

Prosperity at a Crossroads

Targeting Drivers of Economic Growth for Greater Kansas City



Prosperity at a Crossroads: Targeting Drivers of Economic Growth in Greater Kansas City





Published by the Mid-America Regional Council and the Brookings Metropolitan Policy Program with funding support from the Ewing Marion Kauffman Foundation and the William T. Kemper Foundation.

JUNE 2014

Preface

Several years ago, a number of business, civic and community leaders raised the need for a more informed discussion about the economic future of Greater Kansas City. This included the desire for sound research and rigorous analysis that can help residents and decision-makers alike better understand the performance of the region. These leaders also expressed a desire for more data and resources to better evaluate the kinds of policies or strategies that could be pursued, in the wake of the Great Recession and leaner fiscal times, at the local, regional and state levels.

With support from the Ewing Marion Kauffman Foundation and the William T. Kemper Foundation, the Mid-America Regional Council (MARC) and the Brookings Metropolitan Policy Program joined forces to help fill this need and begin to lay the groundwork for future regional analyses.

With this report, our hope is to strengthen public discourse and the many efforts underway to position Greater Kansas City for long-term growth and prosperity.

In that spirit, this report strives to do the following:

- Conduct focused research in one area of analysis productivity

 and examine the underlying factors that determine regional economic performance.
- Suggest a framework for action, including implications for further applied research.

The data analysis found here was compiled by a research team from MARC and Brookings, with econometric and data analysis from the Center for Economic Information at the University of Missouri–Kansas City. The research team supplemented the data analysis with select interviews and roundtables with CEOs, civic leaders, government leaders and scholars to provide more context to the analysis as it emerged. The team also surveyed the landscape of existing economic development initiatives and studies to better build on those efforts.

Our hope is that this report will further the dialogue and collaborations underway to make Greater Kansas City a stronger community, and we welcome ideas and ongoing engagement.



Acknowledgements

The Mid-America Regional Council and Brookings Metropolitan Policy Program wish to extend our gratitude to the following organizations that assisted in the preparation of this report.

- Center for Economic Information, University of Missouri-Kansas City
- City of Kansas City, Missouri
- City of Overland Park, Kansas
- Civic Council of Greater Kansas City
- County Economic Research Institute of Johnson County
- Economic Development Corporation of Kansas City
- Ewing Marion Kauffman Foundation
- Greater Kansas City Chamber of Commerce
- Kansas City Area Development Council
- Kansas City Public Library
- Kansas State University
- KC Digital Drive
- Lewis and Clark Research Institute
- Olathe Innovation Accelerator, Kansas State University
- Overland Park Economic Development Council
- PREP-KC
- U.S. Department of Housing and Urban Development
- United Community Services of Johnson County
- University of Missouri-Kansas City
- University of Kansas
- William T. Kemper Foundation Commerce Bank of Kansas City N A T

Authors and Researchers

Brookings Institution

Amy Liu, Senior Fellow and Co-Director, Brookings Metropolitan Policy Program Chad Shearer, Research Analyst and Senior Project Manager John Ng, Senior Research Assistant

University of Missouri-Kansas City

Peter J. Eaton, Ph.D., Director, Center for Economic Information and Associate Professor of Economics

Mid-America Regional Council

David A. Warm, Executive Director Frank Lenk, Research Services Director Jeff Pinkerton, Senior Researcher Dean Katerndahl, Government Innovations Forum Director Barbara Hensley, Public Affairs Director

With assistance from Jerry Lonergan, Civic Council of Greater Kansas City



Prosperity at a Crossroads: Targeting Drivers of Economic Growth in Greater Kansas City

Table of Contents

Introduction	2
I. What Matters for Regional Economic Growth Global forces are at work Regions are now playing a new role	4
II. The State of Greater Kansas City's Economy Key findings on the region's overall economic performance	
III. The Drivers of Greater Kansas City's Economy Key findings on traded sectors and clusters Key findings on innovation Key findings on human capital	15 21
IV. Implications and Opportunities Current capacity Successful regional approaches Case studies Questions for further research	30 33
Conclusion	
References	3/

Introduction

The Greater Kansas City region has a number of enviable assets: a high quality of life; good jobs in industries as diverse as vehicle manufacturing, information, and financial and engineering services; and a predictably reliable economy for attracting and retaining businesses and talent.

But these assets can no longer be taken for granted.

New analysis on the performance of the Greater Kansas City economy provides evidence that the region is becoming less competitive. The regional economy is struggling to generate more economic output and increase its productivity relative to the nation. This matters because the inability to do so can translate to weaker job and wage growth for workers, especially in the long run. It can also mean less revenue growth for local and state governments and fewer resources to reinvest back into the community for priorities such as better schools and infrastructure.

This is why, in the wake of the Great Recession, the region faces important choices on how it will grow and prosper to keep pace with changes in the global economy. Greater Kansas City has an opportunity to re-assess, adapt and take actions that ensure that the region remains a choice location for firms, workers and investment. And this can be done. Greater Kansas City is endowed with a strong civic culture. Its public officials and private sector leaders, in collaboration with citizens, have a long history of working together to move the region forward.

It is time to take stock, as a community, of Greater Kansas City's economic strengths, weaknesses and opportunities.

This report finds that:

 Greater Kansas City, like other U.S. metropolitan areas, is confronting global and political forces that require renewed attention on the core drivers of economic growth and prosperity.

The forces of globalization, technology and demographic change continue to accelerate and evolve, further testing how regions grow and prosper in the wake of the Great Recession. The rise of emerging markets means greater global competition for industries and talent and a shift in global demand to markets outside the United States. Disruptive technologies, like big data and cloud computing, are changing how firms innovate and deliver products and solutions to customers here and abroad. The twin challenges of replacing retiring

workers and educating and training a more diverse replacement workforce are playing out inside workforce and education systems. The highly visible competition between Kansas and Missouri for jobs and firms has distracted focus away from the core assets in Greater Kansas City at a time when attention to market assets matters more than ever. In the face of big shifts in the global landscape, research shows that regions and their industries must embrace trade, innovation and talent — the fundamental drivers of net growth and opportunity — or risk falling behind.

II. Overall, Greater Kansas City's economy has held steady, but there are troubling indicators in the region's productivity and competitiveness.

For a region to be prosperous, it must be able to generate wealth that can lead to more jobs and better incomes for workers and firms. Since the 1990s, the Greater Kansas City region has generally kept pace with the nation on economic output, employment and wages, with all three performing only slightly below the national average. However, these trends are not translating into improved productivity and living standards for residents. The region's productivity advantage, a historically distinctive competitive edge, has declined relative to the nation and in fact has been eliminated when measured by output per dollar spent on labor compensation. This coincides with a slight shrinking of the region's market share of U.S. jobs and output, indicating a weakening in overall competitiveness. In the meantime, the real wages of Greater Kansas City's workers are not keeping up with the nation, with the bottom 70 percent experiencing steeper declines and the top 30 percent experiencing smaller increases.

III. While Greater Kansas City exhibits strengths in the key drivers of growth and productivity, the region's overall economic engine is not fueling high performance.

To better understand the factors that may be contributing to the region's overall economic performance, one must look at the region's ability to trade, innovate and nurture human capital, especially within the key industries that drive the region's economy. First, Greater Kansas City specializes in a diverse set of traded sectors that comprise half the region's economic output.

Specializations like information, auto manufacturing, finance and insurance, and professional services (e.g., engineering and software development) are important because they "trade," bringing in revenue and income into the region from sales to other markets. whether in the United States or across the globe. However, nearly all these industries are becoming less competitive, losing market share in jobs and output compared to their peers nationally. Second, Greater Kansas City has a relatively high concentration of high-tech startups and strong growth in its development of patented inventions. But these capabilities have not translated into commercial applications across a wide group of firms or industries or led to the creation of enough new firms. Finally, the region has a well-educated workforce, but does not produce enough educated or STEM-qualified workers (science, technology, engineering and math) to keep pace with employer demand. Meanwhile, educational achievement gaps, especially among blacks and Hispanics, contribute to higher income inequality in the region and threaten the region's ability to field an educated workforce in the future.

IV. Greater Kansas City's leaders now face an important opportunity to more strategically bolster drivers of economic growth so that the region can compete and prosper, generating lasting opportunity for all.

The Kansas City region boasts a strong number of organizations that are working on meaningful initiatives to improve growth and

prosperity. The region has an opportunity to take those efforts to the next level. Across the nation, regions that are positioned for success in the next economy share some common characteristics. They are coming together around a unified economic agenda or a common set of priority initiatives. Their agenda and initiatives strategically focus on the market fundamentals of innovation, trade and talent. They organize for success, constantly engaging a broad group of stakeholders with new market research capabilities to foster data-driven decision-making at scale. Finally, successful regions align with their states, helping to shape and inform state policies and investments to support regional priorities. Leaders in Greater Kansas City can learn from these approaches and craft a path forward that works for this region at this economic moment.

While the Great Recession has passed, many paths lie ahead, with the forces of change creating new opportunities but also some risks to continued economic growth and prosperity.

This report aims to arm the region's leaders and citizens with information and analysis to spark an important community-wide conversation about the choices to be made — together — to position the region for continued prosperity. The region has a strong foundation of collaborative community organizations, economic assets and existing initiatives to build on. Greater Kansas City can gather these assets in ways that make the region a center of growth and opportunity for decades to come.







Photos Courtesy of KCAI

I. What Matters for Regional Economic Growth?



Greater Kansas City,
like other U.S.
metropolitan areas,
is confronting global
and political forces
that require renewed
attention on the core
drivers of economic
growth and prosperity.

The global economy has been evolving rapidly in recent years, which has had huge implications for the growth and prosperity of Greater Kansas City and all U.S. regions. The global economy has become far more open and integrated, accelerating the pace of change and giving increased importance to knowledge-related services. These trends are not temporary. They mark a fundamental shift toward a "next economy" that is more global, dynamic and knowledge-intensive. As this shift continues, it will offer new opportunities for Greater Kansas City, but will also pose new risks.

GLOBAL FORCES ARE AT WORK

The Great Recession was a wakeup call. The housing and financial crises revealed that as the global economy was evolving in the years leading up to the recession, the United States and most of its regions did not respond quickly enough. The result is a recovery that remains slow and uneven — much more so than previous recessions in 1990 and 2001. Despite the nation having achieved pre-recession employment levels in May 2014, approximately 10 million people are still unemployed. Many people who do have jobs are earning less than they did more than two decades ago, while a few are earning more than ever. And, at the end of 2013, fewer than half of the 100 largest metropolitan areas, including the Greater Kansas City region, had recovered all the jobs they lost during the recession.

The post-recession period is the time to move to a new economic model. To fuel sustainable growth and prosperity, the United States — and Greater Kansas City — must more intentionally harness the forces of globalization, technology and the changing workforce, while carefully balancing the challenges and opportunities ahead.

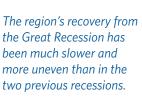
Globalization will continue to open vast new markets for American-made products and services.

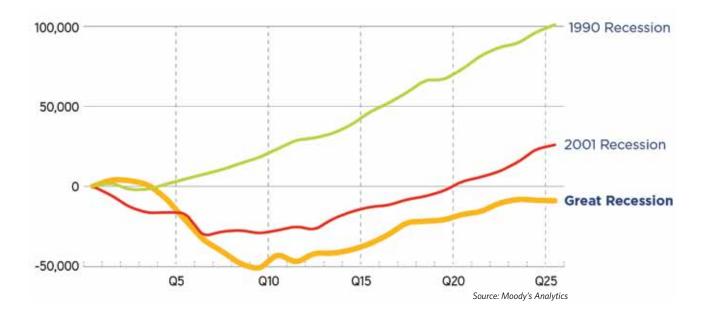
regions cannot afford to ignore foreign trade opportunities.

From 1990 to 2008, the volume of global trade between countries more than tripled, from \$6.8 trillion to \$21.5 trillion.¹ Yet during that same period, only 2 percent of net U.S. job growth came from sectors of the economy that trade goods or services internationally.² Growing global trade is in part a reflection of the "rise of the rest," as China and India's share of global middle class consumption is expected to surpass the United States' by 2016.³ With increasing global demand and nearly 80 percent of economic growth to come from the rest of the world from 2013 through 2018, the United States and its

Greater Kansas City Employment Change During Recession and Recovery

Beginning with initial quarter of national recession



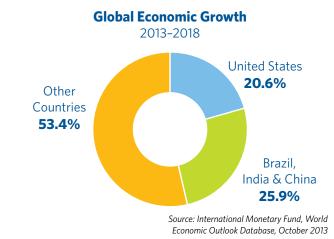


New technologies will continue to disrupt established industries and create new markets.

