⁰

History also offers numerous examples of leading cities that conspicuously failed to reinvest in maintaining world-class educational institutions and adopting new technologies. Spain under the 16th century monarch Philip II and his successors crowded out investment in universities and waterways in port cities like Seville to finance unsustainable military adventures abroad and the sybaritic lifestyle of the imperial court.¹¹ Exactions and regulations imposed by the Qing court in Beijing largely shut down investment in modern education and infrastructure in Shanghai and other Yangtze River port cities in the late 19th century, undermining what had been a promising start to industrialization in those cities.¹² Once-leading cities in imperial Spain and Qing China consequently suffered precipitous economic declines relative to more vigorous cities elsewhere.

In the early decades of America's history, the major cities of the urbanizing Northeast and Midwest pulled ever further ahead of the South in economic terms in part because they invested in education and innovation. After the creation of the independent republic, the rapidly growing cities of the Eastern seaboard from Boston to Philadelphia were among the world's leaders in establishing colleges and broad-based primary education. They also invested aggressively in innovative infrastructure. The Erie Canal, completed in 1825, sparked explosive growth in trade between the Great Lakes region and the cities of the Eastern seaboard. By 1860, the Northern states had by far the most extensive rail network in the world.¹³ As a result, the American Northeast emerged as a global trading power and the second region in the world to achieve a modern industrial takeoff, after England.

During the 19th century, Midwestern cities grew into the Nation's manufacturing heartland, in large part by investing in innovative manufacturing technologies. Taking advantage of superior locations for waterborne trade, they built far larger industrial facilities than those of early Northeastern manufacturing hubs like Salem, Massachusetts, and Paterson, New Jersey.¹⁴ Chicago emerged as the Nation's preeminent center for agricultural equipment, meat packing, and Pullman rail cars. Minneapolis quickly became the country's flour milling capital, thanks to Charles Pillsbury.¹⁵ Most of the smaller industrial cities of the Northeast went into long-term decline, though the leading Northeastern cities – New York, Boston, and Philadelphia – continued to thrive as more diversified skill-based economies with dominant positions in trade, finance, and culture.¹⁶

In stark contrast, the South effectively opted out of modern economic growth. The Southern economy was essentially a hidebound oligarchy of large plantation owners. Roughly 300 oligarchs controlled much of the plantation land and enslaved Black people of the South.¹⁷ The Southern states built far fewer schools and universities than the Northern states before the Civil War, little transportation infrastructure, and virtually no cities of note besides the port city of New Orleans. Even in the decades after the Civil War, Southern states devoted enormous unproductive energy to their shameful but relentless program of excluding Black Southerners from schools, professions, and voting. In agriculture, the South mostly declined to implement productivity-enhancing technologies that were transforming Northern farms, like the McCormick reaper.¹⁸ A few Northern businessmen started manufacturing businesses in the South, but most of them – hounded by the Ku Klux Klan and other former Confederates – gave up.¹⁹

Starting in the 1930s, cities in the South grew from a position of relative backwardness and poverty to near parity with the income levels of Northern and Midwestern cities. Decisive shifts by public- and private-sector leaders toward greater emphasis on learning and innovation played a large role in this catch-up, though air conditioning, cheap land, and anti-union policies contributed as well. Starting during the New Deal era and continuing into the early postwar years, the federal government poured resources into the South and other lagging regions in a conscious effort to modernize them. Federal measures under the Franklin D. Roosevelt, Truman, and Eisenhower administrations included funding universities in formerly backward cities through defense spending, medical research, and the GI Bill. They also included farm modernization, the interstate highway system, and electric utility investment.²⁰ Particularly after the 1960s, rising "New South" cities like Atlanta, Houston, and Dallas invested aggressively in universities, medical centers, and arts institutions.

Another key geographic trend starting in the mid-20th century was the relative decline of the industrial cities of the Midwest into what became known as the Rust Belt. After about 1950, manufacturing jobs started to shrink as a share of the workforce.²¹ Manufacturing grew less geographically concentrated, even as high-skill service industries became more focused in a small number of leading cities.²² These shifts were partly a consequence of labor-saving industrial automation. At the same time, manufacturers in Rust Belt cities also undermined their own position through failure to adopt new manufacturing technologies in many cases.²³ Most Rust Belt cities also failed to keep up with the rising education levels of large cities on the coasts and in the Sun Belt.²⁴

By the second half of the 20th century, local education levels came to exert even greater influence over the economic position of cities than ever before. Harvard University economist Edward Glaeser and other researchers have shown that the share of the population in metropolitan areas with a bachelor's degree or higher became highly predictive of median income levels, including the incomes of workers with lower education levels.²⁵ And cities hosting leading innovative firms in technology, the life sciences, finance, and other service industries established growing economic leads over less innovative cities.

Welcoming attitude toward newcomers and unorthodox ideas

Virtually all the great commercial cities of history benefited from large inflows of skilled people from elsewhere, including from other countries.

Skilled immigrants, including textile craftsmen and Jewish financiers from all over Europe, played outsized roles in building prosperity in booming cities like Venice and Amsterdam, according to Braudel, the French urban historian.²⁶ As he documented, the commercial vigor of these cities depended on an ongoing influx of new merchant families, often from abroad, because members of the leading commercial houses of these cities tended to die out or retire to country estates after two or three generations.²⁷ Immigrants from other parts of Europe and the Mediterranean were so ubiquitous in the leading cities of early modern Europe that one contemporary observer referred to each of these cities as “a Noah’s Ark,” “a fair of masks,” and “a Tower of Babel.”²⁸

Leading cities also tended to offer a greater degree of tolerance for minority religions and other nonmainstream ideas. Amsterdam, for instance, became a haven for persecuted religious groups in the 16th and 17th centuries. London also allowed for a high degree of religious and intellectual diversity by the 18th and 19th centuries.²⁹ In both cities, religious asylum seekers and their descendants made vital contributions to local economic vitality.

On the other hand, growing religious and social intolerance contributed to the decline of numerous once-great cities.³⁰ In some places, self-destructive intolerance extended even to banishing productive outsiders, as Spain did in expelling its longtime Jewish and Muslim communities under Ferdinand and Isabella in 1492.

In America, too, virtually all leading cities have benefited from large inflows of immigrants during their heyday. In the 19th and early 20th centuries, each of the booming industrial cities of the Midwest attracted a tremendous influx of immigrants. Author Joel Garreau notes that the term “melting pot,” borrowed from the metallurgy industry to describe the demographic and social transformation of American cities, arose in the iron and steel belt of the upper Midwest.³¹ Religious intolerance in the Old World thus played a large role in stimulating the growth of rising cities in the New.

A cultural shift toward greater cultural openness after the 1960s – the “Americanization of Dixie,” in Garreau’s words – played a significant role in the rise of leading Sun Belt cities. At least in the South’s largest cities, policies and attitudes became less culturally defensive, less overtly racist, and more like the leading cities of the Midwest and West (though cities throughout the country continued to fall short of their stated goals for racial integration, as we explore in our companion report “[The New Geography of Opportunity](#).”)³² In Houston, Dallas, and Atlanta, rising business leaders pushed to start putting the most unsavory aspects of their cities’ racial legacies behind them and build more outward-looking, inclusive cultures – clear cases of choosing modernization and growth.³³ Some, notably including Houston, became leading magnets for enterprising immigrants from throughout the world.³⁴

Favorable environment for commerce

History's most prosperous cities have invariably fostered a favorable environment for commerce. This has always meant striking a sustainable balance between investing in essential public goods like education and physical infrastructure, on the one hand, and maintaining low to moderate tax rates and light-touch regulation on the other. It has also meant openness to international trade.

Leading cities have additionally permitted their built environments to evolve dynamically in response to the fast-changing needs of commerce and culture. Historian Larry Gerkins has described how visitors invariably noticed the unplanned, unfinished, and even chaotic feel of cities like Venice as successive merchant families remade their properties and corrected the mistakes and obsolete land uses of the past.³⁵

Braudel and Kotkin agree that when great commercial cities have gone into decline relative to more energetic rivals, it has usually been the result of a city turning inward, away from external trade as well as from intellectual and cultural openness. Their examples include Venice in the 17th century, Amsterdam in the 18th century, and London in the early decades after the Second World War.³⁶ History records countless additional examples of once-prosperous cities that suffered long-term economic decline after they or their respective national governments turned away from commerce friendly policies: For instance, China's port cities after the Ming Dynasty largely banned international trade in the 15th century, Buenos Aires after the rise of the Peron regime in the 1930s, and Mumbai and Kolkata after India's early post-independence leaders shifted toward socialism and away from international trade.

As for U.S. cities, historians have often noted the remarkably open, entrepreneurial cultures and commerce-friendly policy environments of places that rose to become leading cities. This was true of New York in the early decades of the republic, in fast-growing Midwestern cities throughout the 19th century, and in Los Angeles in the early 20th century.³⁷

By contrast, the Southern states adopted tax and other policies in the decades before the Civil War that actively encouraged slaveholding and opposed the development of industry, trade, and finance. At the federal level, Southern presidents from the Virginia dynasty – including Thomas Jefferson, James Madison, and James Monroe – along with Andrew Jackson and James Polk prioritized the expulsion of Native Americans from Western lands and ensured that as much newly acquired land as possible went to slave-owning oligarchs at deeply concessionary prices. Policies promoting the westward expansion of slavery-based plantation agriculture directly crowded out other land uses, including the emergence of substantial commercial cities.³⁸

High quality of life for residents

Great cities have always flourished in part because large numbers of people wanted to live in them for quality-of-life reasons. For much of history, providing a relatively high quality of life in cities partly meant ensuring a reasonable degree of physical safety. Amsterdam in the 17th century and London in the 18th and 19th centuries attracted businesspeople and artisans from around Europe in part by offering people security against persecution or financial expropriation.³⁹ (At the same time, dense cities also experienced high death rates from contagious diseases until the late 19th century.)

Great commercial cities have also attracted people by offering a wider variety of consumer goods, services, and recreational amenities than other places.⁴⁰ Amsterdam became well known for the range of high-quality household goods available to ordinary people at a time when only elites enjoyed such products in most other parts of Europe.⁴¹ Harvard University economist Edward Glaeser writes in his book, *The Triumph of the City: How Our Greatest Invention Makes Us Richer, Smarter, Greener, Healthier and Happier* that successful cities

have increasingly prospered by becoming “urban theme parks” which people choose to live in because of arts, culture, and outdoor amenities.⁴² Businesses have often followed people into leading cities even when doing so has meant incurring higher labor costs than they would have had elsewhere. They have done this because workers wanted to be there and were more productive as a result of the strong agglomeration economies these cities achieved.

