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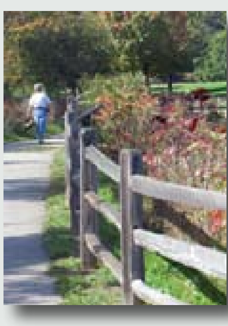
summary report



PLACEMAKING FOR PROSPERITY IN THE NEW ECONOMY

LAND POLICY INSTITUTE

BY THE LAND POLICY INSTITUTE AT MICHIGAN STATE UNIVERSITY

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This report #LPR-2009-NE-03 of the LPI New Economy Report Series is the Executive Summary of a larger report on prosperity strategies in the New Economy. Its aim is to provide science-based information to local, regional, state and national policy decision makers and others involved in place-based strategies for sustainable development.

The Emerging New Economy

IN THESE DARK ECONOMIC TIMES, COMMUNITIES ACROSS THE UNITED STATES ARE ASKING THIS FUNDAMENTAL QUESTION: "WHAT DO WE NEED TO DO TO SURVIVE—AND, IDEALLY, PROSPER—IN THE NEW ECONOMY?"

The unprecedented prosperity Americans enjoyed since World War II has waned in recent years. American communities have struggled to regain the growth and prosperity that came so easily in the past. With the national economy now at a virtual standstill, the current recession further complicates the problem, stressing the finances of local units of government. States too are economically challenged, as record numbers of them are financially strapped and are aggressively seeking assistance from the federal government.

The federal government itself is financially challenged, as it has had to become the funder/banker of last resort for failing financial institutions, major national companies and states themselves. In 2008, Congress approved some $700 billion for the bailout of financial institutions. In 2009, it further passed the American Recovery and Reinvestment Act (ARRA), which provides almost $800 billion in economic stimulus funds for state and local governments and for the American people. Nevertheless, unless the national economy turns around and does so quickly, the plight of the American people and their communities remains uncertain.

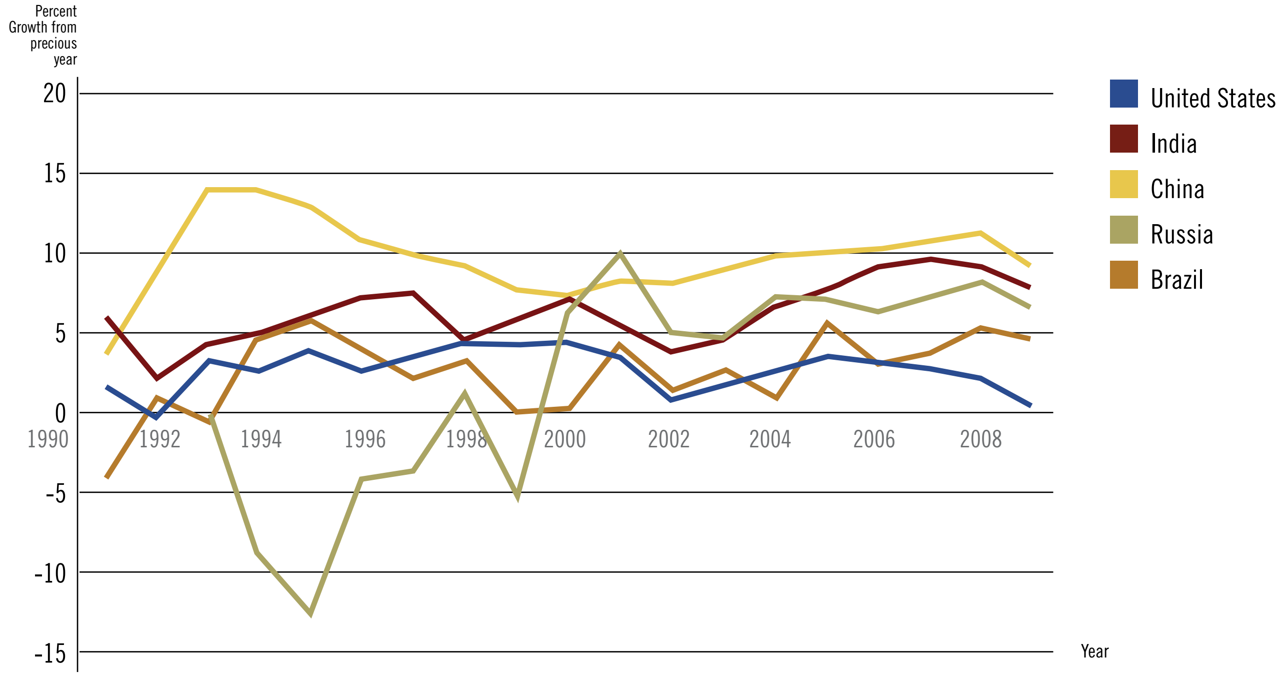
State and local leaders, as well as the economic development professionals they rely on, are struggling to find strategies that will be effective in bringing about a turnaround in an environment where communities and states now compete for prosperity in a "zero-sum game." The business attraction tools that they relied on in the past are not only more difficult to fund, but evidence is mounting that they are largely ineffective in spurring growth today. The realities of economic development seem to have changed. Slow national growth implies more aggressive place competition for opportunities.