McKinsey Global Institute estimates that 12 emerging technology platforms, from 3D printing to big data to cloud computing, could create \$33 trillion in global economic impact per year between 2013 and 2025.⁴ That annual impact is roughly on par with the size of the world's four largest national economies combined—those of the United States, China, Germany and Japan. Though such technological breakthroughs can offer economic and financial value, they also bring risks. New technologies will put 47 percent of U.S. jobs at a high risk of being automated by 2033, with more routine jobs in sales, office administration, retail and hospitality in greatest peril.⁵ Whether it is embedded in people or technologies, knowledge work will increasingly drive productivity and economic growth.

A demographic revolution will change the face of the U.S. workforce.

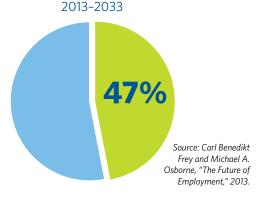
One in four of today's workers will reach retirement age by 2030.6 The workers that replace them will be more racially and ethnically diverse. If current growth trends continue, the U.S. workforce will be majority minority by 2038.7 The United States is fortunate to have such a large and diverse replacement workforce. But many of the nation's future workers face barriers to attaining the education they need to contribute to and benefit from the nation's growing knowledge economy. Only one in seven blacks and Hispanics has a four-year degree, compared to one out of every three whites and Asians.8 Meanwhile, employers continue to demand more skills. Upgrading the skills of the nation's increasingly diverse workforce is no longer just a matter of equity, but an issue of national and regional competitiveness.





Source: Brookings/William Frey analysis of U.S. Census 2010 data.

Share of US Jobs At Risk of Automation



As the nation copes with six years' worth of no net job growth and emerging global shifts, regions must embrace a new economic vision and leadership, a "next economy" that harnesses these forces and leverages new opportunities. The next economy will be driven by trade with growing international economies. It will be fueled by innovative new technologies that advance the state of the art. And it will be powered by the ingenuity of an increasingly talented and competitive workforce. This is a vision in which the nation and its regions export more, innovate in what matters, and ensure the economy brings people forward rather than leaving them behind.

REGIONS ARE NOW PLAYING A NEW ROLE

While the nation grapples with these global, technological and demographic changes, the federal government is increasingly less equipped to set a strong platform for growth and prosperity that regions like Greater Kansas City can build upon. Entitlements and interest payments are crowding out federal discretionary spending in economic development priorities such as trade and smarter investments in innovation, infrastructure and education. Meanwhile, state governments face their own fiscal battles and pension and entitlement obligations.

These economic and political forces have put the United States at the threshold of a "Metropolitan Revolution." Metropolitan areas and regions are now stepping up, leading

the transition to the next economy. But the metropolitan revolution is not just politically expedient. It is also an economic proposition.

Metropolitan areas like Greater Kansas City concentrate the nation's economic assets. The 100 largest metropolitan areas account for two-thirds of U.S. population, three-fourths of jobs and four-fifths of economic output.¹⁰ They produce 72 percent of international

"It is becoming increasingly clear that despite, or perhaps because of federal gridlock, cityled innovation is paving the way for continued prosperity in our nation. City leaders are the ones reshaping our economy and forging a bipartisan path forward."

— National League of Cities⁹

service exports, 92 percent of patents and house 74 percent of the college educated.¹¹ Thus, the nation's largest metropolitan areas already play an outsized role in generating the nation's economic output and driving its productivity growth. In order for regional and metropolitan economies to seize this mantle of leadership, however, they must be more intentional. Traditional economic development tactics are no longer enough to move the needle on growth in the face of economic headwinds. One-time tax incentives have become only marginally useful and at best zero-sum. Broad-based branding efforts and corporate relocation strategies have their place, but do not do enough. Truly transformative investments, by contrast, aim to build next-economy sectors within regions that help firms and workers flourish and enhance global competitiveness.

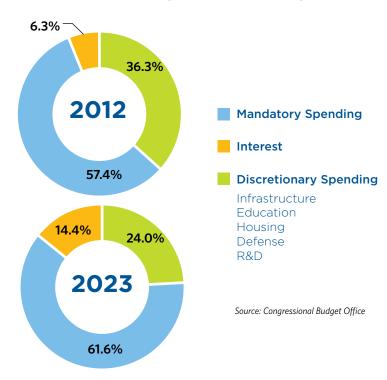
Regions are improving competitiveness by investing in the drivers of the economy.

Leaders in regions throughout the Unites States and across the globe are now charting their own path to economic recovery. Metropolitan and regional economies are specialized, complex and dynamic. Each has its own specific mix of assets that interact in a way that is unique to that locality and crucial to its economic performance. Post-recession, many regions are reexamining their distinct assets, challenges and opportunities in the context of the changing global environment and making smart investments in the local assets that drive prosperity.

The assets and investments that have the greatest impact are those that strengthen the core drivers of regional economies. Despite their distinctiveness, all metropolitan areas rely on the same fundamental drivers of the economy in order to compete and prosper: trade, innovation and talent. These drivers depend on and are strengthened by physical and social factors that shape and enable economic activity in a place: infrastructure, governance and social equity. Analyzing the assets and dynamics related to these drivers and enablers of Greater Kansas City's economy can reveal areas of weakness and strategic opportunities.

- TRADED CLUSTERS. Traded clusters of industries and firms work together to increase the competitiveness and global reach of the region's traded products and services. All regions specialize in clusters of industries, functions (like headquarters or production) or occupations that make their economies nationally and globally distinct. This concentration within regions helps reduce costs among buyers, suppliers and customers. The proximity of firms to one another also facilitates the exchange of new knowledge and information, speeding the pace of innovation. Strong traded clusters are able to achieve efficiencies and add value, making the products and services they sell domestically or abroad more competitive.
- INNOVATION AND ENTREPRENEURSHIP. Innovation and entrepreneurship lead to new ideas, breakthroughs and commercial applications, driving productivity growth. This is vitally important because the region's ability to raise

A Structural Change to the Federal Budget



standards of living depends on its ability to increase the productivity of its economy — the output per unit of input. Innovative capacity enables basic research to be converted into commercial applications, allowing existing industries to generate new, higher-quality products and business solutions and encouraging firms and entrepreneurs to spin off and grow new firms to scale. Heightened competition and pace of change make innovation, entrepreneurship and productivity growth imperative to economic competitiveness.

 HUMAN CAPITAL. Human capital — embodied in the region's workforce and a well-functioning labor market is the single most important driver of inclusive economic growth. Workers must be able to contribute to and benefit from the regional economy and must have the talent and skills to do so. The region must produce, attract and retain smart, well-educated workers aligned with the needs of employers. This requires attention not only to education and training, but also to job creation in growing traded sectors, matching of labor supply and demand, and enhanced labor market efficiency.

These drivers of competitive regional economies are enabled by a set of systems that undergird regional prosperity, which include effective governance and civic institutions, an efficient infrastructure and built environment and an equitable and cohesive social fabric. The quality and effectiveness of these three "enablers" are crucial for the sustainable long-term growth of regional economies.

 GOVERNANCE. Government policies (such as tax and regulatory systems) and the capacity of public and civic institutions can positively or negatively affect market decisions.

- **INFRASTRUCTURE.** A region's built form its physical infrastructure and natural features determines not only its attractiveness of place and environmental health, but also the ease with which firms, suppliers and workers can connect, improving mobility and productivity.
- SOCIAL COHESION AND EQUITY. Regions that provide opportunities for all workers and people are more cohesive and prosperous.

Traditionally, regions have focused most of their economic development attention and resources on these economic enablers. However, the quickly changing economic and political environment now requires leaders within regions to adopt a broader focus and mandate. The regions that are capable of deliberately investing in and improving both drivers and enablers are the ones that will forge ahead in the ever-changing global economy.

A Framework for Regional Prosperity Globally relevant traded clusters. **ENABLERS DRIVERS** innovation capacity and human capital are the primary drivers of a **TRADED** strong regional economy, generating **INFRASTRUCTURE** overall productivity, job growth and **CLUSTERS** income growth. Economic drivers are supported by strong infrastructure systems, sound **GOVERNANCE** governance policies and equitable social systems that undergird and **HUMAN INNOVATION** enable robust economies. **CAPITAL SOCIAL COHESION** Together, these six highly **AND EQUITY** inter-related drivers and enablers produce inclusive prosperity.

II. The State of Greater Kansas City's Economy



Overall, Greater Kansas City's economy has held steady, but there are troubling indicators in the region's productivity and competitiveness.

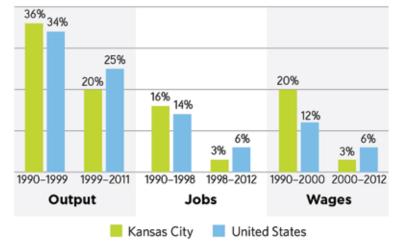
Over the course of the past two decades, from 1990 to 2012, the Kansas City region generally kept pace with the nation's growth. In recent years, however, the region's growth has slowed.

Like most regions in the United States, Greater Kansas City experienced significant economic disruptions caused by the Great Recession of 2007–2009. The recession exposed long-present weaknesses in both national and local economies, many of which had gone largely unnoticed during the prior decade. These weaknesses appear to be subtly undercutting the Kansas City region's ability to compete and prosper in the national and global economies, accelerating an economic decline that began prior to the recession.

Though Greater Kansas City's economy grew faster than the nation in output, jobs and wages into the late 1990s, the region's economy has not kept pace since.

Like the nation, the region's economic growth slowed considerably during the 2000s. However, the region was more adversely affected by the 2001 recession than the United States as a whole and its recovery from the Great Recession has been weaker than average. As a result, Greater Kansas City's economic performance has trailed the nation for over a decade on the key indicators of output, jobs and wages.

Growth in Output, Jobs and Wages



In the 1990s, the region outperformed the nation in each of the three categories — a trend that was reversed in the 2000s.¹²

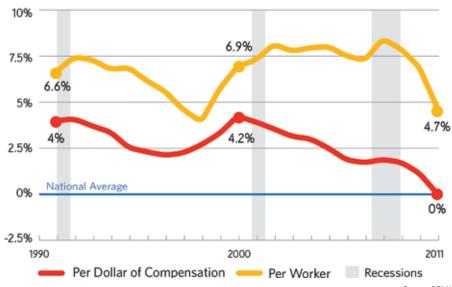
Sources: Regional Economic Models Inc. (REMI) and Moody's Analytics

Since 2000, the region's productivity advantage has declined.

Greater Kansas City has traditionally enjoyed a healthy productivity advantage compared to the nation, in terms of both economic output per worker and output per dollar of compensation. That advantage has slipped. In 1990, the region produced \$64,905 per worker per year compared to the nation's \$60,864, an advantage of 6.6 percent, adjusted for inflation.¹³ Greater Kansas City's advantage grew to 8.1 percent by 2002, but has declined in the years since. This decline was especially fast over the course of the Great Recession and subsequent recovery. The region has also traditionally enjoyed a modest productivity advantage measured by output per dollar of wages, which effectively disappeared by 2011.

Economic Output Per Input

Kansas City relative to the United States



Source: REMI

What do we mean by output and productivity?

Output is an estimate of the total net value produced by business establishments in the Greater Kansas City region. It is a net figure because it subtracts the cost of inputs purchased by area businesses from the value of what they sell. As a result, output measures the value added by local business from their local operations. This measure of output is identical in concept to how the Bureau of Economic Analysis' National Income and Product Accounts define the nation's Gross Domestic Product, or GDP. Output figures are reported in constant 2005 dollars in order to distinguish between real economic growth and values that rise simply because of inflation.

Productivity is a measure of how well businesses are able to create value by transforming inputs into more useful outputs. While the economy grows when firms add more workers, those workers' standard of living can grow only if the firms become more productive, producing more output per worker over time. Moreover, there is often little reason for firms to add workers unless they outcompete rivals by producing better goods and services for less cost.

The foundation of growth in productivity in the United States has been technological change, via innovation, at least since the Industrial Revolution brought with it trains, factories, electricity, telephones and automobiles.