Strong sense of shared community

Leading cities of history have often had exceptionally strong institutions of civil society and a high degree of civic engagement. They have also put a high priority on what Kotkin calls “shared sacred spaces” – places like Venice’s Piazza San Marco – that provided a focus for communal activities and civic identity.⁴³ Seventeenth century Amsterdam was known for its numerous community-building institutions like merchant associations, craft guilds, and philanthropic societies. Philanthropy in Amsterdam emphasized building civic mindedness and incorporating lower-income beneficiaries into the community’s shared value system, according to Simon Schama’s cultural history *The Embarrassment of Riches: An Interpretation of Dutch Culture in the Golden Age*.⁴⁴

Similarly, voluntary associations focused on philanthropy and civic improvement played a pivotal role in strengthening democracy and economic mobility in New England cities, the early 19th century French author Alexis de Tocqueville famously pointed out in his book *Democracy in America*.⁴⁵ Likewise, visitors to booming Midwestern cities in the 19th century frequently noted the widespread civic engagement and burgeoning philanthropic and cultural scenes in these communities.⁴⁶

Just as cities have always faced tradeoffs between investing in public goods and maintaining moderate tax rates, they have had to wrestle with the dilemma that strong civic institutions can also prove insular and unwelcoming to newcomers. The most prosperous cities have found ways, however imperfect, of making their institutions of civil society both reasonably welcoming to newcomers and effective in advancing the needs of the city.⁴⁷ On the other hand, many societies in history – including de Tocqueville’s 19th century France – have actively opposed the emergence of independent civic institutions and maintained relatively unwelcoming approaches to outsiders, a formula that advances social control but undermines economic growth and opportunity.⁴⁸

CONSEQUENCES: LONG-TERM PATTERNS OF RISE AND DECLINE

History shows that when cities successfully pursue the classic formula for prosperity – education, innovation, openness, commerce-friendliness, quality of life, and strong community – the results can be dramatic. Great commercial cities have often offered ordinary people opportunities to earn real wages several times higher than their peers in the surrounding countryside or less prosperous cities.⁴⁹ They have also typically seen a high degree of social fluidity as people move up and down the income ladder.⁵⁰ Along with high living standards and upward mobility for people who have grown up there, these cities have also tended to see explosive population increases as people from other cities and countries pour in, attracted by outsized opportunities.

Great commercial cities have invariably experienced enormous population growth from inbound migration during their heyday and significant shrinkage after their period of preeminence passed. The population of Amsterdam rose tenfold to 200,000 between 1500 and 1650 – making it a vast metropolis by 17th century standards. London grew to 6.7 million by 1900 from 60,000 at the time of Elizabeth I’s accession in 1558.⁵¹

On the other hand, Trier, a significant German commercial center of 60,000 under the Roman Empire, saw its population drop more than 99% by the sixth century as commerce collapsed, Kotkin recounts. The population

of Rome itself declined from more than a million at the time of the Emperor Tiberius in the first century to less than 50,000 six centuries later. Several ancient cities of the Silk Road, including great centers of commerce and learning like Merv and Niya, ceased to exist altogether.⁵²

While relatively prosperous cities tend to offer better-than-average opportunities to ordinary people, there are important exceptions to this pattern. Autocratic regimes often amass considerable wealth in the capital city by extracting resources from the rest of society while holding down incomes for ordinary workers for the benefit of the political elite. Harvard's Glaeser and Alberto Ales of the Hebrew University of Jerusalem have shown that repressive empires tend to build extraordinarily large cities with relatively low real wages in the imperial capital.⁵³

American cities have experienced patterns very similar to those of cities elsewhere in the world. In the 19th century, real wages in booming Northern cities were invariably high, which promoted both upward mobility and capital investment in labor-saving technologies.⁵⁴ New York City became an especially powerful engine of opportunity as hundreds of enterprising artisans became innovative manufacturing entrepreneurs.⁵⁵

Rising Midwestern cities like Pittsburgh and Cincinnati – the great boomtowns of the early 19th century – experienced amazingly rapid economic growth. The value of Pittsburgh's manufacturing output rose eightfold from 1803 to 1815, while the number of merchant businesses in Cincinnati increased more than fivefold over the same period. These cities were exceptional hotbeds of upward mobility. Real wage levels were high, even relative to the large cities of the Northeast. One visitor to Cincinnati wrote that "mechanics here can make their fortune in four or five years."⁵⁶

In the South, meanwhile, the dominant position of the large plantations crowded out small farmers and businesspeople in the decades before the Civil War.⁵⁷ By 1900, after 24 years of stagnation following the federal government's abandonment of Reconstruction, average incomes per capita in the South were only one-quarter the level of those in the Northeast.⁵⁸

People responded rationally to the incentives presented by drastically varying economic conditions and opportunities. Of the more than 5 million immigrants who came to the United States freely between 1820 and 1860, virtually all settled in the Northern states. They understood there was no upside for unskilled White workers competing with uncompensated enslaved people.⁵⁹

Like other high-opportunity cities in history, the cities of the Midwest experienced surging population growth. Chicago's population rocketed from 350 in 1835 to 100,000 in 1860 and 1.7 million by 1900. Detroit's grew from 20,000 in 1850 to 200,000 by 1900, even before the auto industry started to take off, and then quadrupled again by 1921.⁶⁰ As of 1900, the United States had 38 cities with more than 100,000 people, virtually all of them in the Northeast, Midwest, or West Coast. Seventeen were in the Midwest, between the Appalachian Mountains and the Missouri River. The only ones in the 11 Southern states that had seceded in 1860 and 1861 were New Orleans, America's 12th largest city in 1900, and Memphis, the 37th largest.

In the late 19th and early 20th centuries, these patterns repeated themselves in the former Spanish mission towns of the West Coast: San Francisco, Los Angeles, and San Diego. The cities of the Pacific Coast established themselves as the fastest-growing metropolitan areas in the Nation by the late 19th and early 20th centuries, building powerful positions in manufacturing, high value-added services, international trade, and entertainment. The population of Los Angeles rose from under 6,000 in 1870 to 1.2 million in 1930.⁶¹

As we've seen, people moved in large numbers toward opportunity whenever they could. The most dramatic example – and an undertold story in American history – was the Great Migration of more than 6 million Black people from the South to Northern and Western cities between World War I and 1970. Journalist Isabel Wilkerson

tells the story of how migrants fled unspeakably grim conditions, often including legally enforced indentured servitude, to take the cheapest train ride toward cities like New York, Detroit, Los Angeles, and Oakland in her bestseller *The Warmth of Other Suns*.⁶² These migrants were seeking greater freedom, to be sure. But as Glaeser notes, they were also migrating toward relatively high-opportunity cities. Southern sharecroppers could triple their real income by moving to Detroit – a comparatively high-opportunity city even by Northern standards at that time – and taking a job at a Ford Motor plant.⁶³ This massive movement of people demonstrated the powerful draw of relatively high-opportunity places – and the also powerful forces leading people to abandon places of oppression and poor opportunity.

Throughout American history, people have moved in large numbers out of cities that have lost their competitive edge. As Glaeser points out, eight of the cities that ranked among America's top 10 in 1950 lost at least one-sixth of their population by 2010. Six of 1950's top 15 cities – Buffalo, New York; Cleveland; Detroit; New Orleans; Pittsburgh; and St. Louis – lost more than half.⁶⁴

And cities which started the 20th century in a weak position but aggressively pursued growth-oriented policies achieved stunning catch-ups. Average incomes per capita in the South climbed from less than 40% of the national average early in the century to 92% in 1999. Rising New South cities like Atlanta, Houston, and Dallas experienced even greater growth.⁶⁵

Appendix I provides a timeline of selected events we discuss in this report.

Our thumbnail global history has important takeaways for today's America:

- The great commercial cities of the past have nearly always followed a classic formula for success:
 - An emphasis on learning and innovation.
 - A high degree of personal freedom, inclusiveness toward minorities, and openness toward unorthodox ideas.
 - A favorable environment for commerce.
 - A reasonable degree of safety, security, and quality of life for residents.
 - A strong sense of shared community.
- Another factor contributing to the long-term economic dominance of many leading cities has been the tendency of other places in peripheral regions to opt out of catching up, typically because elites had strong interests in preserving the status quo.
- Struggling places can sometimes catch up, given concerted actions and large investment of resources.
- Measured over decades, high-opportunity cities have experienced enormous population growth, while once-great cities that have moved away from the classic formula for urban prosperity have often experienced significant population declines – and sometimes total population collapse.



III. LEADING CITIES OF THE PRESENT: NEW FORCES RESHAPING THE GEOGRAPHY OF OPPORTUNITY IN AMERICA

Powerful tectonic shifts have been reshaping America's economic landscape over the past two decades. The chief driver of the Nation's growing geographic divides in the 21st century is technological change, a variety of studies confirm. Other factors – globalization, changing consumer preferences, public policies, and declining geographic mobility – have all played supporting but still significant roles.

These changes are influencing America's cities in complex ways. But the main result is to reinforce patterns that have governed the rise and decline of cities throughout history. U.S. cities which are positioned to capitalize on these trends are pulling ever further ahead of other places.

NEW FORCES

Technological transformation

Two sweeping technological trends have reshaped America's economic geography and will likely exercise powerful influences on economic mobility in the decades ahead: skill-biased technical progress and rising agglomeration effects. These forces are contributing substantially to the Nation's economic growth. At the same time, they are strengthening some cities while weakening economic mobility elsewhere.