The Roles of Globalization and the New Economy

Among the reasons for the drastic change in the prospects for success are the advent of globalization and the emergence of the New Economy. Globalization implies that the stage for competition is no longer local or national, but international. The emergence of the New Economy implies that tools of the past may no longer work, that growth options for and strategies of communities and states are more limited, and that greater emphasis must be given to place-based strategies for economic prosperity. Consequently, the outcomes of local economic development efforts are now less predictable and increasingly more difficult to engineer.

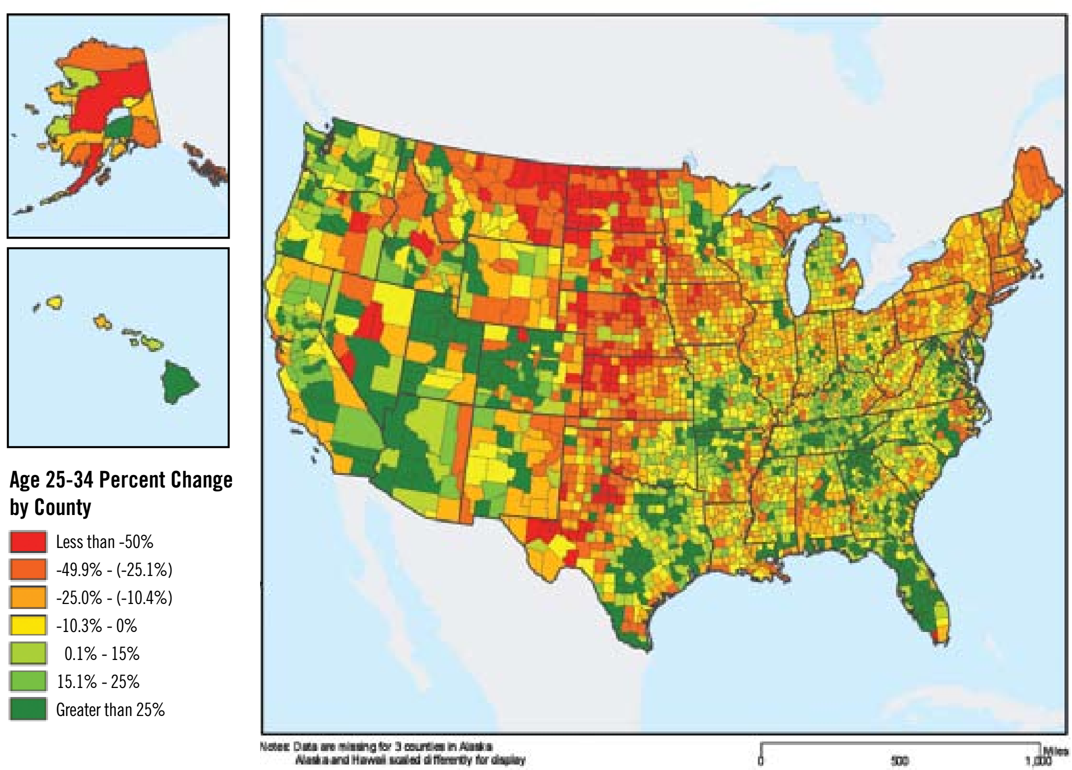
The neoclassical industrial concept of growth, which served as the basis of economic development strategies for at least a century, is very much being contested