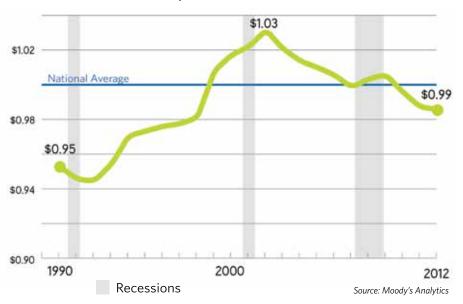
Yet, technology creation alone is not enough. It takes talented people working in firms seeking to expand their markets in order to produce the innovations that determine how and where the technology can be most usefully applied. Not surprisingly, these three factors — clusters of businesses engaged in trade, talented people and innovation — are also the drivers of regional economic prosperity.

To take advantage of new opportunities created by technological change, firms specialize to create core competencies and competitive advantage. As they do, the regional economies that contain them also become more specialized and competitive, allowing them to capture a higher share of U.S. and global markets.

Historically, the gains from productivity increases have been split roughly equally between workers and businesses over the course of a business cycle. However, some economists have found that growth in wages and productivity began to "uncouple" in the 1970s. The two recessions since 2000 and their relatively weak recoveries have further suppressed the productivity gains received by workers and distributed them more unequally across occupations and education levels.

Average Wage Rate

Kansas City relative to the United States

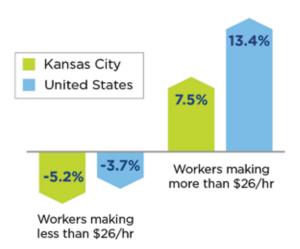


As its productivity advantage has diminished, so has the region's average wage premium, compared to the United States.

As Greater Kansas City's average annual wages grew during the 1990s and early 2000s, the region's average compensation per job caught up with and exceeded that of the United States. 14 Though average wages started off 4.8 percent lower than the nation in 1990—or about 95 cents for every \$1 earned nationally—the region surpassed the national average by 1999 and regional wages were 3.1 percent higher by 2002. 15 However, the subsequent decade of slower-than-average regional wage growth has erased that gain.

Average Real Annual Wage Growth

1989-2012



Source: Census Public Use Microdata

The real wages of Greater Kansas City's workers at both ends of the income distribution are not keeping up with the nation.

Across the United States, the distribution of average wage gains has been highly uneven, with the majority of gains accumulated by top earners. In Greater Kansas City, full-time workers earning about \$26 per hour or less, which describes 70 percent of all workers, saw their hourly wages decline 5.2 percent on average between 1989 and 2012, adjusted for inflation. Meanwhile, the wages of full-time workers making more than \$26 per hour increased 7.5 percent. However, both groups are doing worse than their counterparts elsewhere in the nation, where the bottom 70 percent of workers saw smaller wage declines, on average, while the top 30 percent saw greater increases.¹⁶

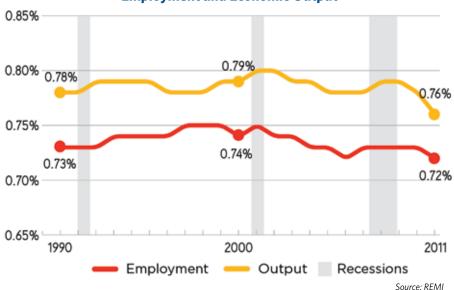
As its productive advantage has diminished, the region has lost market share.

Because Greater Kansas City has not kept up with national growth in output or employment since 2000, its share of national employment and output has declined. The region represented 0.78 percent of national output and 0.73 percent of the nation's jobs in 1990.¹⁷ The region's share of the national economy trended upward through the early 2000s as the region grew faster than the nation. However, around the time of the recession of 2001, Greater Kansas City's growth slowed relative to the nation and its share of the national economy began to decline. By 2011, the region's share of national employment and output had each reached a 20-year low. If Greater Kansas City had managed to maintain its share of the national economy at its peak levels, the regional economy would currently be generating \$5.3 billion more in output and have nearly 40,000 more jobs. Notably, this number of additional jobs would bring employment above prerecession levels.

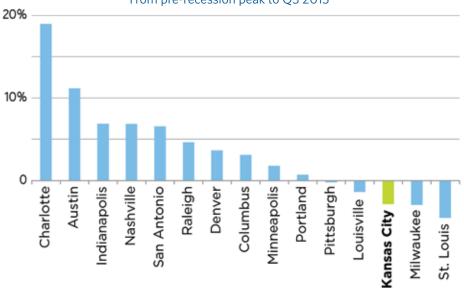
Employment in Greater Kansas City has not recovered from the recession as quickly as in many of its peer metropolitan areas.

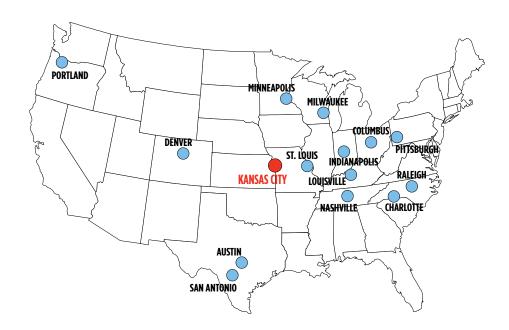
As of the third quarter of 2013, half of all U.S. metropolitan areas had recovered all the jobs they lost during the Great Recession, but nearly three-quarters of the Kansas City region's peers had achieved this milestone. Greater Kansas City was one of only four metropolitan areas in its peer group still in the red in terms of post-recession employment. After peaking at 990,000 jobs in 2007, the region lost almost 60,000 jobs and has only recovered about 30,000 of them. Only the Milwaukee and St. Louis metropolitan areas have experienced weaker recoveries so far.

Kansas City's Share of National Employment and Economic Output



Metropolitan Area Recovery by Employment Change From pre-recession peak to Q3 2013





Greater Kansas City is doing better than its peers in some key performance measures, but more poorly in others.

Compared to its peers across the country, the Kansas City region performs better by a few measures and more poorly by others. Greater Kansas City's population is slightly more educated. Median household income is higher than average, and its poverty rate of 12.9 percent is lower than average. The region's population also includes a higher percentage of young people, indicating potential for growth. Greater Kansas City's unemployment rate has historically been relatively lower, but the region has recently struggled to gain ground. More than four years after the end of the recession, Greater Kansas City's unemployment rate remains 1.2 percentage points higher than before the recession started, while some peers now have unemployment rates that are lower than their pre-recession levels.

Rank	Educational Attainment	Poverty	Median Income	Percent Under Age 18	10-yr. Job Growth	Recession Recovery	Gross Metro Product 10-yr. Change	Unemployment Rate Change Since 2007	Change in Real Average Wage
1	Raleigh	Minneapolis	Minneapolis	San Antonio	Austin	Charlotte	Portland	Columbus	Nashville
2	Austin	Pittsburgh	Denver	Indianapolis	Raleigh	Austin	Austin	Minneapolis	Austin
3	Denver	Raleigh	Raleigh	Raleigh	San Antonio	Indianapolis	Pittsburgh	Austin	Pittsburgh
4	Minneapolis	Denver	Austin	Charlotte	Nashville	Nashville	Nashville	Pittsburgh	Charlotte
5	Portland	Kansas City	Portland	Kansas City	Charlotte	San Antonio	Milwaukee	San Antonio	Portland
6	Columbus	Portland	Kansas City	Austin	Portland	Raleigh	Minneapolis	Milwaukee	Minneapolis
7	Kansas City	Nashville	Columbus	Minneapolis	Indianapolis	Denver	San Antonio	Nashville	San Antonio
8	Charlotte	St. Louis	Milwaukee	Denver	Denver	Columbus	Louisville	Indianapolis	Denver
9	Nashville	Indianapolis	Charlotte	Columbus	Louisville	Minneapolis	Kansas City	Kansas City	Columbus
10	Milwaukee	Columbus	St. Louis	Milwaukee	Minneapolis	Portland	Indianapolis	Portland	Louisville
11	Indianapolis	Charlotte	Indianapolis	Nashville	Columbus	Pittsburgh	Denver	Raleigh	Indianapolis
12	St. Louis	Austin	Nashville	Louisville	Kansas City	Louisville	St. Louis	Charlotte	St. Louis
13	Pittsburgh	Milwaukee	San Antonio	St. Louis	Pittsburgh	Kansas City	Raleigh	Louisville	Kansas City
14	Louisville	Louisville	Pittsburgh	Portland	Milwaukee	Milwaukee	Charlotte	St. Louis	Milwaukee
15	San Antonio	San Antonio	Louisville	Pittsburgh	St. Louis	St. Louis	Columbus	Denver	Raleigh

Sources: U.S. Census Bureau, Bureau of Labor Statistics, Bureau of Economic Analysis. Years vary by performance measure.18

What happened in the 1990s versus the 2000s?

Measured in terms of employment and output growth, Greater Kansas City performed better than the United States during the 1990s while it has performed more poorly since the turn of the 21st century. Why?

In a word: telecommunications.

During the 1990s, the economic output of Greater Kansas City's telecommunications industry grew 108 percent, compared to only 75 percent nationwide. As a result, Greater Kansas City's share of the U.S. telecommunications industry rose from 2.2 percent in 1990 to 2.6 percent in 2000.

Following the dot.com bust of 2000, the terrorist attacks of September 11, 2001, and the concurrent economic recession, the climate changed for national and local telecommunications industries. From 2000 to 2011, the U.S. telecommunications industry saw the rate of its output growth fall by more than half of its 1990s growth rate, to 31 percent. These events were even more disruptive for Greater Kansas City's telecommunications industry. Locally, the economic output of the telecommunications industry did not grow at all. In fact, it declined 17 percent, as AT&T left the region and Sprint experienced product and customer service difficulties. Greater Kansas City's share of the U.S. telecommunications industry fell by a full percentage point, to 1.6 percent, from 2000 to 2011.

In the Kansas City region, the telecommunications industry comprises the largest part of the information sector, which, in turn, is the region's largest net exporter, bringing substantially more national and international income into the Kansas City region than its residents spend when they buy information services. Many sectors of the regional economy benefit when the local telecommunications industry succeeds. including construction, wholesale trade. finance, real estate. professional services



and health care, along with a host of other consumer-oriented sectors.

Unfortunately, these same sectors are hurt when the telecommunications industry performs poorly. The sizable swing in the local telecommunications industry's economic performance relative to the United States between the 1990-2000 and 2000-2011 periods explains more than half of the drop in the relative economic performance of the entire Greater Kansas City economy since 2000.

Greater Kansas City's economy is far from a crisis. However, there is evidence that the region is becoming less competitive.

The regional economy is struggling to generate and retain its economic output and productivity relative to the nation. The region has seen weaker job growth and wage growth since 2000. The Great Recession certainly did not help improve the region's economy or its standing relative to the nation or its peer regions. However, many of these trends appear to have begun years before the Great Recession.

These are important trends for the region to consider. Declining competitiveness, slowing growth and falling wages for a majority of workers can mean less revenue growth for local and state governments to recycle back into the community, in such priorities as better schools and infrastructure. But these trends can be reversed. With its strong business, public and civic infrastructure the region can address the underlying causes of these trends once the issues are more thoroughly understood. Further analysis of the region's economy has revealed that the region may require renewed attention to the fundamental drivers of prosperity and competitiveness.

III. The Drivers of Greater Kansas City's Economy



While Greater Kansas
City exhibits strengths in
the key drivers of growth
and productivity, the
region's overall economic
engine is not fueling high
performance.

To better understand the factors that may be contributing to the region's overall economic performance, one must look at the region's ability to trade, innovate and nurture human capital, especially within the key industries that drive the region's economy. As the prior section documents, Greater Kansas City began to see an economic slowdown at the turn of the 21st Century and has fallen behind the United States and some of its peer regions as a result. This analysis of the core drivers of the region's economy suggest that a major factor inhibiting the region's growth and prosperity has been an insufficient ability to remain competitive in key traded sectors, particularly through innovative products and services that are in demand by other regions and countries.

Though the region is facing challenges, it has many assets within its core economic drivers that it can leverage. First, Greater Kansas City is home to a diverse set of industries and firms that trade globally. Its challenge going forward will be to ensure that these industries are better connected to global markets and have local access to the talent and resources they need to thrive. Second, Greater Kansas City has a relatively high concentration of high-tech startups and strong growth in its development of patented inventions. But these capabilities need to better translate into commercial applications across a wide group of firms or industries in order to create more new firms. Third, Greater Kansas City has many smart workers who are employed in a sophisticated set of industries and occupations. As the national and regional workforce become more diverse, however, the region will need to ensure that its future workers have access to the education and training they need to compete.



TRADED SECTORS

Local traded sectors remain active in national and international markets but appear to be losing ground.

Greater Kansas City specializes in a diverse set of economic sectors that are important because they "trade," exchanging goods and services with the rest of the world and bringing revenue and income into the region from sales to other markets. But nearly all of these traded sectors are becoming less competitive, losing market share in jobs and output compared to peer regions.