Skill-biased technical progress

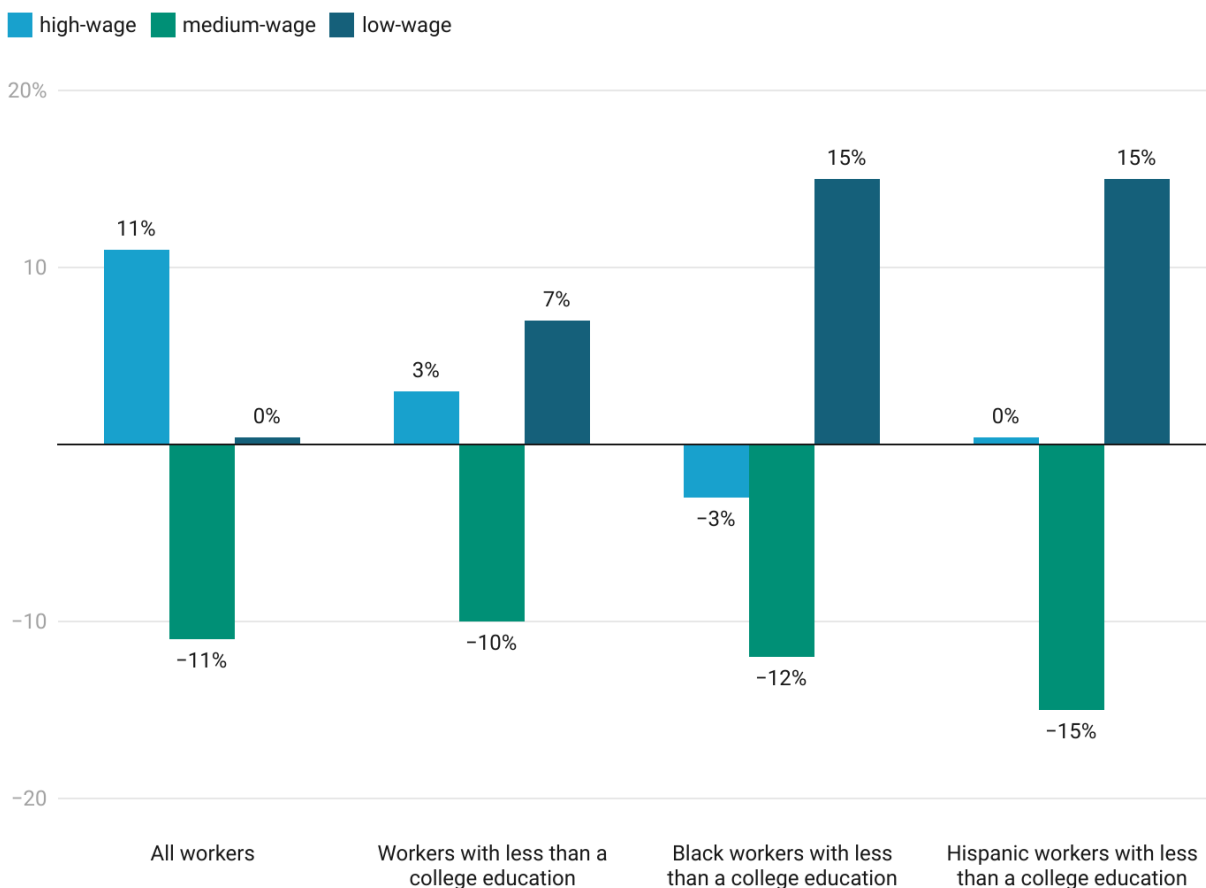
In today's increasingly knowledge-centric economy, technological progress has proved to be "skill-biased." That is, technological change has increased the productivity and income of high-skilled people who use new information technologies effectively much more than lower-skilled people. Skill-biased technical change has been the most powerful driver of productivity differences between workers and growing income inequality, studies by the late Stanford University economist Edward Lazear, Massachusetts Institute of Technology economist David Autor, and others show.⁶⁶

Autor and his colleagues have documented how increasing computerization and automation have spurred demand for highly educated workers with specialized training and cognitive skills and reduced demand for lower- and medium-skilled workers performing routine tasks. Jobs requiring a high level of specialized skills have grown as a share of total employment, as have low-skilled service jobs in industries like restaurants, hotels, and other labor-intensive areas that have seen little automation. Meanwhile, medium-skill jobs – especially in manufacturing – have declined as a share of total employment.⁶⁷

Growing "job polarization," as labor economists call it, has been good news for college-educated people but challenging for less educated Americans and others from vulnerable communities. From 1980 to 2015, the share of noncollege-educated people working in medium-wage job categories declined by 10%, while the share working in low-wage categories rose by 7%. For Black workers without a college degree, the share in middle-wage occupations dropped by 12%, while the share in low-wage occupations rose by 15%. For Hispanics without a college degree, the number in middle-wage job categories fell by 15%, and the share in low-wage occupations increased by 15%.⁶⁸

Figure 1 shows how the mix of high-paying, middle-paying, and low-paying jobs has shifted since 1980 for the overall population, the population of workers without a bachelor's degree, and the populations of Black and Hispanic workers without a bachelor's degree.

Figure 1. Middle class jobs are being replaced by low-wage jobs, especially for Black and Hispanic populations.



Source: David Autor, "The Faltering Escalator of Urban Opportunity," MIT Work of the Future Research Brief, August 2020.

These trends have played out with particular force in large cities, according to Autor. For college-educated workers, the extra income they could earn by working in a large city rather than a smaller place grew considerably between 1980 and 2015. Noncollege-educated workers also earned more income by working in large cities, but the premium they earned declined over the same period.

Skill-biased technological progress and job polarization have had transformational consequences for economic mobility in American cities. On the positive side, they've created bountiful opportunities for college-educated people in the cities that have most effectively capitalized on these trends. Contrary to fears that automation lowers employment, the industries that have seen greatest digitization have also seen greater than average job growth since the 1990s, particularly in large cities.⁶⁹ Also, novel technologies are creating new, growing categories of middle-skill work in occupations like computer support, medical technology, and audio-visual installation, even if the total number of middle-skill jobs has declined, economist Michael Strain of the American Enterprise Institute points out.⁷⁰

On the other hand, these technological disruptions have put growing pressure on middle- and lower-income people, especially less highly educated Americans. It's widely known that the decline in medium-wage manufacturing jobs has taken a heavy toll on people in manufacturing-heavy cities in the Rust Belt and the Southeast. But the shift from middle-skill to low-skill jobs has also caused real incomes to fall for less educated workers, even in major cities like New York and San Francisco – and that's before considering rising local living costs in those metros, Autor reports.⁷¹

These technological trends are likely to continue in the future. Growing automation and artificial intelligence will create strong employment and income growth for college-educated people in approximately 30 large metro areas and another 30 or so niche metros, McKinsey Global Institute predicted in a 2019 report on the future of work. But the middle-skill share of total employment will decline further, the authors said, adding that technological change will disrupt millions of less educated workers and lagging cities will fall further behind.⁷²

Rising agglomeration effects

The forces strengthening today's leading cities in high value-added technology and service industries have grown more powerful in the last four decades.

New industries generally take root in places that have large communities of potential workers with relevant skills, either from formal education or from working in a similar industry, Harvard's Glaeser has shown.⁷³ And companies have been significantly more productive in recent years in U.S. metros with relatively high population shares with a college degree than in less educated metros, studies by economist Enrico Moretti of the University of California at Berkeley confirm.⁷⁴

Local advantages in innovation, furthermore, tend to become self-reinforcing. Inventors who move from a less-innovative to more-innovative place become much more productive, based on Moretti's work.⁷⁵ And people who move to highly educated, innovation-minded places as children are more likely to become successful inventors than other people of similarly high math and science ability, Harvard University economist Raj Chetty and his colleagues show.⁷⁶ Technology "spillovers" from one firm to others are far more likely to take place locally, rather than over longer distances, other research has found.⁷⁷

Another common theme is the surprisingly slow adoption of new technologies in lagging regions and cities – as we saw with the South's failure to adopt the McCormick reaper in the 19th century and the Midwest's slow implementation of new production processes in the mid-20th century. On the whole, lagging cities and firms haven't been very effective at catching up through close copycatting of technology leaders in the 21st century.⁷⁸ One study of European regions found that lagging regions caught up to leading regions only when the technologies they rely on are highly differentiated from those of the leaders, not close imitations. This study suggests that lagging places should focus not on copying the technological strategies of their more prosperous neighbors, but on innovation.⁷⁹

All these trends are elevating the role of research-oriented universities and medical centers – "eds and meds" institutions – in metro-area economies. A metro's knowledge-generating institutions increasingly influence the education and skill levels of its workforce and the competitiveness of its business sector.⁸⁰

Does remote work imply deagglomeration?

The worldwide experiment in remote working during the COVID-19 crisis raises questions about whether long-term trends toward growing geographic agglomeration in technology and service industries might be on the verge of reversing themselves. Most workers and employers seem to believe the remote-work experience has gone better than expected, suggesting a reduced need to assemble knowledge workers in expensive, dense urban offices even after the pandemic ends.⁸¹ Economist Richard Baldwin argues that the "globotics" revolution – globalization plus robotics – will increase firms' ability to break down service-sector production processes and distribute different elements to separate locations. The result could be a geographic dispersal of activities like the one experienced by the manufacturing sector in the decades after 1950.⁸²

At the same time, numerous business leaders are expressing growing concern over the effects of full-time remote work on social cohesion, firm culture, and onboarding of new employees. It seems likely that most technology and service-sector employers will expect their organizations to return to office work at least some of

the time.⁸³ Also, while New York and San Francisco have experienced an outflow of knowledge workers since the start of the COVID-19 crisis, the principal destinations appear to be several dozen cities that had already established themselves as secondary technology centers: places like Raleigh, North Carolina; Austin, Texas; Dallas-Fort Worth; Denver; Boulder, Colorado; Salt Lake City; Boise, Idaho; and Bend, Oregon.⁸⁴ It's clearly premature to suggest that the technology and service sectors are moving toward deagglomeration.

Rising agglomeration effects don't imply the geography of opportunity will necessarily become more concentrated in a small number of cities. The key takeaway is that relatively well positioned cities – which history suggests are cities with strong cultures of education and innovation, welcoming attitudes to outsiders and unorthodox ideas, favorable policy environments, and attractive quality of life – are likely to expand their lead over other places.

Technological change over the past several decades has affected U.S. cities in two key ways:

- Skill-biased technological change has increased income inequality both within and across cities. It has reduced economic mobility for noncollege-educated workers – particularly in large, expensive metro areas – while increasing opportunities for highly educated workers.
- Technological progress has increased the agglomeration economies enjoyed by cities with high educational attainment and technical skill levels, widening their lead over other cities.

Globalization

International trade and globalization have played at most a small role in increasing income inequality in the United States, considerably smaller than skill-biased technological change, many studies confirm.⁸⁵

But globalization has had negative effects on certain cities. This is especially true in regions such as the Midwest and Southeast, where manufacturing-oriented metros have also been under pressure from technological change. Surging Chinese imports after China joined the World Trade Organization in 2001 resulted in net job losses and lower wage levels in a group of especially vulnerable metro areas, economists David Autor, David Dorn, and Gordon Hanson have shown.⁸⁶

Globalization has also strengthened the position of a small number of large, globally connected finance and business hubs that play outsized roles in coordinating complex activities across international lines, according to authors Bruce Katz and Jeremy Nowak.⁸⁷ Clear winners include the 10 metro areas that rank highest for hosting Fortune 500 company head offices (as measured by total revenue of the firms based in each metro): New York; Dallas-Fort Worth; Chicago; San Jose, California; Seattle; Fayetteville-Springdale-Rogers, Arkansas; Minneapolis-St. Paul; San Francisco; Washington; and Houston.⁸⁸

Growing international commerce has always strengthened the position of leading port cities, and 21st century globalization has almost surely had the same effect on U.S. metros. Significant beneficiaries include America's leading ports – New York, Los Angeles-Long Beach, Houston, the San Francisco Bay area, and Seattle – as well as cities with growing inland ports like Chicago; Columbus, Ohio; Atlanta; Greenville, South Carolina; Dallas-Fort Worth, and Phoenix.⁸⁹

While globalization has played at most a small role in exacerbating income inequality, it has weakened the position of many manufacturing-oriented metros in the Midwest and Southeast and strengthened the position of large metros that host global corporate head offices and booming port facilities.

Evolving preferences

Incomes have grown significantly for most Americans over the last several decades. As people have become wealthier, their spending patterns have shifted. Demand for most categories of manufactured goods has not grown commensurately, which has weakened the local economies of cities that specialized in manufacturing.