Comparison of Real GDP Growth Rates for Select Countries



Source: World Bank data

U.S. Population of 25- to 34-Year-Olds Percent Change: 1990-2000



Prepared by the Land Policy Research Program at the Land Policy Institute, Michigan State University, 2008. Source: U.S. Census Bureau, ESRI

OLD ECONOMY

The prevailing U.S. economy throughout much of the 19th and 20th centuries was based largely on the manufacturing industry, access to raw materials and skilled labor. America's cities and regions generated great wealth, had a well-paid middle class, and prosperity was almost guaranteed. This model worked well until the 1990s.

today. If the New Economy paradigm holds true, then the accumulation of capital, skilled labor, management and exhaustible natural resources—the so-called basic factors of production—would be less important in driving the economic performance of a place. Much of what economic developers know was learned in the Old Economy environment of rapid growth. However, much of what they need to know now may defy the logic and mindset of the Old Economy.

The New Economy implies that information technology (IT), communications technology (CT) and other emerging technologies have changed the world so radically since the early 1990s that traditional measures of value are no longer entirely valid. New products and needs have emerged, which better integrate information and high technology into manufactured goods and services. Hence, we argue that places that provide for greater capacity to innovate and integrate technology into products and services are performing better, compared with traditional manufacturing locations, which created great value in the Old Economy through the basic manufacturing process.

Knowledge Workers

The New Economy implies that innovative and talented people, entrepreneurs and other knowledge workers, are far more valuable today than are traditional skilled production workers, and they are potent drivers of growth. Such people are said to be more mobile on the landscape than are traditional skilled workers, as they pursue a high quality of life. Hence, capital is said to be more likely to follow knowledge workers to quality places that are rich in amenities, rather than agglomerate in old industrial manufacturing-based cities and towns. This suggests less local control over economic outcomes, a more strategic approach to economic development and a strategic link between land policy, placemaking and prosperity. The term "strategic growth" was coined by one of the report's authors to describe this new paradigm in land use in the New Economy: managing assets to attract knowledge workers in order to place-make for the New Economy.

Pursuing Prosperity in the New Economy

The primary goal of economic developers is to boost prosperity, which we defined as "a state of stable, reliable and secure growth, with rising employment, income and other elements of quality of life that ensures transcendental success." By this definition, prosperity encompasses income, employment and quality of life. To pursue prosperity, it is important to know what one's targets should be and what levers of growth drive them. One also needs to know how the New Economy works, especially in the context of place. The literature is suggesting that quality of life is increasingly a determinant of place competitiveness—it attracts knowledge workers who are potent conduits to economic development. But quality of life is not only a function of income and employability; it is also a function of access to critical environmental, social, cultural, recreational, educational, leisure and other amenities. Obviously, the most effective strategy for prosperity will depend on what element of prosperity is the primary target of a community: income, employment and other elements of quality of life.

Communities Need Better Guidance

THE ABSENCE OF AN INTEGRATED FRAMEWORK THAT PROVIDES KNOWLEDGE ABOUT THE RELATIVE PAYOFFS FROM ALTERNATIVE STRATEGIES IS A MAJOR GAP BETWEEN SCIENCE AND PRACTICE IN STRATEGIC GROWTH AND PLACEMAKING IN THE NEW ECONOMY.

While communities need guidance on what works and in what context, the information available to them from the research community is confusing at best. What is available includes examples and case studies of successful places and initiatives, and various conclusions that could be drawn from the writings of individual researchers who, mostly, narrowly focused their research on the link between one or two drivers to growth and prosperity. Much of the existing research was done in the context of inquiries into the effects of a particular variable or driver of growth, or one or two hypotheses about the "significance" of a driver. In many cases, the findings actually conflict. In some cases, they are context specific (e.g., cities). This makes the practice of implementing new strategies difficult at the local level. The absence of an integrated framework that provides knowledge about the relative payoffs from alternative strategies is a major gap between science and practice in *strategic growth and placemaking* in the New Economy.