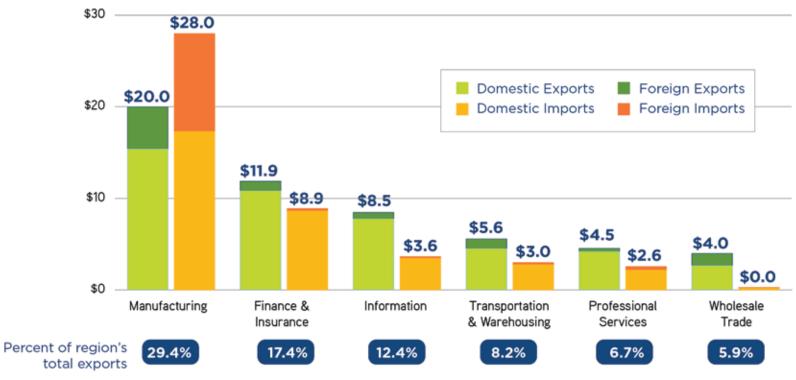
The region benefits from a diverse set of traded sectors that comprise half of its economy.

A diverse set of economic sectors and clusters of firms drive Greater Kansas City's trade. The sectors that export the most, and therefore represent the portions of the region's economy that make it distinct from other regions, are, in order, manufacturing, finance and insurance, information (including telecommunications), transportation, professional services (including scientific and engineering services), and wholesale trade. Together, these six sectors accounted for 80 percent of the region's total domestic and international exports in 2011 and accounted for half of the region's total economic output.¹⁹

The economy must produce and export more value than it imports in order for trade to contribute to rising incomes. Imports represent an outflow of residents' wealth and income, while exports bring income from other parts of the country or the world into the region. As a whole, Greater Kansas City's traded sectors generate more exports than the region imports, producing a \$10 billion trade surplus in 2011. Subtracting imports from exports to estimate net exports reveals that the region sees its largest net exports from the information sector, followed by wholesale trade, finance and transportation.²⁰ On the other hand, the region imports more manufactured goods than it exports, which drags down its trade surplus despite the manufacturing sector being the region's largest domestic and international exporter.

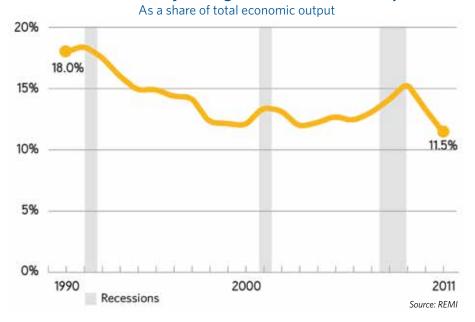
Foreign and Domestic Exports by Traded Sectors in 2011

Total exports in billions of inflation-adjusted 2005 dollars

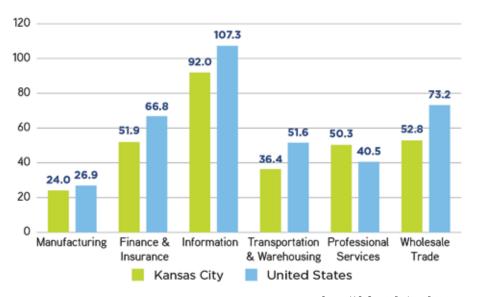


Source: REMI

Greater Kansas City's Foreign and Domestic Trade Surplus



Establishments per 1,000 Jobs by Sector, 2011



Source: U.S. County Business Patterns

However, net trade from those sectors has declined as a share of the region's economy.

Greater Kansas City's trade surplus is shrinking as a share of its total economy. The region's imports have risen at about the same pace as its exports so that the absolute dollar amount of its net exports, or its trade surplus, has remained roughly constant since 1990. As the overall metropolitan economy has grown, however, the trade surplus has become a smaller driver of production and income. Trade's net contribution to economic output declined by one-third, from 18 percent in 1990 to 11.5 percent in 2011.²¹ This implies that the regional economy is becoming increasingly dependent on growth in local demand and that its industries are not producing enough innovative products and services to be competitive in national and international markets.

Furthermore, Greater Kansas City's traded sectors are composed of thin clusters of firms.

The region's trade surplus may be declining as a share of its economy in part because of the "thinness" of its traded sectors and clusters. This research has revealed that, despite the size and role of the region's traded sectors in local employment and output trends, the sectors themselves are characterized by a relatively sparse number of large firms.

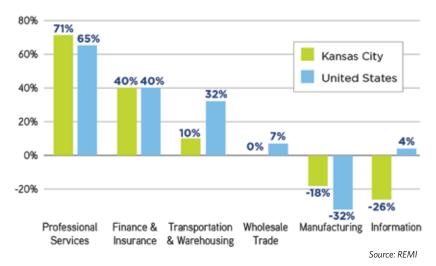
The number of companies in a local sector or cluster matters.²² Companies in the region's traded sectors compete against firms around the world, which forces them to innovate and specialize. When traded sectors are "thick," large numbers of companies lead to greater intra-regional competition, especially for talented workers. This second level of competition attracts higher quality inputs (such as talent, supply chains and infrastructure) that help speed up innovation, which positions local firms to capture greater market share. Conversely, thin traded sectors inhibit the flow of people and ideas needed to generate innovation and growth.

Greater Kansas City's traded sectors are losing market share to their national peers.

Many companies in the region's traded sectors appear to be losing ground to their competitors elsewhere, at least in aggregate. Most major traded sectors in the Greater Kansas City economy have grown more slowly than their national counterparts in terms of both employment and the value of economic output. As a result, they are losing market share.

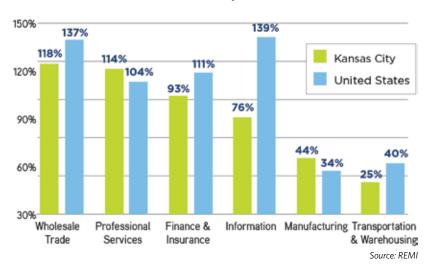
The region's decline in national market share has been led by the information sector—the largest contributor to the region's net exports. This sector's economic output saw the sharpest divergence from national trends, having grown at only half the rate of the U.S. information sector over the period of this study. In 1990, the local information sector represented 1.5 percent of the economic output of the nation's information sector and 1.4 percent of its jobs.²³ These shares are about twice as high as the region's overall share of the U.S. economy, indicating Greater Kansas City's high degree of specialization in the information sector. However, difficulties experienced by some locally-based companies since 2000 caused the region's information sector to grow more slowly in Greater Kansas City than elsewhere. As a result, the local information sector's share of national output had declined to 1.1 percent and its share of employment had declined to 1.0 percent by 2011, a 26 percent and 29 percent decline in market share, respectively.²⁴

Growth in Employment, 1990-2011



Only professional services and manufacturing outperformed the nation in terms of employment growth, though manufacturing achieved this by losing jobs more slowly.

Growth in Economic Output, 1990-2011



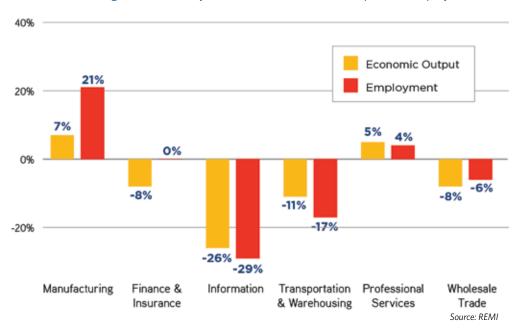
Professional services and manufacturing were also the only two traded sectors whose output grew faster locally than nationally. Note that output growth is larger than employment growth, and in some sectors much larger, due to rising productivity over the period.

But other traded sectors lost market share between 1990 and 2011, too. The local transportation sector's share of national output dropped 11 percent, while its share of national employment fell 17 percent.²⁵ Similarly, the region's wholesale trade sector lost 8 percent of its share in output and 6 percent of its share of employment. The region's finance sector maintained its employment market share, but saw its share of national output decline 8 percent.

In all, only two of Greater Kansas City's traded sectors have increased market share in both output and employment: manufacturing and professional services. The local

Change in Market Share, 1990-2011

Percent change in Kansas City's share of U.S. economic output and employment



By growing faster than the nation, the local manufacturing and professional services sectors are the only two to increase their market share of both output and employment. But when a sector's share of employment increases faster than its share of output, as is true for manufacturing, the implication is that the average productivity of workers is falling compared to other parts of the country.

manufacturing sector saw its share of the nation's manufacturing output increase 7 percent, while its share of the nation's manufacturing employment jumped three times as much. However, Greater Kansas City's share of national manufacturing employment increased only because local manufacturing jobs disappeared more slowly than they did nationwide. The sector's employment actually shrunk. Additionally, because the local manufacturing sector's share of the nation's output grew significantly slower than its share of employment, the sector's average output per worker declined compared to other parts of the country. In fact, by 2011, the value of goods produced by the average manufacturing worker in the region had dropped to 4.4 percent below that produced by the average U.S. manufacturing worker, notwithstanding the fact that some sub-industries, like auto manufacturing, actually saw increases in their relative productivity.

Among the region's traded sectors and clusters, only professional services could be truly described as fully competitive with its national counterparts. Its economic output and employment both grew more rapidly than the national professional services sector, so that its share of national output increased 5 percent between 1990 and 2011. Meanwhile, its share of national employment increased 4 percent. Moreover, with output growing faster than employment, the region's professional services sector has become more productive, even surpassing the productivity of the U.S. professional services sector. This helps promote the region as a leading place for professional, scientific and technical work.

Going forward, Greater Kansas City will need to extend its trade competitiveness to a broader base of industries. The professional services sector is a vitally important sector of the region's economy and a huge asset in terms of its competitiveness, innovation and the skill of its workers. However, professional services represented just 9.2 percent of the region's jobs and 10 percent of the region's output in 2011. Its growth and competitiveness alone cannot support a region with broadly shared and expanding opportunity. Until other traded sectors achieve a similar level of competitiveness, growth of the entire regional economy will likely continue to lag that of the United States.

Regional Economic Competitiveness — Trends in Greater Kansas City Traded Sectors

Traded Sector	Growth		Marke	t Share	Productivity	Prosperity
	Output	Employment	Output	Employment	Relative Output/Job	Relative Compensation
Finance & Insurance			_	•	_	_
Manufacturing				_	_	_
Professional Services						
Wholesale Trade		•	_			_
Information		_	_	_		
Transportation & Warehousing			_			_

△ Growing ▼ Declining ◆ Steady

Source: REMI

What's the difference between a traded sector and traded a cluster?

In the United States, industries are defined by North American Industrial Classification System (NAICS) codes, a common means of reporting economic data. While the classification of individual industries is very detailed, economic data for metropolitan areas is typically reported at the sector level, consisting of about 20 broadly defined industries, such as construction, manufacturing, transportation, information, wholesale and retail trade, finance, and a variety of service industries.

Traded sectors are those that account for the bulk of a region's exports and imports and represent its contribution to the larger national and global economies. Because traded sectors must compete against the rest of the world, they tend to be more innovative than local-serving sectors of the economy and more specialized in products and skills.

A traded cluster is a more nuanced concept than a traded sector. It is based on a much more detailed classification of industries and also on how inputs and outputs flow across those industries. For example, an increase in the demand for automobiles would, in turn, increase the demand for auto assembly by manufacturers and parts from suppliers, and perhaps financing

from banks and advertising as well. The portions of these industries tied to auto production are part of the automotive cluster.

Thick traded clusters — clusters with lots of interacting firms — tend to improve productivity because competition spurs them to find new ways to increase value and lower costs. Workers also tend to flow among firms as they bid for talent, which increases the cross-fertilization of ideas and generates increased rates of innovation. Metropolitan areas with thick traded clusters tend to become "the place to be," talent magnets for mobile professionals and others that possess the specialized competencies needed.

Traded sectors and clusters are not incompatible concepts. Sectors are broader than clusters, and each cluster tends to mostly draw from one or two sectors, though which one or two varies by cluster. It takes a second level of analysis and more detailed data than that typically available at a metropolitan area level to understand the inter-industry relationships that define a region's traded clusters.

For more information on traded clusters, see Michael Porter's cluster mapping project, **www.clustermapping.us**.