Instead, demand has steadily grown for experiences of all kinds – dining out, entertainment, travel, and more. It has also increased for education, health care, senior living, and financial services. Above all, demand has grown for consumer digital services. These trends have lifted the economies of technology centers like San Francisco and Seattle, finance centers like New York City and Dallas, entertainment centers like Los Angeles, medical technology centers like Minneapolis, and college towns with major medical centers, and tourism and retirement destinations.

With greater resources, people have put a higher value on the quality-of-life amenities that some cities can offer. One study suggests that some cities have created a virtuous circle in which their urban amenities attract high-income people and thereby raise more tax revenue than most other places, which these cities can then invest in still more amenities.⁹⁰ Another study finds that employers also prioritize cultural institutions, recreational amenities, environmental quality, good schools, and public safety in choosing business locations, since they recognize that they are competing for highly skilled talent, and talented people increasingly choose where to live based on these considerations.⁹¹

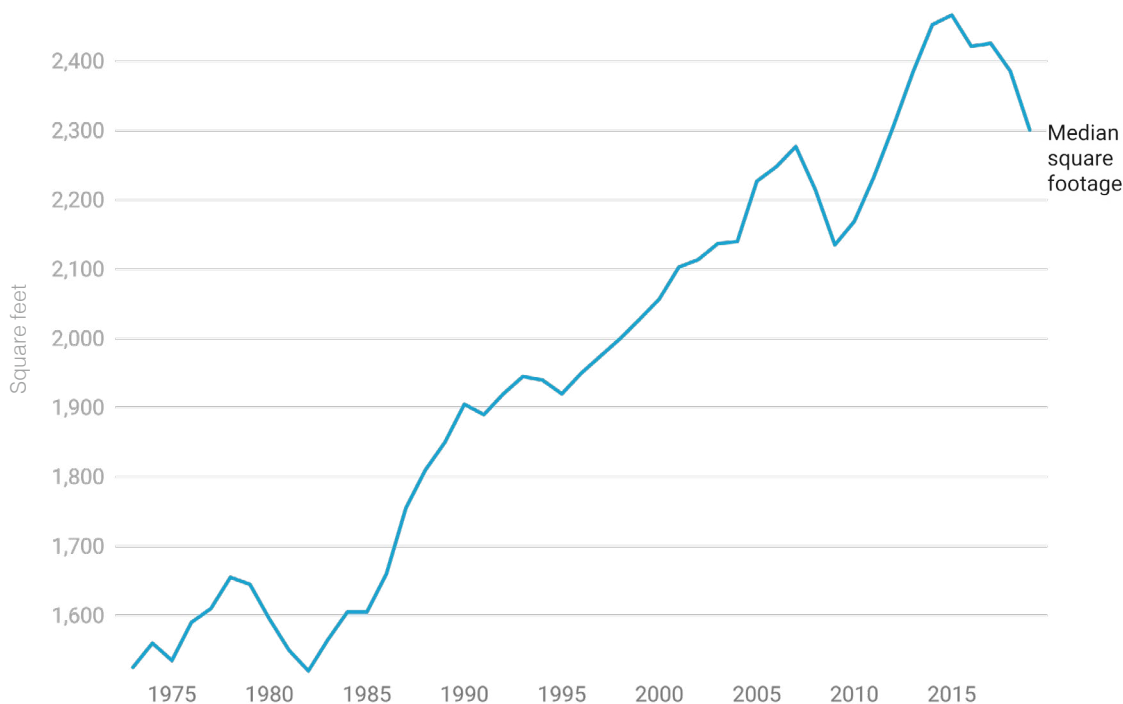
The sudden increase in remote working during the COVID-19 pandemic strengthened the position of high quality-of-life cities even further, since growing numbers of knowledge workers can choose to live where they want without regard for traditional workplace locations, urban scholars Richard Florida and Adam Ozimek point out.⁹²

People also increasingly value living in cities that offer a high degree of cultural openness, diversity, and inclusiveness. Cities ranking highly on Richard Florida's "bohemian index" – measuring the prevalence of artists, musicians, and other creative professionals in a city – and other indices of human diversity also score well when it comes to attracting highly educated people and creating high-paying technology jobs.⁹³

As they've grown better off, Americans have also demanded larger homes. New houses and apartments have grown steadily larger in core cities and suburbs alike, building on trends that have been underway since the early 19th century. This supports the idea that new real estate development in desirable locations for higher- and middle-income families takes up more space per person that it did in the past. The average population density in built-up urban areas has declined continuously in almost all the world's large cities over the last 100 years, including over the last two decades, New York University urban planning expert Shlomo Angel and his colleagues show.⁹⁴ Remarkably, the population density of Manhattan has declined by roughly half over the last century, even as apartment towers have become much taller – reflecting the far larger units that high-income New Yorkers prize.⁹⁵

The COVID-19 experience seems to have strengthened preferences for larger homes and lower density among Americans across the income spectrum. Larger homes mean that new development potentially crowds out more low-income families than in the past. These preference shifts also add to home prices, particularly in cities proven to be popular destinations for remote workers, fueling greater segregation. Figure 2 shows the increase in the average size of newly built detached single-family homes in the United States over time.

Figure 2. The size of new homes has increased by 50% since 1973



Source: U.S. Census Bureau.

Higher-income Americans are also increasingly willing to pay up to save commuting time. Higher-income professionals' greater emphasis on holding down commuting times helps explain their growing tendency to live close to centrally located job centers and the resulting neighborhood gentrification in some large cities, Federal Reserve Bank of Dallas economist Yichen Su showed in a 2020 study.⁹⁶ Average commuting times have *declined* somewhat over the last several decades for Americans living in many high-growth suburban cities, since a growing share of these people work near home rather than in the core city, other studies show.⁹⁷

At the same time, growing competition for well-located space in both core and suburban cities has forced many lower-income people to live in neighborhoods removed from job centers. Disadvantageous locations – and the fact that most lower-skill jobs can't be done remotely from home – increasingly force these Americans to choose between extreme commutes and subpar jobs in low-opportunity areas.

Most profoundly, higher-income people increasingly prefer to associate with other high-income people when it comes to where they live, where their children go to school, and even whom they marry.⁹⁸ The result of this self sorting is rising segregation along income lines in America's cities, fewer mixed-income neighborhoods, and growing concentrations of poverty.

Evolving preferences have had two significant consequences for opportunity and economic mobility in America's cities:

- Shifting consumer demand patterns have continued to strengthen the position of metro areas specialized in consumer digital services, entertainment, finance, health care, and education and weaken traditional manufacturing-focused metros. Growing demand for quality-of-life amenities as well as for open, diverse, inclusive urban environments is drawing highly skilled people to metros that score well for these attributes, contributing to prosperity and opportunity in these places.
- Rising demand for physical space, growing emphasis on holding down commuting times, and sorting among higher-income people are exacerbating segregation along income lines in almost all U.S. metro areas. Rising income segregation is erecting new barriers to economic mobility for people in disadvantaged areas.

State and local policies

Policy differences across cities contribute in countless ways to America’s bifurcated opportunity landscape. Consider three examples: new business policies, land-use policies, and taxes.

U.S. cities vary tremendously in how welcoming they are toward new businesses, as we explored in our [first report](#). It takes five to 10 times as many days on average to navigate city rules in highly restrictive San Francisco and San Jose than in cities with relatively little red tape, based on a 2019 Arizona State University [study](#). Large cities in California, New York, and Pennsylvania mostly rank in the bottom third of U.S. metros on ASU’s index and have experienced large outmigration in many cases over the last two decades. Cities ranking in the highest third for ease of launching a company – places like top-ranked Oklahoma City; Houston; Atlanta; Nashville, Tennessee; Boise, Idaho; Salt Lake City; Sioux Falls, South Dakota; and Fargo, North Dakota – have also seen considerable net domestic in-migration since 2000.⁹⁹

Some cities have far more restrictive land-use policies and other hurdles to housing development than others. More restrictive cities have comparatively low housing construction levels and high housing prices relative to local incomes, studies by Glaeser and other economists confirm.¹⁰⁰ In metros with the tightest land-use rules, the ratio of median home price to median household income is as much as four times higher than in the least restrictive metros, according to Wendell Cox of the research group Demographia and the Urban Reform Institute. What’s more, the gap in home price-to-income ratios between tighter and looser metros has widened sharply over the last two decades.¹⁰¹

Ill-advised policies to choke off suburban areas through “urban growth boundaries” have contributed to affordability crises in cities throughout the world, separate studies by Australian real estate expert Ross Elliott, British author James Heartfield, and Cox show.¹⁰² Other studies confirm that strict land-use rules have directly contributed to greater housing market segregation in U.S. cities.¹⁰³

As for taxes, total state and local tax collections per capita are more than twice as steep in high-tax jurisdictions like New York, Connecticut, and the District of Columbia as in lower-tax Sun Belt, Plains, and Mountain states, according to 2017 Tax Foundation data.¹⁰⁴ And differences in state and local tax rates have large effects on people’s decisions on where to live, studies by UC Berkeley’s Moretti, Stanford University economist Joshua Rauh, and others show. States and cities with relatively low tax rates have seen an influx of businesses as well as “star” scientists in recent decades.¹⁰⁵ Limitations on the state and local tax deduction in the federal Tax Cuts and Jobs Act of 2017 – which raised the effective rate in high-tax states and localities more than in lower-tax places – have caused additional migration to lower-tax states during the years that they have been in effect.¹⁰⁶

The types of taxes on which cities rely also influence economic outcomes. Economists have long argued that taxes on real property, especially land, are likely to distort people’s location decisions less than other taxes because physical property is difficult or impossible to move. Cities like Houston, Dallas, and Jacksonville, Florida, that rely heavily on property taxes have tended to score higher for net domestic in-migration rates than cities more dependent on income taxes and other revenue sources.¹⁰⁷

More generally, researchers at the SMU Bridwell Institute for Economic Freedom show that metro-area scores on the Institute’s composite measure of economic freedom – capturing taxes, government size, and labor market flexibility – have been highly predictive of domestic migration trends over the last two decades.¹⁰⁸

State and local policies toward new business, land use, and taxes vary enormously across the United States. Welcoming policies toward new business creation and new housing development as well as low to moderate tax burdens are contributing to the rise of many cities of opportunity and attracting large domestic in-migration from metro areas with lower levels of economic freedom.