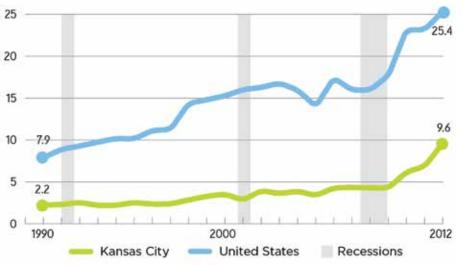
INNOVATION

The region's innovation capacities have not translated into increased commercial activity or entrepreneurship.

Greater Kansas City has many strong assets in its "innovation ecosystem" but they remain siloed. A region's innovation ecosystem is defined by its ability to develop commercial applications from scientific research, deploy new ideas through entrepreneurship, and drive technology adoption and incremental innovation within existing firms and clusters. Though Greater Kansas City is home to several large and reputable research institutions, they produce relatively few patented breakthroughs. A handful of large companies generate a majority of the region's patents. Though these companies are important local assets, their innovations do not appear to be spilling over into other existing firms or driving the creation of new firms.



Patent Grants per 10,000 Jobs, 1990-2012



Source: Jonathan Rothwell et al., "Patenting Prosperity," Brookings, 2013.

While Greater Kansas City's ability to apply technological advances is improving, it is generating new inventions at about one-third the rate of the rest of the country.

The region's research institutions, both academic and in the private sector, have recently begun to generate many more commercial technology applications each year, as measured by patent grants. Patents are not the only measure of a region's innovative activities or outputs, but they tend to be a reliable indicator of the extent to which technological advances are being developed and applied locally. Greater Kansas City's number of patent grants per job increased more than fourfold from 1990 through 2012, with most of that growth coming during the few years since 2006.²⁶ However, despite the recent growth in the region's rate of patenting, it continues to lag the nation. In 2012, the nation averaged 25.4 patents per 10,000 workers, while Greater Kansas City produced only 9.6, or 38 percent as many.

The region's commercial innovation has been driven by a small set of clusters and firms.

Four large companies generate the majority of the region's patents, which are concentrated in a small handful of technologies. Inventors in the Greater Kansas City area were awarded a record 6,585 patents from 2007 through 2011.²⁷ Half of these patents belonged to a set of three core technology platforms. One-third was related to communications technologies and nearly one-fifth was related to computer hardware or software. Another 5 percent belonged to biotechnologies and medical devices. The remainder was more evenly distributed across a spectrum of technologies.

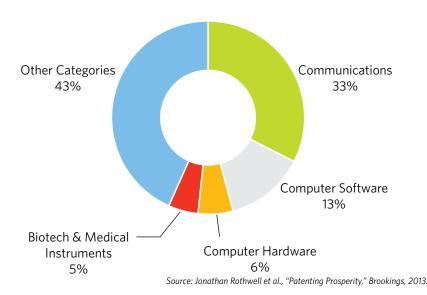
That Greater Kansas City specializes in a core set of technology competencies is not notably different from other similarly sized metropolitan areas. However, that so few companies drive its commercial innovation may be a concern. Fewer than 20 companies own 62.8 percent of the 908 patents granted to local inventors in 2011.²⁸ Sprint and former Sprint subsidiary Embarq together accounted for 45.2 percent of the region's 2011 patents

grants. Cerner and Garmin accounted for another 3.4 and 2.4 percent, respectively. Honeywell, BHA Group, General Electric, Johnson and Johnson, and HNTB together accounted for another 5.2 percent of patents granted to local inventors.

Patent grants are not all equally commercially valuable and patenting trends are subject to distortions. However, at a high level, these patenting statistics portray a regional innovation ecosystem that is heavily reliant on a small group of large companies in well-established, highly competitive industries. This may reflect Greater Kansas City's reliance on a set of thin traded clusters. Without a wide range of local suppliers and competitors, there is little chance to broaden the number of companies engaged in commercializing new technologies. In addition, no area research university comprises more than two percent of the region's patents. In combination, thin clusters and universities without a strong track record of patenting limit the region's ability to create a larger system of innovators and entrepreneurs that can more actively test and scale new inventions.

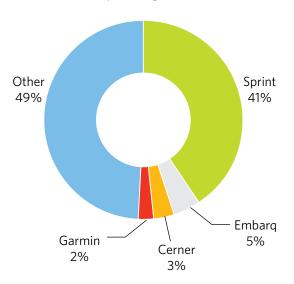
Local Patent Grants by Category

Patents granted to Kansas City inventors, 2007-2011



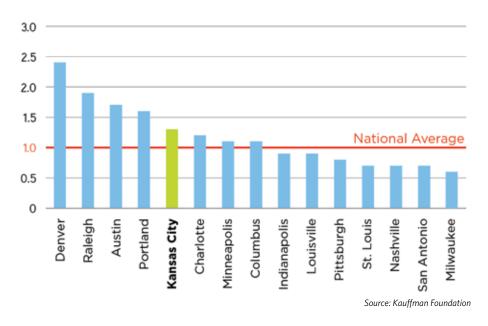
Local Patent Grants Assignees

Share of patents granted, 2011



Source: Jonathan Rothwell et al., "Patenting Prosperity," Brookings, 2013.

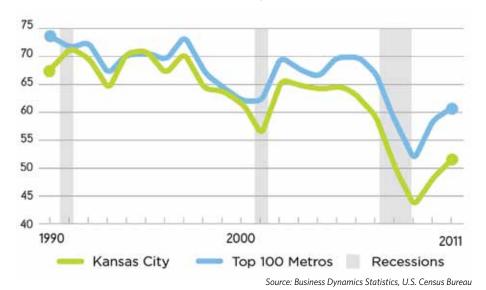
High-Tech Startup Density, 2010



Greater Kansas City's concentration of high-tech startups increased faster than average since 1990, and by 2010 the region ranked in the top third of its peers.

In 1990, Greater Kansas City generated high-tech businesses at a rate 40 percent below the national average, as a proportion of its population. ²⁹ By 2010, however, the region's high-tech "startup density" had improved to 30 percent above the national average. As a result, the region's rank among its peer metropolitan areas improved from 13th to fifth. The region's performance was especially strong in the information, communications and technology (ICT) component of high-tech industries, as it experienced the fastest rise in ICT startup density among all large U.S. metropolitan areas during this time period. ³⁰ This indicates that some businesses may have spun off from Sprint, in spite of — or perhaps because of — the difficulties it experienced during the 2000s, as documented by the number of new local firms with roots in Sprint. ³¹

Establishment Births per 10,000 Jobs



While Greater Kansas City has significantly improved its ability to start technology-oriented businesses, its overall rate of business creation still lags behind the nation's largest metropolitan areas.

The nation's rate of overall business establishment formation has been systematically falling since the late 1980s, perhaps indicating a slowdown in U.S. business dynamism. The decline in new business formation appears to be occurring even faster in Greater Kansas City. In 17 of the 21 years from 1990 to 2011, the region's rate of establishment births was significantly lower than that of the 100 largest metropolitan areas in the United States.³² The region's rate of establishment births fell 39 percent over the entire period, compared to 28 percent for the nation's largest metros. As a result, the gap in the region's overall business dynamism appears to be growing wider and, as the economy recovers from the Great Recession, this trend shows no signs of abating. In 2011, the average large metropolitan area in the U.S. created 61 new business establishments per 10,000 jobs, but Greater Kansas City generated only 52. Had the region kept pace with the nation, it might have added 900 more businesses in 2011. The process of business creation and survival is vital to productivity and long-term economic growth. A dynamic economy in which firms are continually born, expand, contract or fail helps promote the "creative destruction" vital to market economies. This process ensures that new ideas are put to commercial uses and that economic assets are continuously, productively deployed. New business formation plays a critical role in this process, and young firms have been shown to play an important role in net job creation.³³ While it may have a new strength in high-tech entrepreneurship, the Greater Kansas City economy appears to be less dynamic in terms of overall establishment creation than many large metros. This muted dynamism may mean that the region is less able to snap back from significant downturns and less likely to be at the forefront of big new ideas that can often lead to rapid growth and produce the biggest economic and financial returns.

While Greater Kansas City continues to make large strides in expanding its basic research capacities, especially in life sciences, and is successfully creating new technology-oriented businesses, its innovation ecosystem nonetheless appears incomplete. Not only is the region's rate of patenting low, it is concentrated in a few firms that dominate their sector locally, which inhibits the flow of talent and ideas across companies. As a result, the region may not be able to adapt as quickly as other places to opportunities created by globally disruptive technologies.

HUMAN CAPITAL

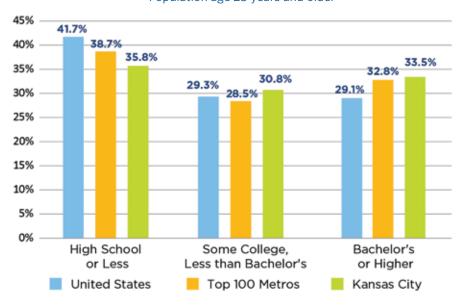
Greater Kansas City has a skilled workforce, but is not educating and retaining enough workers to meet future demand.

Greater Kansas City has a well-educated labor force engaged in relatively sophisticated work. However, despite strengths in some areas, the region's human capital assets are showing cracks in the face of an evolving economy. The region has not produced enough highly educated or STEM-qualified workers to keep pace with employers' demand, and its ability to attract talent from elsewhere has diminished. Meanwhile, educational achievement gaps, especially among blacks and Hispanics, contribute to higher income inequality in the region and less ability to field a "next economy" workforce.

The region's workforce is slightly more educated than the nation's and similar to peer metropolitan areas.

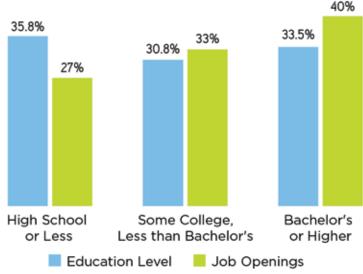
Greater Kansas City benefits from a well-educated labor pool, with a slightly larger proportion of local residents aged 25 years or older possessing postsecondary education than the nation as a whole. As of 2012, 30.8 percent of local workingage people had either some college education or had earned an associate's degree, versus 29.3 percent nationwide. Greater Kansas City's advantage was even larger for individuals with a bachelor's degree or above. More than one-third of the working age population had such a credential, compared to 29.1 percent nationwide. As a result, a smaller share of the working aged had only a high school diploma or less — 35.8 percent, compared to the nation's 41.7 percent. Compared to the top 100 metropolitan areas, however, the region's advantage is less significant.

Educational Attainment, 2012Population age 25 years and older



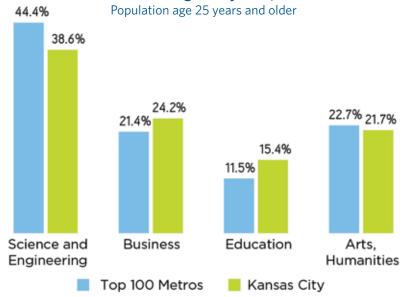
Source: U.S. Census American Community Survey

Kansas City's Educational Mismatch, 2012



Source: Jonathan Rothwell, "Education, Job Openings, and Unemployment in Metropolitan America, Brookings, 2012.

Bachelor's Degrees by Field, 2012



Source: U.S. Census American Community Survey

The region's slight educational advantage may be enhancing its workers' earnings. Based on national trends in occupation by industry, one would expect workers in Greater Kansas City to earn \$43,900 on average, independent of differences in cost of living. Local workers actually earn \$45,300 per year on average, or approximately 3 percent higher than predicted. This suggests that many of the region's industries specialize in slightly more sophisticated types of work requiring skills that can command higher wages.

However, local demand for educated workers is exceeding supply.

Though Greater Kansas City's working age population is more educated than the rest of the nation, the region still falls short of meeting employers' demand for highly educated and skilled workers. In particular, the region, like many other metropolitan areas across the country, has too many workers with only a high school diploma or less and too few workers with postsecondary training. Over 40 percent of local job openings in 2012 required a bachelor's or above but only 33.5 percent of the region's workforce had that level of education.³⁵ Meanwhile, 35.8 percent of the region's working-age residents have only a high school diploma or less but only 27 percent of job openings are satisfied with this level of education.

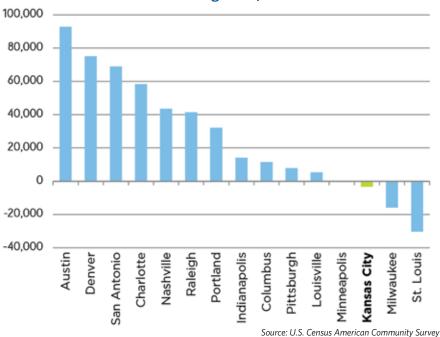
The gap between demand and supply of talent is especially important in the science, technology, engineering and math (STEM) fields. Although nationwide only half of STEM jobs require at least a bachelor's degree, in Greater Kansas City a slightly higher proportion (52 percent) of all STEM jobs require four years of postsecondary education or more.³⁶ This demand for STEM skills reflects assets in advanced industries and specialized firms, but the region must do a better job of developing its human capital to meet the needs of the next economy.

Additionally, Greater Kansas City's ability to attract talent has declined.

By definition, an area's total population changes by adding births, subtracting deaths and adding net migration (those who move into the region from other areas minus those who move out). During the 2000s, net migration from other parts of the United States added about 3,300 people per year to the region's population, on average. Since 2010, though, that flow of human capital has stopped. According to the most recent population estimates from the Census Bureau, Greater Kansas City is only one of three of its peers to experience negative net domestic migration from 2010 to 2013.

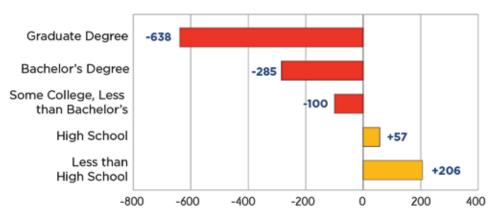
More troubling still is that Greater Kansas City may no longer be a magnet for the most talented workers. According to the American Community Survey examining migration data between large counties in the United States from 2007 to 2011, while the region continues to draw graduates from Kansas and Missouri. it lost more workers with postsecondary education to the rest of the country than it gained.³⁷ During this five-year period, an average of about 2,100 individuals with only bachelor's degrees moved to Greater Kansas City from beyond the bistate area, while nearly 2,400 people with the same educational level left the region for other states, resulting in a net outflow of nearly 300 people per year.³⁸ Among graduate degree holders, the region's annual net outflow was even more acute, with approximately 1,100 moving in and 1,700 moving out. On the other end of the spectrum, Greater Kansas City experienced a net inflow from the rest of the United States among individuals with only a high school diploma or less. This suggests the region may be suffering from "brain drain" to other regions in the country as they offer attractive opportunities to talented, mobile workers. These migration trends, if persistent, will aggravate the region's shortage of workers with the right skills.

Net Domestic Migration, 2010-2013



Greater Kansas City Net Migration by Educational Attainment

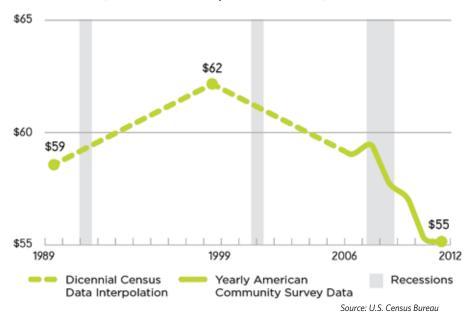
Annual Average, 2007-2011 for population age 25 years and older



Source: County-to-County Migration Flows, 2007-11 American Community Survey.

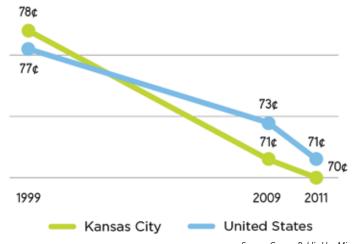
Greater Kansas City's Median Household Income

In 1,000s of inflation-adjusted 2012 dollars, 1990-2012



Middle Class Pay Gap

Median earnings of blacks and Hispanics compared to median earnings of whites and Asians



Source: Census Public Use Microdata.

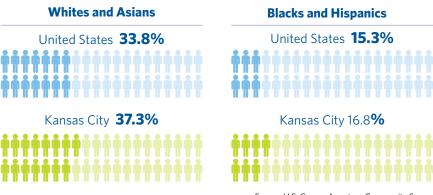
Wide educational achievement gaps are contributing to higher income inequality.

As the economy increasingly rewards those with advanced education and highly sought-after skills, Greater Kansas City's middle class has been left behind. Median household income has shrunk by approximately 11 percent in the past decade, falling from \$62,000 in 1999 to \$55,000 in 2012.³⁹ In fact, incomes were lower in 2012 than in 1989 for 70 percent of wage earners in the region.⁴⁰

Compounding these trends is the fact that educational attainment levels are uneven across the region's demographic groups. In particular, there is a stark achievement gap between whites and Asians, among whom 37.3 percent have a bachelor's degree or higher, and blacks and Hispanics, for whom the proportion with at least a bachelor's is 16.8 percent.⁴¹ Greater Kansas City's disparity in educational attainment by race reflects national patterns. Like the United States, the region's racial and ethnic pay gap has widened in the last decade. In 1999, middleclass blacks and Hispanics were paid 78 cents for every dollar earned by whites and Asians, but in 2011 blacks and Hispanics only received 70 cents on the dollar. In fact, over this period middle-class wage inequality by race has increased faster in Greater Kansas City than the United States as a whole.⁴²

Bachelor's Degree Attainment

By racial and ethnic groups, 2012



Quality of life versus quality of opportunity: Which attracts talent more?

Talented people are clearly key to innovation. It is less clear, however, what characteristics attract talent to a region and, equally important, retain it.

According to one school of thought, most often associated with Richard Florida and his book "The Rise of the Creative Class," talented people seek an "urban quality of life," punctuated by creative environments and high levels of diversity that provide exciting, rich community amenities. These amenities include vibrant arts scenes, a variety of densely located attractions, world-class opportunities for advanced education, revitalized neighborhoods and an effective, accessible transit system.

Another line of thinking, most often associated with Joel Kotkin and his book "The Next Hundred Million," asserts that the key to attracting and retaining talent is to create a low-cost, low-stress environment. Low costs of living allow young adults to devote resources to investing in their careers or starting businesses rather than paying rent. Once they start families, Kotkin says, talented workers want safe neighborhoods with great schools. This strategy for developing, attracting and retaining talent focuses more on enhancing the suburban quality-of-life.

In practice, however, talented people are typically more attracted to a place by the quality of opportunity created by a dynamic economy rather than its quality of life. Research by Enrico Moretti presented in his book "The New Geography of Jobs" shows just how much talent matters to dynamic, prosperous economies. But Moretti's work also reveals that the key to attracting talented people is to create a competitive, vibrant, growing economy that provides a diversity of employment and career opportunities.

This alternative is supported by the data from the Current Population Survey on migration trends. Work-related factors like a new job or access to job opportunities were the most cited reason for moving across state lines among people with a bachelor's degree between 2000 and 2013. In fact, 51 percent of these movers reported work as their primary reason for relocating. Another 43 percent cited family reasons or life changes, like getting married or moving after college or for graduate school. Only 7 percent cited quality of life factors like community amenities, quality or cost of housing, or the climate.

All three strategies have merit when it comes to developing, retaining and attracting talent. While a high quality of life helps, it is not sufficient to overcome the lure that a high-value, innovative economy provides to talented people. In the parlance of this report, quality of opportunity is more of a driver, while urban and suburban quality of life are enablers. This suggests that talent attraction strategies should focus on ramping up the skills of those already here and providing the community supports that allow existing talent to thrive and prosper.

Greater Kansas City possesses notable strengths in a workforce that is generally well-educated and employed in gainful, high-value occupations. In a global economy that prizes advanced knowledge and skills, the region is positioned to build on its human capital assets to succeed. To do so, however, Greater Kansas City will need to re-examine whether its current and future workers will be ready to meet the demands of diversifying industries and rapidly changing work requirements, especially in STEM areas. For instance, the region's services-heavy economy and the particular skill mix of its current workforce may enable the economy to support relatively sophisticated occupations now, but emerging industries and shifts in modes of production may require Greater Kansas City to update its human capital in order to compete.

A strong talent pool is essential for creating inclusive, broad-based prosperity as well as economic growth. In the last two decades the benefits of growth have not accrued to broad swaths of the region's workers and households. Middle-class income has declined in real terms, and large gaps in educational attainment by race have contributed to a widening pay gap. To reverse these trends, the region needs to develop its human capital in a way that creates widespread economic opportunity.

Development of a skilled workforce is especially important as the workforce becomes more diverse. Successful regions will develop workforce pipelines that help all residents, especially people of color, obtain a high-quality education, develop next-economy skills and connect with job opportunities in vibrant, growing industries.







Together, the three economic drivers described in this section — trade, innovation and human capital — have been key contributors to the current state of the regional economy. They are also the areas where coordinated regional action can have the most impact on future growth and prosperity.

IV. Implications and Opportunities



Greater Kansas City's
leaders now face an
important opportunity to
more strategically bolster
drivers of economic
growth so the region can
compete and prosper,
generating lasting
opportunity for all.

Greater Kansas City stands at a crossroads. The rapidly changing nature of globalization, technology and demographics is shifting — and testing — the fortunes of the region. While the region has relevant traded sectors, robust innovation assets and a strong workforce, global macro forces have revealed weaknesses in all of these drivers of growth. The region must decide whether it will allow these assets to weather disruptive global headwinds alone, and risk further deterioration, or take a more affirmative, intentional approach to ensuring future prosperity.

It is time to take a step back and assess how the region can respond to the forces of change to ensure that it remains an attractive place to do business, raise a family and build opportunities for generations to come.

Greater Kansas City benefits from effective local governance and strong civic capacity.

The Kansas City metropolitan area is home to a robust network of business, civic, government and philanthropic leaders who are working together to enhance the community and its economy. Various efforts are underway, both across the region and within each county, to address some of the key drivers of economic growth, especially around education and skills development, innovation and entrepreneurship, and the built environment. Furthermore, interviews with over 25 business and economic development leaders reveal a collective understanding and consistent approach to job growth and economic development for the region.

The current economic development model is based on a belief that the region must invest in community assets like good schools, safe and quality neighborhoods, reliable public services and infrastructure, and arts and cultural amenities. That investment will build a high quality of life that will attract firms, jobs and more investment. The result is overall economic growth that enables the region to further improve its community assets and quality of life, fueling a virtuous cycle of growth and opportunity. The existing economic development model has delivered a measure of success, but looking forward leads to questions about whether this model is sufficient to take regional assets to the next level of impact and return on investment for the community.

Could current efforts be better aligned, scaled and prioritized to substantially improve the economic course of the region? While there are many strong organizations undertaking well-intentioned initiatives, a more comprehensive approach could substantially improve the economic course of the region.

Key Global Competitiveness Organizations and Initiatives in the Kansas City Region

Local governments are increasingly using proactive strategies to focus on economic drivers, often working in partnership with civic institutions. Working with and through more than 50 local economic development agencies, as well as the states of Missouri and Kansas, cities and counties in the Kansas City region are moving beyond traditional public incentive programs and tax policies to expand their roles in forging the next economy. A sampling of the initiatives underway that have a regional impact includes:

- Greater Kansas City Chamber of Commerce "Big 5" Animal Health Symposium, Urban Neighborhood Initiative, America's Most Entrepreneurial City, Translational Medical Research, UMKC Downtown Conservatory
- Civic Council of Greater Kansas City Heartland Civic Collaborative; civic research and capacity building; support for education and life sciences initiatives
- Kauffman Foundation Entrepreneurship, innovation and education initiatives
- Kansas City Area Development Council Animal Health Corridor, KC SmartPort, KC Advanced Energy, KC NEXT, Higher Education Task Force
- Kansas City Life Sciences Institute
- Mid-America Regional Council Transportation Outlook 2040, Creating Sustainable Places, Comprehensive Economic Development Strategy, Clean Air Action Plan, Solid Waste Management Plan, KC Communities for All Ages, Regional Workforce Intelligence Network, Regional Energy Efficiency and Conservation Strategy
- UMKC KC SourceLink, Center for Economic Information, Center for Health Insights
- Kansas City, Missouri Climate Protection Plan, Advance KC, Launch KC, sewer and water investments
- Johnson County, Kansas County Economic Research Institute, Johnson County Research Triangle, Johnson County Sustainability Plan
- Education PREP KC, KC Stem Alliance, KC Technet, Mid-America Manufacturing Technology Center, Lumina Foundation Partnership, higher education institutions, K-12 Education
- United Way Decade of Difference
- International Trade Council of Greater Kansas City
- KC Digital Drive
- Missouri Enterprise

Is the current economic development model sufficient to address what matters in today's hyper-digitized, global economy? This research shows that strong focus on amenities and quality of life must be matched with a higher and more deliberate emphasis on the economic drivers — trade and traded sectors, innovation, and human capital — that together create a robust market environment for continuous economic growth and opportunity.