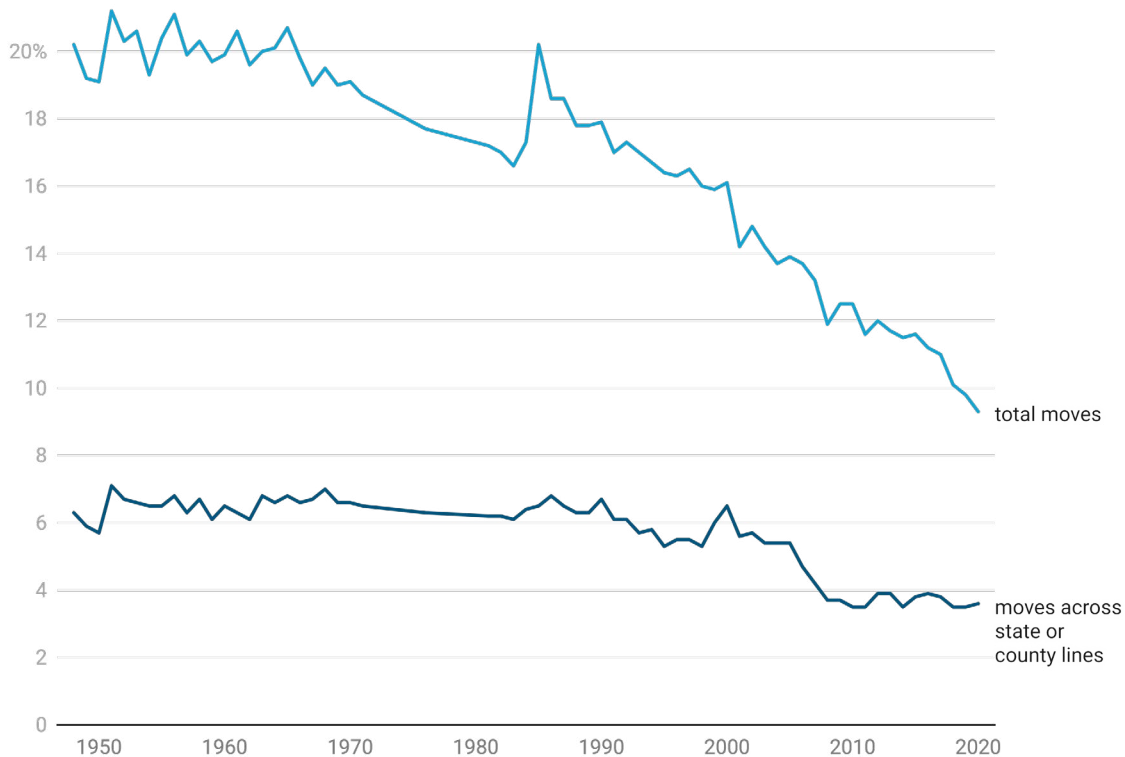
Declining geographic mobility

People have historically tended to move toward opportunity. Mass movements to thriving cities have always represented one of humankind's most powerful avenues of upward mobility.¹⁰⁹ Migration to thriving areas from struggling ones has also provided a vital counterbalance to forces that otherwise promote geographic disparities by rebalancing labor supply and demand in both labor-starved booming cities and lagging areas with abundant labor and low wages.

But geographic mobility in the United States has been declining for the last several decades. About 3.6% of Americans moved between counties or states in 2017, down from 6.1% in 1990, according to data in McKinsey's 2019 report.¹¹⁰ The overall share of the population moving residences was lower in 2018 than in any year since the U.S. Census started tracking this data in 1948, urban scholar Florida shows.¹¹¹

Figure 3 shows the long-term decline in the overall share of Americans moving to another home each year and those moving across county or state lines.

Figure 3. The percentage of households which moved within the previous year is on the decline.



Source: U.S. Census Bureau.

When people in rural areas or struggling metro areas move these days, it's usually to other places with a similar profile rather than higher-opportunity metros, McKinsey reports.¹¹² Americans with lower educational attainment levels, moreover, are considerably less likely to make long-distance moves than highly educated people.¹¹³

Perhaps surprisingly, declining geographic mobility helps to explain the widely reported population shifts among cities during the COVID-19 pandemic, a study from the Federal Reserve Bank of Cleveland shows. Migration into places like New York, Los Angeles, and San Francisco is declining at a faster pace than outmigration from these metros, and this dropoff in inbound migration explains most of the reported shrinkage of these cities.¹¹⁴

Another trend closely associated with declining geographic mobility is the falling rate of job switching among American workers. The share of people who change jobs voluntarily each year has dropped by 7% since 2000. This trend likely translates into declining upward mobility, since people have historically achieved almost half of their lifetime wage growth through job switches.¹¹⁵

Most unemployed, lower-skilled Americans are unwilling or unable to move to another state or to incur an hourlong daily commute, even for an attractive job, surveys show.¹¹⁶ This has an important takeaway for economic mobility: The opportunities realistically available to most people depend not just on the city they live in, but their location within their city.

Why has geographic mobility receded in the United States, particularly for Americans with lower educational attainment levels? The most important reason is high housing prices in thriving cities, according to a study by economists Peter Ganong and Daniel Shoag,¹¹⁷ “Affordability” was the No. 1 answer people surveyed by Prudential Financial gave when asked why they chose to live where they did, topping “job prospects” and “school quality.”¹¹⁸

A range of factors contribute to lower geographic mobility, recent studies by Opportunity Insights, McKinsey, the Brookings Institution, the Council on Foreign Relations, and the Federal Reserve Bank of New York indicate:

- High housing prices.
- Low real wages for less educated workers.
- Regulatory obstacles to transferring occupational licenses across state lines.
- Dependence on extended family for child care.
- Poor information sources in the housing search process.
- Inadequate funds to pay for a move.
- Unwillingness to move to places with different political and cultural attitudes.
- Growing emotional attachment to one’s hometown, reflecting a “yearning for rootedness.”¹¹⁹

Declining geographic mobility is slowing the growth of high-opportunity cities and the shrinkage of lower-opportunity cities and other struggling areas. Prohibitive housing costs and falling real incomes for less educated people in some wealthy metro areas have unambiguously negative consequences for economic mobility. The trend may also reflect shifting preferences for rootedness.

CONSEQUENCES: NEW TRENDS IN THE ECONOMIC GEOGRAPHY OF THE UNITED STATES

Well positioned cities pull further ahead

All these trends are contributing to a growing tendency for well-positioned metro areas to expand their lead over other metros and rural areas in terms of prosperity and economic opportunity.

Several dozen metros are far outperforming most others in education levels of residents, concentrations of high-skilled jobs in technology and other fast-growing sectors, and positions in complex cross-border activities. For example, metros that had the highest shares of the population with a bachelor’s degree or higher 30 years ago have built their lead over less educated metros. Today, the average population share with a college degree for the 60 best-educated metros is approximately two-and-a-half times higher than the average for the 60 metros with lowest educational attainment levels.¹²⁰ And the gaps in income levels between high- and low-education

metros – already large in the 1960s and 1970s – have grown much more pronounced in recent decades.¹²¹

Some cities are also enjoying virtuous cycles in which in-migration of diverse, highly skilled people makes them more culturally interesting to others, attracting further in-migration, while others are experiencing vicious cycles of outmigration.

Not only are some metros much better positioned than others to capitalize on 21st century developments, these diverging destinies have also driven a geographic “sorting” of people. Highly educated people have gravitated toward exceptionally productive cities benefiting from these trends, while less educated people – unable to compete for increasingly expensive real estate in relatively wealthy cities – have gravitated to less productive places.¹²² Meanwhile, lower overall geographic mobility means that there is less rebalancing of labor supply and demand across cities, a force that has historically counteracted tendencies toward growing geographic disparities.

As a first pass at accounting for why some metros are pulling ahead of others on measures of economic mobility, we’ve conducted a series of simple regressions analyzing factors associated with variation across America’s 382 metro areas. Our quantitative analysis confirms that factors historically important to the emergence of prosperous cities of opportunity continue to play a large role in shaping the opportunity landscape today.

Our analysis points to a number of striking relationships:

- **Median incomes:** Four variables – population share with a bachelor’s degree or higher, foreign-born population share, the social capital measure developed by the U.S. Congress Joint Economic Committee (JEC), and metro-area population – are positively associated with 2018 median household incomes in metro areas. Variation in these four metrics collectively accounts for more than half the disparities in income levels across metros. Population shares with a college degree and foreign-born population percentages have significant positive effects after controlling for metro-area size, which means their effects are not just due to the tendency of larger metros to have relatively high college shares and foreign-born percentages.
- **Standards of living:** College shares, foreign-born population percentages, social capital, and population size are positively associated with 2018 metro-area standards of living.* Additionally, low home price-to-income ratios, high housing permits per resident, and strong scores on the SMU Bridwell Institute economic freedom index predict higher living standards.**
- **A sweet spot for metro-area size?** We can tease out whether metro-area population size has nonlinear effects on income levels and standards of living by including the square of population as well as population itself in our regression analysis. It turns out that larger size is only associated with higher median income and living standards up to a point. The effect of larger size on income levels and living standards becomes very weak once a metro area is of sufficient size to be among America’s 20 largest and turns negative past about 9 million – the size of the Chicago metro. These results suggest there may be a sweet spot metro-area size for maximizing the productivity benefits from agglomeration in contemporary America, in the range of 3 million to 9 million residents.***
- **Upward mobility:** Our analysis also shows that foreign-born population percentages and social capital are positively associated with the Opportunity Insights measure of upward mobility, holding metro-area population constant. Interestingly, college-educated population shares are positively correlated with

* We report a similar calculation in our first report. We’ve refined the method in this report, incorporating home values into local cost-of-living adjustments for each metro. We draw on a method developed by Wendell Cox and the Urban Reform Institute (Urban Reform Institute, “2020 Standard of Living Index,” available at: <https://urbanreforminstitute.org/2020/05/2020-standard-of-living-index/>). Refining the method slightly changes our list of cities of opportunity. We provide our lists in appendices to our [first report](#), this report, and the [companion report](#) to this report.

** The Bridwell Institute economic freedom index is a composite score combining measures of tax rates, government size, and labor market flexibility.

*** Based on the regression coefficients we show in the online data appendix, the population size at which a metro area’s living standards reach their maximum, all else equal, is about 8.8 million. The population size at which an additional million people starts to cause less than a 2% increase in living standards is approximately 2.8 million.

the Opportunity Insights upward mobility measure (0.26), but the effect of college shares on the upward mobility measure becomes insignificant once we control for social capital, which is highly predictive of education levels.

- **Net domestic migration rates:** The JEC social capital measure, the SMU Bridwell Institute economic freedom measure, and housing permits per resident are positively associated with net inbound migration. Variation in these measures collectively accounts for a majority of disparities in domestic migration across metros.
- **Accounting for differences in social capital:** Median income levels strongly predict social capital (as proxied by the JEC measure), which is unsurprising since wealthier places can generally afford more social capital-generating institutions and activities. But holding median income constant, higher homeownership rates and stronger research universities also predict stronger social capital. On the other hand, higher foreign-born population percentages predict *lower* social capital, all else being equal. This suggests that it's still more difficult to build strong social cohesion in more diverse metro areas than in more homogeneous places – an ongoing challenge for American society.

Clearly, correlation doesn't prove causality. It's likely that causality runs in all directions among the variables we discuss here. But these results are, at least, consistent with the main arguments we make in this report.

We present all regression results cited in this section in the [online data appendix](#).

A widening geography of opportunity

During the decade before the COVID-19 crisis, a common narrative centered on the growing lead of a handful of “star” metropolitan areas, particularly in the Northeast and on the West Coast, over everywhere else.¹²³ If there's one key takeaway from this report about how the economic geography of America is changing, it's that this narrative is incomplete. The most important story in recent years has been the rise of some – though hardly all – less celebrated cities, sometimes in unexpected places.

Consider how the leading star metros stack up relative to other U.S. metros on key measures of economic mobility, taking averages for the eight metros among America's 15 largest that are most commonly cited – New York, Los Angeles, Chicago, Washington, Miami, Boston, San Francisco, and Seattle:

- **Net domestic migration rates:** On average, the eight star metros experienced net outbound migration of 2.4% of their 2010 population between 2010 and 2018. Early evidence suggests that all but Miami have seen accelerating net outflows during the COVID-19 crisis.¹²⁴ Total population in these eight metro areas grew 5.0% from 2010 to 2018, benefiting from strong immigration into each metro. But the other 92 metro areas that make up America's 100 largest collectively grew 9.6% over the same period, while metropolitan America as a whole grew 7.6%.
- **Standards of living:** On average, the star metros had median living standards 7.4% above the average for all metros in 2018, hardly a commanding advantage. Thirty-five of the other 92 metros in the top 100 had higher living standards than the average level for the eight stars.
- **Upward mobility:** The eight star metros, on average, score approximately 9% above the average for all metros on the Opportunity Insights measure of upward mobility. Fourteen other top 100 metros performed better than the star-metro average, including Minneapolis-St. Paul; Salt Lake City; Des Moines, Iowa; Allentown-Bethlehem, Pennsylvania; and Albany, New York.

The star city narrative is accurate in some important respects. The eight star metros are for the most part highly educated, productive places. They have benefited enormously from the technological trends we describe in this report as well as from globalization and from their reputations as exciting, diverse cities. But a growing number

of smaller cities score similarly high on the same measures – and better on other significant factors like housing affordability and social capital.

How do we reconcile this conclusion with the trend toward growing agglomeration effects? Agglomeration economies are indeed becoming more important, but more metros are reaching sufficient scale in high-growth industries to achieve relatively good agglomeration benefits. For instance, more and more cities are creating thriving startup ecosystems.

The list of highly educated metros with outsized population shares in technology-related industries is longer than people often assume. According to data from the Information Technology Research Council, it includes the technology capitals of San Francisco, San Jose, Seattle, Washington, and Boston, plus the secondary tech centers of Austin, Denver, and Portland, Oregon. But it also includes Philadelphia; Pittsburgh; Indianapolis; Madison, Wisconsin; Raleigh; Charlotte, North Carolina; Huntsville, Alabama; Dallas-Fort Worth; Minneapolis-St. Paul; Fort Collins, Colorado; Boise; Salt Lake City; Provo, Utah; Bend; and other smaller metros.¹²⁵

A number of metros that we identify as cities of opportunity in our first report tend to have strong reputations for outdoor amenities and other quality-of-life features that increasingly figure in people’s decisions about where to live. Many are also beneficiaries of the growing tendency of people to move to cities with low to moderate taxation, relatively affordable housing prices, and favorable environments for small business.

Another trend contributing to a broader geography of opportunity is the decline in geographic mobility. This has had complex consequences. On the one hand, at least some thriving, high-opportunity cities have likely grown more slowly than they would have if more Americans were geographically mobile, which has contributed to declining economic mobility.

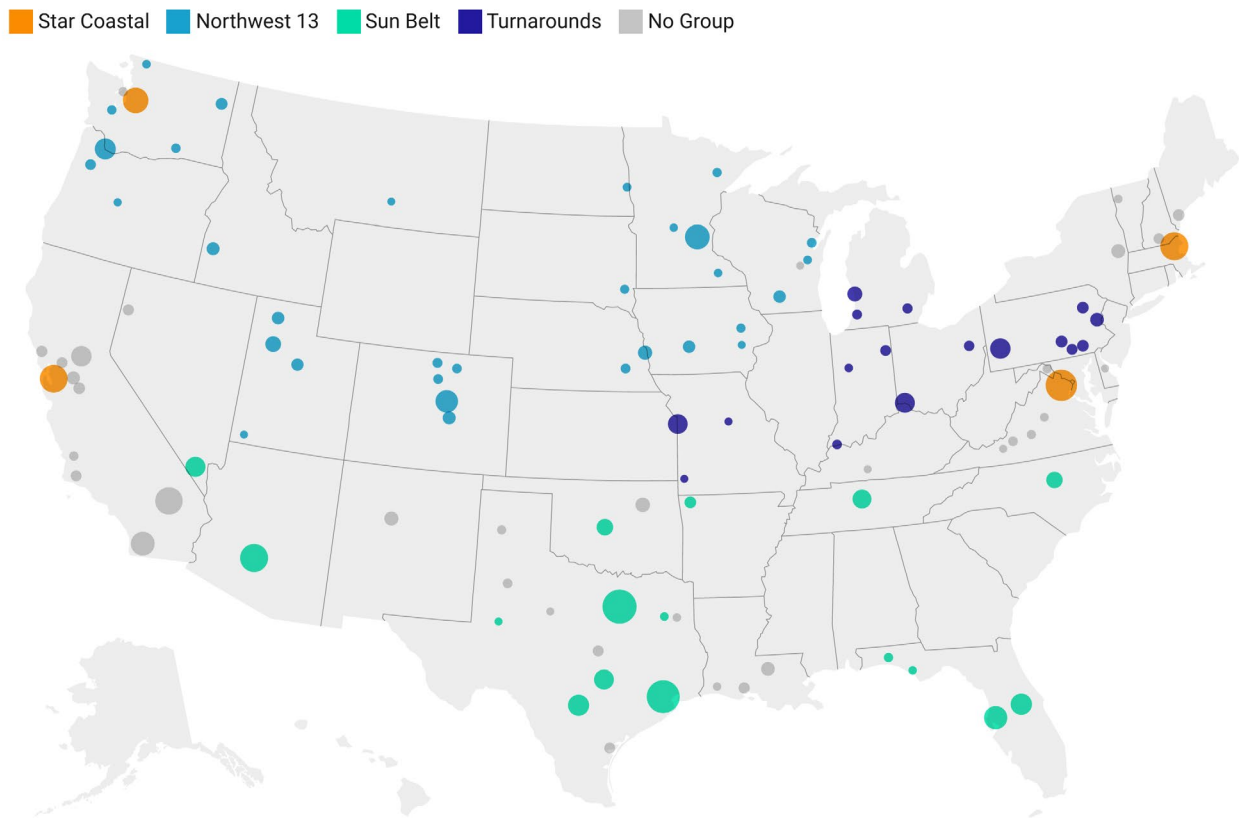
On the other hand, many Americans may judge that, all things considered, they and their families enjoy greater well-being living in their hometowns than they would in other cities with higher income levels. It may be that growth in U.S. living standards has allowed Americans to prioritize rootedness more than earlier generations could afford to do.¹²⁶ Greater rootedness may contribute to social capital in communities, promoting economic mobility for young people who grow up there. States where young people disproportionately tend to stay into adulthood include Minnesota, Wisconsin, Iowa, Nebraska, and Idaho – home to some of America’s best-performing metros for social capital and economic mobility – though they also include lower-income states like Louisiana, Mississippi, Alabama, and West Virginia.¹²⁷

The widening geography of opportunity has an important implication: Cities don’t need to be dominant centers for technology or finance to become high-opportunity areas.

Figure 4 shows the 64 of America’s 250 largest metro areas that we’ve identified as “cities of opportunity” based on living standards, net domestic migration rates, and the Opportunity Insights measure of upward mobility. We also include 39 metros that rank as intermediate performers based on these measures.*

* In “[Cities and Opportunity in 21st Century America](#),” we list 61 metro areas as cities of opportunity. We have since refined our measure of living standards. We restrict our attention to America’s 250 largest metro areas in this analysis in the interest of space. We explain our updated quantitative methods in the [companion report](#).

Figure 4. *Cities of Opportunity*



The rise of urbanizing suburban cities

The long-term shifts we describe in this report are contributing to two significant geographic trends *within* America’s metropolitan areas, in both cases reinforcing trends that have been underway for more than a century. The first is the rapid rise of what we call “urbanizing suburban cities” in large metro areas throughout the country.

Human settlements have always spread out as far around job centers as the technology of the day would allow. Cities like London, Amsterdam, New York, and Pittsburgh had thriving suburbs as early as the 1830s. In America, growth in suburban areas has far outpaced that of core cities continuously since the emergence of mass automobile ownership in the 1920s.¹²⁸

In the 1960s and 1970s, White flight to racially homogeneous bedroom communities arguably dominated U.S. suburbanization. But by the 1980s and 1990s, workplaces, cultural amenities, and virtually all features of traditional core cities were moving to successful suburbs as fast as families were, as author Joel Garreau showed in his 1991 book *Edge City: Life on the New Frontier*. As he put it, this shift entailed moving “the essence of urbanism – our jobs – out to where most of us have lived and shopped for two generations.”¹²⁹ The ratio of jobs to resident workers rose between 1995 and 2005 in suburban areas throughout the world while falling in almost all core cities, a comprehensive study by transportation expert Alan Pisarski found.¹³⁰

High-growth suburbs also became more ethnically diverse starting in the 1980s. Black, Hispanic, and Asian American populations grew far faster than White populations from the 1980s to the 2010s in suburban America. In *Edge City*, Garreau describes the mass movement of Black families into Atlanta-area suburbs like Alpharetta

and Sandy Springs. From the 1980s on, these places became magnets for middle-class Black Americans moving from the city of Atlanta or from Northern cities. Black people featured in Garreau's book pointed to the same factors motivating their location choices that White people cited: job opportunities, good schools, personal safety, lifestyle amenities, and spacious, affordable homes. By the 1990s, 40% of Black people in the Atlanta metro area lived in suburban cities, with one third living in majority-White neighborhoods. Immigrant populations, meanwhile, grew much faster in most suburban areas than in neighboring core cities.¹³¹

Key 21st century trends are powerfully reinforcing these tendencies. Growing demand among middle- to higher-income people for good schools, safety, quality-of-life amenities, and spacious homes at affordable prices is leading more and more people to booming suburban cities. As more employers choose to locate facilities in urbanizing suburbs, more people are settling in suburban locations to hold down commuting times as well. In many metro areas, land-use policies in suburban cities are more growth friendly than those of nearby core cities, resulting in much greater housing affordability. Most recently, the surge in remote working during the COVID-19 pandemic is increasing the attraction of suburban living even for people whose physical workplace is in a traditional downtown setting in the core city.

America's urbanizing suburbs are becoming increasingly powerful engines of economic mobility for the large, diverse communities that live there. At the same time, the rapid growth of many of these cities has had mixed consequences for people living elsewhere in the same metropolitan areas, as we explore in our companion report, "[The New Geography of Opportunity](#)."

Bifurcation of core cities into have and have-not areas

Another pervasive trend within metro areas is growing bifurcation into have and have-not areas inside core cities. In this case, as well, new 21st century forces are reinforcing decades-old trends.