Is the current economic development approach too fragmented? Rather than being a region-wide effort, the current approach is, in reality, being executed by 119 cities and nine counties, including over 50 separate economic development entities. The potential result, in a modest growth environment, is that jurisdictional neighbors compete with each other for assets, moving economic growth around the region, rather than working together to "grow the regional pie."

Leading metropolitan areas are adopting new approaches to economic development.

As the region considers its next wave of collaborations to strengthen the economic course for Greater Kansas City, it is not alone. Many metropolitan areas across the country have been re-evaluating their economic development strategies post-recession and acting with intention to ensure they emerge from the downturn stronger and more resilient than before, anchored by a sound foundation for long-term growth. Based on Brookings' observations from working with regions throughout the United States and overseas, it appears the metropolitan areas that are well-positioned to excel in the next economy are those that share the following characteristics:

Leading metropolitan areas are working from a common set of objectives.

Successful regions are pursuing a shared economic agenda or a common set of priorities. There is widespread awareness that fragmented, uncoordinated efforts must give way to a new regional alignment that will lead to more transformative outcomes. Within this shared plan, individual organizations are taking leadership and ownership over specific elements and coordinating with other organizations within the region. New

initiatives, like Chicago's Plan for Economic Growth and Jobs, are now deliberately designed to advance cross-cutting strategies in regional economic plans instead of adding to piecemeal efforts. Louisville and Lexington are working together alongside industry across a 22-county region to pursue a network of strategies around one shared priority — to make their region a global hub of advanced manufacturing. In short, these collective, regional efforts aim to maximize leaders' and organizations' efforts, focusing on the most impactful actions and ensuring that actions are coordinated and mutually reinforcing.

Leading metropolitan areas focus on the market fundamentals.

More and more regions are turning to the fundamental market drivers of trade, innovation and human capital to drive new sources of growth that will directly benefit firms, workers and communities. Many metropolitan areas, including Des Moines and Portland, are pursuing comprehensive global exports and investment strategies, based on their distinctive strengths, such as bio-agriculture, computer and electronics, and environmentally sustainable services. Others are working on comprehensive approaches to skills strategies aligned to employers, like the well-recognized, tri-state regional effort in Greater Cincinnati. San Diego has converted its technology capabilities in defense contracting to a more robust innovation ecosystem where university-based research and development is leading to new industry partnerships, commercial applications, and new firms and products. The end result is a culture shift underway in regional economic development, one that is transitioning from a singular focus on attracting firms and talent to a more expansive view of economic development that uses the market drivers to help existing industries and capabilities innovate and thrive.

Leading metropolitan areas organize for success.

The pioneering regions are pursuing broader more inclusive engagement and enhanced market analysis to drive the design and execution of regional plans and strategies. Single plans by single governments or organizations are giving way to comprehensive approaches developed by networks of leaders who co-design, co-own, and co-implement coordinated regional

strategies to achieve transformative economic change. While this is more complex, leading regions are finding that networked approaches and solutions are yielding near-term returns, as new federal and philanthropic resources are rewarding highly integrated, multi-sector, regional initiatives and collaborations. In addition, these regions are building research and market analytic capacity to ensure that data and information are regularly informing regional economic strategies, and that data is available to help monitor and track progress.

Leading metropolitan areas are aligning with their states.

Metropolitan areas with strong regional economic strategies are often better able to effectively shape and inform state policies and investments in ways that align with regional priorities. The Seattle region, led by the Puget Sound Regional Council, the Seattle Chamber of Commerce and other partners, pursued a smart buildings technology initiative as one of the signature priorities its regional economic growth plan. The result was a large matching grant and partnership with the state to launch the region's effort to spur new industry growth and skills development in energy efficiency and information technology. Syracuse/Central New York's regional export initiative sparked the governor to create GlobalNY, enabling the state to prioritize global trade in ways that coordinates with regional economic strategies. And a number of other states, like Colorado, Tennessee and Minnesota, are in the midst of designing and executing regionally-oriented state economic policies. In short, a region's ability to articulate and coalesce around a common set of regional priorities can enable the state to be a better partner to regional ambitions.

Greater Kansas City has the opportunity to use lessons from other regions to inform plans to take existing collaborations and initiatives to the next level of impact. — becoming a more resilient, prosperous region that makes data-driven decisions to adapt to and act on emerging opportunities.

CASE STUDIES

ADVANCING A UNIFIED REGIONAL ECONOMIC AGENDA

Chicago Plan for Economic Growth and Jobs

Goal: To grow jobs, increase output and productivity, and raise wages and incomes in the region through a fact-based and data-driven plan that (a) benefits all people and sections of society, not just the downtown area and O'Hare Airport corridors; (b) is outward looking to the greater region; and (c) is capable of evolving over time.



Summary: Chicago boasts a number of strong assets, such as a highly diverse economy, from business headquarters to metals manufacturing, a global logistics infrastructure, and leading universities. Despite these assets, the region emerged from the Great Recession underperforming the nation in jobs, output and wages. Growth was also hampered by fragmented economic development efforts and slow-to-emerge institutional networks. In 2011, Mayor Rahm Emanuel charged a newly repurposed World Business Chicago, the city's economic development agency, and a team of nonprofit and private-sector organizations to develop an economic plan for the city and region. The resulting Plan for Economic Growth and Jobs (PEGJ) includes 10 touchstone strategies that build on an assessment of five market levers — economic clusters, human capital, innovation, infrastructure, and public and civic institutions. The strategies, such as becoming a hub for advanced manufacturing, supporting entrepreneurship, fostering innovation in mature and emerging sectors, and developing workforce assets in a demand-driven manner, are driven by dozens of newly designed, cross-cutting initiatives.

Key organizations: To ensure cross-sector input and representation, PEGJ and its 10 strategies are co-chaired by Mayor Emanuel and two leading private sector executives. The strategies and initiatives are monitored and implemented by committees composed of business, nonprofit, civic and philanthropic leaders from across the region.

Impact to date: These strategies and initiatives have already begun to gain momentum. In April 2013, PEGJ launched Seed Chicago, a Kickstarter-based online platform for crowd-funding small businesses

across economically diverse areas. Seed Chicago had an initial cohort of 11 businesses and unveiled a second cohort with matching funds from MillerCoors. Skills for Chicagoland's Future, an innovative workforce development program, has connected over 500 previously long-term unemployed residents with jobs as of November 2013. And in early 2014, a regional coalition of university, business and civic organizations, anchored by UI LABS in Chicago, received \$230 million in federal, state and local funds for a digital manufacturing lab, an outgrowth of the plan's focus on manufacturing innovation. These and various other initiatives represent a strategic, concerted and cross-cutting approach to organizing civic efforts for regional prosperity.

For more information: www.worldbusinesschicago.com/plan

FOCUSING ON FUNDAMENTALS

TRADE

Greater Portland Metropolitan Export Initiative

Goal: To double exports in five years by pursuing a comprehensive plan that includes diversifying and expanding the mix of exporters and export markets, and create a vibrant local export culture while building Greater Portland's global reputation.



Summary: Post-recession, leaders in Greater Portland decided to apply its strong model of regional governance toward economic growth, with exports as its priority. While the region benefited from a doubling of exports between 2003 and 2010, creating nearly 46,000 new jobs, it wanted to maintain that momentum through intentional action. A market assessment found that two-thirds of Greater Portland's exports were driven by its computer and electronics industry, thanks to Intel. Many small and medium companies also had limited awareness of global opportunities and available support, which meant many had not tried to export at all. As a result, the region launched a metro export plan. The plan has three core strategies: (a) solidify the region's primary exporting cluster through logistics and supply chain strategies; (b) help under-exporting manufacturing firms successfully go global; and

Case Studies, continued

(3) brand and market a cluster that embodies Portland's global edge, which is "We Build Green Cities," of collection of goods and services firms in sustainable planning and design.

Key organizations: The plan today is co-chaired by the president of Metro Council and a senior executive from Intel, with day-to-day leadership and coordination provided by Greater Portland, Inc., a public-private partnership organization. The plan is being implemented and monitored by strategy teams of business, government, nonprofit and civic leaders.

Impact to date: The region is on track to reach its goal of doubling exports within five years and has already logged several important accomplishments. The region has conducted a freight movement analysis to identify freight flows between local companies and Portland's international airport. The study yielded essential insights to help the region leverage its export strengths in the computers and electronics cluster. The region has trained economic development officials on providing export-related services and launched a pilot program to help under-exporting firms access new markets through case management and market research assistance.

Greater Portland has also begun to more intentionally telegraph its sustainability and manufacturing expertise to growing global markets. Building on Portland's "We Build Green Cities" brand, local green tech and real estate development firms visited Japan for one-on-one talks in 2013. Portland companies have since signed their first international agreements to help build a new model city in Japan and are now discussing opportunities to contribute to the 2020 Olympics. In 2013 National Journal named Portland the nation's top innovator in expanding exports.

For more information: www.greaterportlandinc.com/global

INNOVATION:

San Diego CONNECT

Goal: Cultivate a thriving innovation ecosystem by helping inventors and entrepreneurs commercialize the most promising technology.



Organization: CONNECT has a full-time staff of 20 employees. The organization's in-house entrepreneurs coach researchers, early stage startups and established corporations through each stage of the innovation process, from evaluating the commercial promise of a discovery to patent licensing and from product launch to expansion into new markets. CONNECT also relies on more than 1,800 volunteers to provide mentoring and help develop and refine its programs and initiatives.

Impact: San Diego CONNECT has attracted more than \$2 billion in investment capital for more than 3,000 companies it has helped at various stages of development. CONNECT has also adapted itself to meet the needs of the region's evolving high-tech clusters. Its capabilities have expanded to include mentorship, advocacy, talent development and capital attraction.

CONNECT has also played an important role in helping emerging and maturing clusters develop their own trade associations. Outside the San Diego area, more than 50 regions around the world have adopted the CONNECT model, including New York City, Bogotá, Colombia and Saudi Arabia. In 2010 the U.S. Department of Commerce awarded San Diego CONNECT the Innovation in Economic Development Award for the creation of Regional Innovation Clusters.

For more information: www.connect.org

SAN

Case Studies, continued

HUMAN CAPITAL:

Greater Cincinnati Partners for a Competitive Workforce

Goal: Meet employer demand for talent by developing skills in the current and future workforce, with the stretch goal of achieving gainful employment for 90 percent of the region's labor force by 2020.



Summary: The Greater Cincinnati area's workforce-related organizations and initiatives have a long history of working collaboratively to address regional challenges. To confront a structural skills gap, leaders from the Ohio-Kentucky-Indiana tristate region built on existing institutional ties to establish Partners for a Competitive Workforce in 2011. The partnership serves as the backbone organization for businesses, workforce investment boards, educational institutions, labor groups, chambers of commerce and service providers engaged in workforce initiatives in the region. It works to aligns resources, priorities, strategies and advocacy across its constituents.

To coordinate the region's efforts, Partners for a Competitive Workforce has articulated well-defined priorities, including connecting employers with qualified employees by providing tailored workforce delivery services; aligning education with employer needs in select industries by identifying workforce requirements, mapping career pathways and calibrating training and work experience; and improving work readiness among disadvantaged jobseekers by ensuring that workforce service providers equip all participants with a common standard of employable skills.

With these priorities in mind, the partnership collects and analyzes labor market data to measure workforce trends, needs and gaps; aggregates labor market information in the form of a web portal for employers, jobseekers, service providers and workforce professionals; and produces metrics to measure progress under each priority area.

Impact to date: Since 2008, the partnership and its member organizations have raised more than \$25 million in funds from public, private and philanthropic sources. More than 50 agencies have

begun to collect comparable data through a common data system. Three of the partnership's career pathway initiatives have served 4,800 people, helping them earn more than 3,500 postsecondary credentials and achieving a job placement rate of up to 70 percent.

For more information: www.competitiveworkforce.com

ORGANIZING FOR SUCCESS

The Greater New Orleans Data Center

Goal: "Make informed decisions possible" by drawing on data from multiple sources to give the region's government, business and nonprofit communities a well-rounded view of important local issues.



Summary: Established in 1997 as the Greater New
Orleans Community Data Center, this five-person
organization has had an outsized impact on policymaking, civic
activism and community-driven change in the Southeast Louisiana
region. The organization's strength lies not only in its fluency with
data assets, but also in its familiarity with the Greater New Orleans
region. The center's deep understanding of local conditions means
it can interpret data with local nuance, a regional perspective and a
keen awareness of the implications for action. As a result, the Data
Center has earned a reputation for its unique ability to conduct
independent analyses of regional issues and examine these issues
from multiple angles.