Cities throughout the United States started becoming dramatically more segregated, particularly along racial lines, after 1900, Douglas Massey and Nancy Denton document in their book *American Apartheid*. Cities from Baltimore to Dallas imposed explicit racial housing segregation policies starting in the 1910s. Segregation then grew continuously through the 1960s, based on Massey and Denton's quantitative measures.¹³²

Starting in the 1930s, the federal government as well as state and local governments beyond the South engaged more actively than before in furthering the racial segregation of cities and constraining economic mobility for Blacks, Hispanics, and Asian Americans. New Deal agencies explicitly undertook to create racially segregated neighborhood patterns, as scholar Richard Rothstein recounts in *The Color of Law: A Forgotten History of How Our Government Segregated America*. The Franklin D. Roosevelt Administration's Home Owners' Loan Corporation – the original agent of federal involvement in housing finance – drew up color-coded city maps, literally inventing the concept of redlining, and encouraged banks to avoid Black neighborhoods. The new Federal Housing Agency, the first federal entity to insure private mortgages, insisted in its 1930s manual that properties and neighborhoods "must continue to be occupied by the same social and racial classes."^{133*}

The federally sponsored boom in White homeownership in segregated neighborhoods and suburbs from the 1930s to the 1970s represented a massive state-subsidized exercise in middle-class wealth creation – and

* From the 1930s to 1960s, federal housing resources went almost entirely to all-White neighborhoods, increasingly in segregated suburbs. The Public Works Administration, another New Deal agency, built single-race apartment developments in numerous cities, in some cases establishing segregation in neighborhoods that had previously been relatively integrated. In the 1940s and 1950s, the Federal Housing Agency endorsed the code of ethics of the National Association of Real Estate Boards, which prohibited realtors from contributing to the racial integration of neighborhoods. Local leaders like the longtime mayor of Dearborn, Michigan, vowed to keep White suburbs and neighborhoods "lily white." (Rothstein, *The Color of Law: A Forgotten History of How Our Government Segregated America*, Liveright; Tanner, *Inclusive Economy*, p. 95; and P. Moskowitz (2018), *How to Kill a City: Gentrification, Inequality, and the Fight for the Neighborhood*, Bold Type Books, p. 153.)

one which explicitly excluded Black Americans, Dedrick Asante-Muhammad, an executive at the National Community Reinvestment Coalition and an authority on racial wealth disparities, and his colleagues point out.¹³⁴ And, having consigned Black citizens to segregated Black neighborhoods, public authorities took further steps to impede wealth accumulation in those communities.

Because Roosevelt's new Social Security law excluded domestic workers and farmworkers from the system for its first several decades, Black households received some \$143 billion less in benefits than they otherwise would have, measured in 2016 dollars. Most state governments discriminated against Black veterans in their implementation of GI Bill funding for education, homeownership, and business creation. Local governments systematically underinvested in infrastructure in Black neighborhoods and blessed efforts to exclude Black people from higher-paying professions.¹³⁵

Despite the many disadvantages and indignities they faced, most Black neighborhoods in Northern and Western cities were relatively healthy communities in many respects, with strong upward mobility and low crime rates, for the first two generations after the Great Migration began. They benefited from strong social cohesion and a growing middle class, according to landmark studies by the eminent Harvard University sociologist William Julius Wilson.¹³⁶

But the passage of time took its toll. In neighborhoods with poor amenities, underperforming schools, and deteriorating infrastructure, rational homeowners had little reason to invest. By the 1980s, Wilson writes, middle-class Black families who could afford to leave their urban neighborhoods often did. Meanwhile, core cities suffered from declining public-sector services as White flight to the suburbs destabilized their finances. Finally, federally sponsored programs to raze slums, relocate poor Black residents to public housing projects, and construct highways connecting downtowns to suburbs destroyed many functioning Black neighborhoods.¹³⁷

Studies show that between 1970 and 2010, housing segregation on racial lines modestly declined, in significant part due to the Civil Rights Act of 1964 and the Fair Housing Act of 1968. But segregation of people with different education and income levels increased over the same period, reflecting growing income inequality and shifting preferences.¹³⁸ One result was a decline in the share of lower- to moderate-income families living in mixed-income neighborhoods and a rise in the share living in areas of concentrated poverty.¹³⁹

Historical segregation on both race and income lines has left lasting imprints on America's cities in two ways. First, it has shaped the geographic landscape of cities, as today's economic geography closely follows the redlined maps of the past. Second, it has played a central role in creating today's racial disparities in wealth levels, since it effectively prevented many Black families from building generational wealth for most of the 20th century.

Once again, the new trends we describe in this report are reinforcing historical patterns of segregation. Wealth creation in large, thriving cities is fueling increasingly intense competition for scarce physical space in high-opportunity locations. Growing income inequality – powered by skill-biased technological change – means high-income people are more likely than ever to prevail in this competition.¹⁴⁰ Consumer preferences emphasizing larger homes, shorter commuting times, and self-sorting by education and income level are also driving increased segregation along income lines.

The rise of large metro areas with high degrees of segregation has had an important consequence. It means that a metro area, more than before, can essentially separate into two separate places, with one offering great opportunities to build human capital, earn high real wages, start businesses, enjoy appreciating home values, and provide good opportunities for one's children. The other place might become so physically separated and

culturally distinct from its more prosperous neighbor that it may as well be separated by an ocean. Both inner city neighborhoods abandoned in the late 20th century and new areas of concentrated poverty in the suburbs have turned into the very opposite of engines of upward mobility.

The profound shifts we describe in this report are driving deep changes in the geography of opportunity:

- Several dozen metropolitan areas that are well positioned for these shifts are pulling further ahead of other metros and rural areas in education levels, incomes, and other measures of economic mobility.
- Numerous metro areas are emerging as cities of opportunity, sometimes in places that don't get a lot of media attention. While the widely celebrated "star" metros of the coasts are in some cases performing very well as engines of economic mobility, dozens of smaller metros are performing just as well – and with greater affordability.
- "Urbanizing suburban cities" are growing rapidly in many large metro areas throughout the United States, creating new high-opportunity places for increasingly diverse populations but with complex effects for other places.
- Rising income inequality and changing preferences are fueling increased segregation on income lines, undermining opportunity and economic mobility for people living in areas of concentrated underinvestment and poverty.



IV. LEADING CITIES OF THE FUTURE: THE ROAD AHEAD

History leaves little doubt that the geography of opportunity will continue to evolve. Based on trends that have been underway for decades, we offer several predictions:

- **Getting the urban basics right – schools, safety, quality-of-life amenities, and infrastructure – will continue to grow in importance.** As the economy becomes more knowledge-centric, highly skilled workers will see their positions grow stronger relative to employers. They will increasingly choose where they wish to live, with a heavy emphasis on quality-of-life considerations, and talent-focused employers will follow them. Cities will compete more than ever to retain homegrown talent and attract highly skilled people from elsewhere. In general, cities that outperform in the competition for high-skilled talent will also offer the best opportunities and economic mobility for moderate- to lower-skilled people, as they have done since the heydays of Venice and Amsterdam.
- **Cultural openness, diversity, and inclusiveness will figure even more prominently in shaping the geography of opportunity.** These values have always played a vital role in creating cities of opportunity, but retaining and attracting talented people of all backgrounds will move to center stage as the workforce becomes more ethnically diverse. Society will demand that policymakers focus on racial equity to a greater degree than in the past. Cities that attract outsized shares of enterprising immigrants will enjoy significant economic benefits, raising income and economic mobility for their native-born populations as well as creating opportunities for their foreign-born residents.
- **The social capital of cities will play a growing role in determining how well they function as engines of opportunity.** One reason: people tend to value living in locations with a strong sense of place and community, as recent migration patterns have shown.¹⁴¹ Also, if Americans continue to value rootedness and geographic mobility remains at historically low levels, then the social capital of cities and neighborhoods will shape people's prospects even more than it did in past decades, when more people moved away to pursue a better life. Cities will rely ever more on bottom-up solutions developed by public-private partnerships, in which the quality of their private-sector institutions of civil society will make a big difference. All cities will need to surmount the cultural challenges of building more inclusive, racially diverse models of connectedness, trust, and civic participation.
- **Rapid technological progress will continue to favor highly skilled people and geographically concentrated places that can realize strong agglomeration economies.** Education, job skills, and other forms of human capital will become more important than ever. Cities will continue to lose middle- and lower-skill jobs that can be automated, and metro areas with high education levels will pull further ahead of other places. New technologies will allow greater geographic dispersion of many service- and technology-sector activities, but they will mostly go to secondary centers that still score relatively highly for talent levels and agglomeration economies. Knowledge-generating “eds and meds” institutions will play even larger roles in local economies, though they will need to evolve to become more physical-asset light, with greater reliance on remote learning and telemedicine, as well as more financially sustainable.
- **The fate of cities will depend more than ever on the environment they provide for private commerce.** Private capital will become more mobile and responsive to local realities than ever, as it becomes increasingly knowledge based. The quality of physical and digital infrastructure will remain an important consideration, and cities which effectively address current infrastructure shortcomings will gain new advantages in the competition for talent and business. Successful cities will strike an effective balance between maintaining moderate tax rates and investing in vital public goods like education, infrastructure, and quality-of-life amenities.
- **Domestic migration will dramatically reshape the geography of America, even if geographic mobility remains low by historical standards.** People will continue to vote with their feet as they have always done. Although growing emphasis on social connectivity might be a force for further declines in geographic mobility, growth-oriented, high-opportunity cities are likely to see massive economic and

population advances over the long term. Many other cities and towns will likely experience traumatic population declines if they fail to adapt to changing realities – including the trends we outline in this report.

- **Urbanizing suburban cities will likely constitute America’s fastest-growing geographies of opportunity.** Dynamic metro areas that allow growth and plan for it well are likely to expand both horizontally and vertically, extending even further out from old city centers but also developing more walkable, culturally interesting mixed-use centers in core cities and suburbs alike. New high-growth urbanizing suburban cities will in turn contribute dynamism, affordability, and opportunity to their surrounding metro areas. Metros in which core cities go into decline are not likely to thrive for long with donut-shaped patterns of economic geography. Some large metros that are booming today will likely succeed in transitioning to more economically and ecologically sustainable growth models, but all will face considerable challenges in their core cities.
- **Housing market pressures will intensify, increasing the competitive advantages of cities that maintain good housing supply and affordability.** The centuries-old trend of growing demand for residential space is likely to continue, but land-use restrictions and housing market dysfunctions might grow worse in numerous cities. Geographic dispersion of people and businesses from the ultra-high-priced coastal metros – accelerated during the COVID-19 crisis – may take some of the pressure out of these markets, but supply-demand imbalances may deteriorate in other overrestrictive places, like the core cities of Austin, Dallas, and Denver. Growing affordability challenges will generate even more pronounced segregation and push middle-income people out of some core cities, undermining both commerce and economic mobility in these places. On the other hand, large affordability advantages will create openings for more turnaround metros to attract people and become stronger cities of opportunity.
- **A growing public-sector footprint in the economy will likely have mixed effects on the geography of opportunity.** Aging demographics and demands for more efforts to address social disparities are likely to lead to larger government, continuing a trend more than a century old.¹⁴² This trend risks crowding out private-sector investment in some of America’s most dynamic cities, including places that have been large beneficiaries of growth in the technology sector. On the other hand, growing state and federal investment in education and basic research could help more cities with strong knowledge-generating eds and meds institutions rise up as cities of opportunity. Also, large concentrations of highly educated people are likely to strengthen state capitals as engines of economic mobility, as Washington and numerous state capitals have demonstrated in recent decades.

Cities will choose their own futures in the decades ahead, as they have throughout history.



APPENDIX I: TIMELINE OF SELECTED EVENTS

A.D. 14	Accession of the Emperor Tiberius; Rome's population peaks at 1 million
3rd century	Niya, in China's modern-day Xinjiang Province, enjoys heyday as a Silk Road post
4th century	Trier peaks out at 100,000, becoming one of largest cities in the Roman Empire
410	Visigoths sack Rome
476	Final fall of the Western Roman Empire
6th century	Rome's population falls to 50,000, and Trier's to less than 1,000; Niya disappears
1150	Merv, in modern-day Turkmenistan and well located on the Silk Road, enjoys a golden age of trade, architecture, and learning; population peaks out at 500,000
15th century	Venice enjoys golden age
1492	Columbus sets sail from Spain; opening of trade with Americas makes Seville into a leading commercial center in Europe
1498-1499	Vasco da Gama's discovery of sea route to Asia starts Venice's long commercial decline
16th century	Seville enjoys golden age, founding university & becoming world's top cartographic center under leadership of Amerigo Vespucci
1558	Accession of Britain's Queen Elizabeth I; London's population reaches 60,000
17th century	Seville starts long decline as Spain fails to maintain sea-trade infrastructure Amsterdam's golden age; Dutch East India Company and Amsterdam Stock Exchange founded in 1602
1636	Founding of Harvard College confirms Boston's position as the first U.S. center of learning
1688	Britain's Glorious Revolution leads to London's eclipse of Amsterdam as a trading center
1776	Philadelphia is America's largest city at time of U.S. independence, at 20,000
1785 & 1787	Northwest Ordinances pave the way for rapid settlement of the Ohio River Valley
1788-1789	Merv razed to the ground and final remaining inhabitants leave
1791	Alexander Hamilton launches Society for Establishing Useful Manufactures in Paterson, New Jersey, which becomes a top cotton textiles and firearms manufacturing hub in early 1800s
1790s	Salem, Massachusetts, launches trading with Asia, Africa, and Latin America, becoming 6th largest U.S. city, and richest in per capita terms
1800	New York population reaches 60,000, making it America's largest city by far
1800-1810	First businesses open in Pittsburgh and Cincinnati; Pittsburgh grows to 50,000 by 1860, and Cincinnati to more than 100,000
1810s	London becomes largest city in the world, at just over 1 million Salem starts declining as a trading center and population growth slows dramatically
1825	Opening of Erie Canal cements New York's position as America's dominant center of trade and finance
1840	New Orleans, founded in 1718, reaches population of 100,000, 3rd largest in America

- 1850 Chicago, founded in 1833, reaches 30,000; exceeds 1 million by 1900
Detroit population reaches 20,000; grows to 200,000 by 1900
- 1861 Founding of Massachusetts Institute of technology cements Boston's position as America's top center for university research
- 1860s Banks and trading companies launched in Shanghai, which then enjoys rapid growth as China's leading trade and transportation center
- 1868 Meiji Restoration in Japan; Tokyo's population stands at 500,000; then grows to 7 million by 1940
- 1880 Los Angeles, with population of 11,000, starts century of rapid growth, reaching 3 million by 1980
- 1885 Founding of Stanford University creates significant center of learning on America's West Coast
- 1890s-1900s Growing restrictions imposed by Qing court stunt growth of Shanghai, ending in overthrow of Qing in 1911 and China's descent into "Warlord" period
Chicago becomes dominant meat-packing and railcar hub; population passes 1 million
Detroit becomes dominant automobile manufacturing hub; population grows from 200,000 in 1900 to more than 800,000 by 1921
Minneapolis becomes top flour-milling hub; population triples from 1890 to 1940
- 1890s Wyoming becomes first state allowing women's suffrage in 1890; Colorado and Utah become second and third states, in 1893 and 1896
- 1910 London reaches population of 7 million, but growth then slows dramatically
- 1910s Great Migration of Black Americans from the South to Northern and Western cities begins
- 1930 Chicago reaches peak population of 3.4 million, then declines more than 20% by 2010
- 1933-34 Creation of Federal Home Owners' Loan Corporation, followed by Federal Housing Administration, means federal government starts to actively promote racial housing segregation
- 1930-1950 Expansion of federal government helps Washington population to grow 65%
- 1939 Founding of Hewlett-Packard lays foundation for emergence of the San Francisco Bay Area as a leading technology hub
- 1950 New York reaches population of 7.9 million, its peak level until 2000
Washington reaches population of 800,000, then declines more than 10% by 2018
Philadelphia population peaks out at 2.1 million, then declines more than 20% by 2000
Buffalo, then the 15th largest U.S. city, peaks out, and population falls by 50% by 2000
Pittsburgh population peaks out, then falls 50% by 2000
Cincinnati population peaks out, then falls 40% by 2010
Detroit population peaks out at 1.8 million, then falls more than 60% by 2010
San Francisco reaches population of 775,000, its peak level until 2000
Minneapolis population peaks out at 500,000 in 1950, declines for 40 years – but then starts growing again after 1990
Denver population passes 400,000 – then almost doubles by 2018
Houston passes New Orleans to become largest city in the South at more than 500,000 – then quadruples by 2018
Dallas population passes 400,000 – then triples by 2018
- 1956 Passage of Interstate Highway Act; together with G.I. Bill (1944) and rising federal funding for medical research, brings vast federal funding to the Sun Belt
- 1958 Simultaneous invention of the integrated circuit by Fairchild and Texas Instruments launches Silicon Valley as well as Texas as technology hubs

- 1959 Creation of North Carolina Research Triangle, which becomes a leading R&D center after GlaxoSmithKline moves U.S. headquarters in 1983; Raleigh population quadruples from 1970 to 2018
- 1960 New Orleans population peaks out at 628,000, then falls more than 50% by 2010
- 1968 Passage of the Fair Housing Act
- 1970s Headquarters move by Shell and other oil companies makes Houston America's energy capital
- 1975 Founding of Microsoft, followed by Amazon in 1994, cements Seattle's position as a leading technology hub
- 1976 Founding of Apple, followed Google in 1998, cements the San Francisco Bay Area as America's top technology center
- 1984 Founding of Dell Computer in Austin; Austin population quadruples from 1970 to 2018
- 1990s Los Angeles population growth slows dramatically
- 2014 Uber launches major research facility in Pittsburgh
- 2018 Amazon announces new "HQ2" in Arlington, in the Washington metro area
- 2020 COVID-19 crisis accelerates outflow from New York and San Francisco
Oracle, HP Enterprise, and Tesla announce moves to Texas
Combined population of Collin and Denton Counties in Texas passes 2 million; combined population of Fort Bend and Montgomery Counties approaches 1.5 million



APPENDIX II: CITIES OF OPPORTUNITY AND INTERMEDIATE PERFORMERS

Metropolitan Statistical Areas Qualifying as Cities of Opportunity

(sorted by 2018 population size)

Dallas-Fort Worth-Arlington, TX	Santa Rosa, CA
Houston-The Woodlands-Sugar Land, TX	Reno, NV
Washington-Arlington-Alexandria, DC-VA-MD-WV	Salem, OR
Boston-Cambridge-Newton, MA-NH	Manchester-Nashua, NH
Phoenix-Mesa-Scottsdale, AZ	Ann Arbor, MI
San Francisco-Oakland-Hayward, CA	Fort Collins, CO
Seattle-Tacoma-Bellevue, WA	Lincoln, NE
Minneapolis-St. Paul-Bloomington, MN-WI	Boulder, CO
Tampa-St. Petersburg-Clearwater, FL	Green Bay, WI
Denver-Aurora-Lakewood, CO	Greeley, CO
Orlando-Kissimmee-Sanford, FL	Kennewick-Richland, WA
San Antonio-New Braunfels, TX	Olympia-Tumwater, WA
Portland-Vancouver-Hillsboro, OR-WA	San Luis Obispo-Paso Robles-Arroyo Grande, CA
Las Vegas-Henderson-Paradise, NV	Duluth, MN-WI
Cincinnati-Middletown, OH-KY-IN	Crestview-Fort Walton Beach-Destin, FL
Austin-Round Rock, TX	Cedar Rapids, IA
Kansas City, MO-KS	Sioux Falls, SD
Nashville-Davidson-Murfreesboro-Franklin, TN	Fargo, ND-MN
Oklahoma City, OK	Appleton, WI
Raleigh, NC	Charlottesville, VA
Salt Lake City, UT	Tyler, TX
Omaha-Council Bluffs, NE-IA	Bellingham, WA
Albany-Schenectady-Troy, NY	Rochester, MN
Colorado Springs, CO	Panama City, FL
Boise City, ID	St. Cloud, MN
Ogden-Clearfield, UT	Bend-Redmond, OR
Madison, WI	Dover, DE
Des Moines-West Des Moines, IA	Midland, TX
Provo-Orem, UT	Bowling Green, KY
Spokane-Spokane Valley, WA	Iowa City, IA
Scranton-Wilkes-Barre-Hazleton, PA	Billings, MT
Fayetteville-Springdale-Rogers, AR-MO	St. George, UT

Metropolitan Statistical Areas Qualifying as Intermediate Performers

(sorted by 2018 population size)

Riverside-San Bernardino-Ontario, CA	Fort Wayne, IN
San Diego-Carlsbad, CA	Canton-Massillon, OH
Sacramento-Roseville-Arden-Arcade, CA	Kalamazoo-Portage, MI
Pittsburgh, PA	Lubbock, TX
Grand Rapids-Wyoming, MI	Evansville, IN-KY
Tulsa, OK	Roanoke, VA
Albuquerque, NM	Bremerton-Silverdale, WA
Allentown-Bethlehem-Easton, PA-NJ	Amarillo, TX
Baton Rouge, LA	Hagerstown-Martinsburg, MD-WV
Stockton-Lodi, CA	Lynchburg, VA
Harrisburg-Carlisle, PA	Lafayette-West Lafayette, IN
Modesto, CA	Burlington-South Burlington, VT
Lancaster, PA	Longview, TX
Portland-South Portland, ME	Lake Charles, LA
Lafayette, LA	Blacksburg-Christiansburg-Radford, VA
Corpus Christi, TX	Columbia, MO
Killeen-Temple, TX	Joplin, MO
York-Hanover, PA	Abilene, TX
Vallejo-Fairfield, CA	Oshkosh-Neenah, WI
Santa Maria-Santa Barbara, CA	



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