The center's expertise in providing data and analysis is focused on several highly topical areas, including disaster recovery, workforce development, racial disparities and regional economic performance. Around these core issue areas, the organization monitors key indicators, produces interactive data toolkits and publishes a series of well-regarded reports. For example, each year the Data Center produces a publication analyzing the region's demographic trends, income levels, homeownership rates and mobility patterns. At the sub-regional scale, the center produces neighborhood profiles to help community leaders set priorities at the block level. And in areas where traditional channels of data are lacking, the organization has innovated novel approaches.

Case Studies, continued

Besides providing the region with a timely and accessible information platform, the Data Center also conducts action-oriented research to more deeply examine issues of special interest to the community. The organization puts a strong emphasis on communicating findings to public officials, business leaders and community organizers. Its outreach efforts aim to equip private, public and nonprofit actors with the information needed to fix regional problems in an informed, collaborative way.

Impact: The Data Center sees its larger mission as one of culture change: transforming local stakeholders' aversion to data into a culture that leverages data as an essential tool for policymaking. When the center was first established, many community leaders were skeptical of the need for information; decision-making was based on relationships, anecdotes and institutional habit. But Hurricane Katrina proved a turning point, when the Data Center's "New Orleans Index" became the premier, and in many cases the only, credible source for tracking progress toward recovery and prosperity in the region. The Index, which monitors economic growth, inclusiveness, sustainability and quality of life, is now a biennial publication that has set a new national standard for measuring disaster recovery.

For more information: www.datacenterresearch.org

Questions for further research

Inevitably, research generates as many questions as it answers, and this report is no exception. In the coming months, the region can use its research capacity to address some of these questions and help fine tune an economic strategy.

- What are the core competencies of the region's businesses that could be leveraged to improve the performance of its traded clusters and increase their exports?
- What is the proper role of incentives and tax policy in improving the region's ability to trade, innovate and attract talent?
- Is the region's advantage in starting technology-oriented firms resulting in them growing to scale in Greater Kansas City? Why or why not?
- Why have some regions been better able to continuously adapt to disruptive global challenges and opportunities than others, and what lessons can be applied in Greater Kansas City?
- How can the region better align the skills of its workforce with the demands of a rapidly changing economy?
- To what extent do regions with stronger traded sectors and innovation also create greater socioeconomic mobility for its residents?
- How can the Greater Kansas City best organize across business, civic and governmental sectors to implement a strategic agenda around improving the core drivers of regional prosperity?

Additional questions, research and progress updates will be posted online at www.marc.org/prosperity.

IV. Conclusion

After more than a year of work, researchers at MARC, Brookings and UMKC, along with civic, business and public leaders, have documented that while the region has a stable, predictable economy, it has shown signs of weakness over the last decade. This has been exacerbated by the recent recession. While the region's economy performed well in the 1990s, in the 2000s the region began to fall behind national averages and peer metropolitan areas.

A review of fundamental economic drivers sheds more light on why this is happening. Traded sectors, which are critical to a robust economy because they bring resources into the region, are not performing as well as they should. Only one of these sectors, professional services, is currently firing on all cylinders. The region's economy also shows some signs of underperformance in translating innovation into firms and jobs, and supporting and expanding human capital — especially in STEM areas.

The region's economic performance has slowed, but not to the point of crisis. The trends can be reversed through a coordinated focus on the drivers and enablers of the regional economy. The Kansas City metropolitan area has a solid base to build on, and numerous initiatives are already underway.

What Comes Next?

Understanding the issues is an important first step. Next, through community discussion, the region's leaders must agree on the fundamental elements that must be addressed if the region is to compete successfully in the next economy and begin to develop strategies to reach the next level of impact.

The four key characteristics of successful regions that Brookings identified can serve as a roadmap for the Kansas City region as it contemplates how to build a stronger, more resilient economy:

- Work from a common set of economic objectives.
- Focus on market fundamentals.

- Organize for success.
- Align regional priorities with state objectives.

To follow through on the findings of this report, MARC will engage the community and undertake the following activities:

- Produce one or more research white papers that go into greater depth on research covered in this report particularly productivity, competitiveness and traded sectors.
- Work with other regional organizations and institutions to create and sustain research capacity that can begin to address the questions raised by this research and provide ongoing information and analysis to civic, business and public decision-makers.
- Work with others to initiate processes for continuing discussion around issues raised in this report and to develop strategies for concerted action to better position the region for continued prosperity.
- Work with local governments to integrate these issues into regional plans and initiatives.

The work represented in this report demonstrates the importance of working together to continuously monitor and research the regional economy so that decision-makers have the information they need to act. This is just the beginning of a longer conversation and more in-depth research that will lead to unified action and help build a more robust economy that will benefit the entire region.





Endnotes

- ¹ Authors' analysis of World Trade Organization Statistics.
- Michael Spence and Sandile Hlatshwayo, "The Evolving Structure of the American Economy and the Employment Challenge," Council on Foreign Relations, 2011.
- ³ Homi Kharas, "The Emerging Middle Class in Developing Countries," OECD Development Center, 2010.
- ⁴ James Manyika and others, "Disruptive Technologies," McKinsey Global Institute, 2013.
- 5 Carl Benedikt Frey and Michael A. Osborne, "The Future of Employment," 2013.
- 6 Authors' analysis of U.S. Decennial Census data and Census Population Estimates.
- ⁷ Brookings and U.S. Census Bureau projections.
- ⁸ Authors' analysis of 2012 American Community Survey 1-year estimates.
- ⁹ National League of Cities promotion for the 2013 Congress of Cities.
- ¹⁰ Authors' analysis of U.S. Census Bureau and Moody's Analytics estimates.
- Brookings, "Export Nation," 2013; Jonathan Rothwell and others, "Patenting Prosperity," Brookings, 2013; authors' analysis of U.S. Census Bureau estimates.
- The last year for output data is 2011, while the last year for jobs and wages is 2012. The lengths of the time periods shown for each bar are unequal because the year when the region's fortunes began to reverse relative to the nation is slightly different for each indicator.
- ¹³ Authors' analysis of Regional Economic Models, Inc. data.
- Regional differences in the cost of living give workers in Greater Kansas City purchasing power on par with their counterparts in the United States as a whole. In 2011, consumer prices in the Kansas City metropolitan area were 6.6 percent lower than prices nationwide according to the Bureau of Economic Analysis. Adjusting Greater Kansas City's average wage for this cost disparity effectively erases the lag in average wages for that year. Due to the limited availability of reliable measures across the entire study period, data presented in this report are not adjusted for differences in cost of living. Future research could more closely examine Greater Kansas City's economic performance and standard of living in light of regional prices.
- ¹⁵ Authors' analysis of Moody's Analytics data.
- ¹⁶ Authors' analysis of Census Public Use Microdata.
- ¹⁷ Authors' analysis of Regional Economic Models, Inc. data.
- Peer metropolitan area comparison data for educational attainment, poverty, median household income and percent under age 18 are from the U.S. Census Bureau's 2012 American Community Survey 1-year data.

- Ten-year job growth is from the Bureau of Labor Statistics (BLS), 2002–2012. Recession recovery is from BLS, measured from each metropolitan area's pre-recession peak employment through third-quarter, 2013. Gross Metropolitan Product (GMP) 10-year change is from the Bureau of Economic Analysis, 20102–2012. Unemployment rate is from BLS, March 2014. Change in real average wage is from BLS, 2009–2012 in 2012 dollars.
- ¹⁹ Authors' analysis of Regional Economic Models, Inc. data.
- Among these six sectors, manufacturing is the region's largest exporter, both domestically and internationally. The region imports more manufactured goods than its exports. This is not surprising, given that the biggest components of local imports are computers and electronics, which are purchased by nearly all businesses and most households but are not made in metropolitan Kansas City. Most of the region's other consumer and durable goods are also manufactured elsewhere, which has become quite common, expected, and actually beneficial for regional economies worldwide.
- ²¹ Authors' analysis of Regional Economic Models, Inc. data.
- ²² Thin clusters of related firms or within sectors can pose several challenges for regional economies. In Greater Kansas City, the relatively small number of companies may indicate that the region's traded sectors are dominated by a few large firms whose competitors and suppliers are largely located outside of the metropolitan area. For example, the information sector is driven predominantly by Sprint, rather than a cluster of small and midsized technology companies. Despite the presence of Honeywell and Hallmark, a large portion of the local manufacturing sector is driven by Ford, General Motors and their suppliers—a huge asset to the local economy but a potential liability should one of them ever decide to relocate its local operations. The lone exception is the professional services sector, where, despite the presence of a large firm like Cerner, there are 50.3 establishments per 1,000 jobs locally compared to 40.5 establishments nationally.
- $^{\rm 23}\,$ Authors' analysis of Regional Economic Models, Inc. data.
- ²⁴ Authors' analysis of Regional Economic Models, Inc. data.
- ²⁵ Authors' analysis of Regional Economic Models, Inc. data.
- $^{\rm 26}\,$ Jonathan Rothwell and others, "Patenting Prosperity," Brookings, 2013
- ²⁷ Jonathan Rothwell and others, "Patenting Prosperity," Brookings, 2013.
- ²⁸ Jonathan Rothwell and others, "Patenting Prosperity," Brookings, 2013.
- ²⁹ Ian Hathaway, "Tech Starts: High-Technology Business Formation and Job Creation in the United States," Ewing Marion Kauffman Foundation, August 2013. High-tech is defined as industries with high proportions of STEM

- occupations. It includes, among others, the technology, manufacturing, software, Internet, communications, computer systems design, pharmaceutical, scientific research, and architectural and engineering industries.
- Dane Stangler, "Path-Dependent Startup Hubs Comparing Metropolitan Performance: High-Tech and ICT Startup Density," Ewing Marion Kauffman Foundation, September 2013.
- The genealogy of Greater Kansas City's technology companies is visualized in Heike Mayer's mapping of the region's "Tech Galaxy," online at www.kauffman.org/~/media/kauffman_org/research%20reports%20 and%20covers/2013/06/kctechgalaxy 613.pdf
- ³² Authors' analysis of Business Dynamics Statistics (BDS) data from the U.S. Census Bureau.
- Dane Stangler and Paul Kedrofsky, "Neutralism and Entrepreneurship: The Structural Dynamics of Startups, Young Firms, and Job Creation," Ewing Marion Kauffman Foundation, September 2010.
- ³⁴ Authors' analysis of 2012 BLS Occupational Employment Statistics.
- Authors' analysis of 2012 American Community Survey 1-year estimates; Jonathan Rothwell, "Education, Job Openings, and Unemployment in Metropolitan America," 2012.
- ³⁶ Jonathan Rothwell, "The Hidden STEM Economy," 2013
- ³⁷ In- and out-migration by educational attainment was tabulated by the Census Bureau to and from each county in the United States, but is only reported for counties where the sample size was sufficiently large to avoid revealing confidential information about individuals. The reporting of these flows is asymmetric, in that they may be sufficiently large to be reported in one direction but not the other. The Census Bureau only calculates net migration between individual counties where flows in both directions are sufficiently large to be reported without violating confidentiality restrictions. However, this method of estimating net migration had the impact of ignoring large outflows from the region to some counties in, for example, Texas, simply because there was not enough in-migration from those counties to be reported. To avoid ignoring relevant data, this analysis instead summed the inflows and outflows by state to and from any county in the 15-county Kansas City metropolitan area, then calculated net migration on a state-by-state basis. As a final step, migration to and from the rest of Kansas and Missouri was excluded to evaluate the region's ability to attract talent from the rest of the country. It is worth noting, however, that even using the Census Bureau's more restrictive definition of net migration, the data still indicate that the region experienced a net outflow of those with graduate and bachelor's degrees to other regions

- of the United States beyond the bistate area. For more information on the Census Bureau's county-to-county migration flows data, see www.census.gov/hhes/migration/data/acs/county-to-county.html.
- ³⁸ Authors' analysis of 2007-2011 American Community Survey 5-year estimates.
- ³⁹ Authors' analysis of U.S. Decennial Census and American Community Survey.
- ⁴⁰ Authors' analysis of Census Public Use Microdata.
- ⁴¹ Authors' analysis of 2012 American Community Survey 1-year estimates.
- ⁴² Authors' analysis of Census Public Use Microdata.



1775 Massachusetts Avenue NW Washington, DC 20036 202-797-6000 www.brookings.edu



MID-AMERICA REGIONAL COUNCIL

600 Broadway, Suite 200 Kansas City, MO 64105 816-474-4240 www.marc.org