Existing Literature on Economic Growth and Prosperity

A brief review of the literature is appropriate at this point. The literature suggests:

- That the tools and incentives that economic developers employed to attract business to urban and rural areas included (1) fiscal incentives; (2) tax reductions; and (3) direct grants of goods or services. Their reliance on these tools was consistent with the Old Economy notion that the cost of doing business is a relevant driver of business location and, therefore, economic activity.
    - Keeping taxes low and competitive can be a growth incentive (Mofidi and Stone, 1990; Phillips and Gross, 1995).
    - Edwards (2007) and Sands and Reese (2007) suggest that these incentives are largely ineffective. If these incentives no longer work, then what works?
- That attracting high-tech companies who pay high wages to places where a technology, research, invention and innovation base already exists enhances growth (Blakely, 1994).
- That "economic gardening," which is the promotion of the growth of targeted industries or clusters, can induce development (Hackler, 2003).
- That investment in infrastructure is a growth driver, but Johnson (1990) and Graham (1999) suggested that infrastructure is only a necessary but not sufficient condition for growth.
- That keeping the fiscal and regulatory climate friendly, pursuing strong intergovernmental cooperation, improving the quality of education and retraining the workforce attracts growth (Fry, 1995).
- That attracting entrepreneurs and knowledge workers who are increasingly mobile on the landscape gives a competitive edge (Barro and Sala-i-Martin, 1991, 1995; Glaeser et al., 2000; Clark, 2003; Florida, 2002a; Simon, 1998; Glendon, 1998).

- That enhancing regional openness, diversity and tolerance to attract the creative class to urban areas are key elements of competitiveness (Florida, 2002a, 2002b, 2002c; Florida and Gates, 2001).

- That attracting knowledge workers to rural communities may help (Mathur, 1999; McGranahan and Wojan, 2007).
- That expanding the financial market and targeting financial companies can enhance growth (King and Levine, 1993; Levine, 1997; Montgomery and Washer, 1988; Rousseau and Wachtel, 1998; Abrams et al., 1999).
- That universities play a role in economic growth (Etzkowitz et al., 2000; Wu, 2005; Glaeser and Saiz, 2003; Kresl and Singh, 1999); and that tapping into the research prowess of universities and others involved in research or those that generate patents is beneficial to growth (Wu, 2005; Abdullateef, 2000; Mayer, 2003).
- That development of local capacity for venture capital is a crucial element of development (Wu, 2005).
- That enhancing rural amenities, infrastructure and quality of life can provide a competitive edge (Greenwood, 1985; McGranahan and Wojan, 2007; Beyers and Lindahl, 1996; Goe, 2002; McGranahan, 1999; Deller et al., 2001).
- That transitioning out of the Old Economy by transcending legacy costs enhances long-term growth (Higgins et al., 2006).

Needed Framework

Given the large number and specific nature of the questions that communities, leaders and their residents are asking, it is clear that many of their questions may well remain unanswered, due to the contrast between how research on policy issues is conducted and the context within which policy makers need information or make decisions. A framework is needed for understanding how drivers of growth work together—one that allows communities to better understand the relative responsiveness of various forms of growth (income, jobs, population, etc.) to investments in alternative assets (green infrastructure versus gray infrastructure), to the implementation of alternative strategies (e.g., attraction of knowledge workers versus immigrants), in alternative climates and weather settings (cold versus warm places) and under alternative scenarios (urban versus rural settings). To be valuable, such a framework must also provide information on relative impacts and elasticities of alternative policy tools and strategies. An integrated framework that would allow the comparison of the relative effects of alternative growth drivers, the pathways of each to prosperity, and the differences in impacts between metro and non-metro areas is needed.

NEW ECONOMY

A global, entrepreneurial and knowledge-based economy, wherein business success comes increasingly from the ability to incorporate knowledge, technology, creativity and innovation into products and services.

Approach and Methodology

OUR "NEW ECONOMY GROWTH THEORY" SUGGESTS THAT NEW DRIVERS OF GROWTH HAVE EMERGED IN THE NEW ECONOMY FROM A SET OF PREVIOUSLY INTANGIBLE DRIVERS IN THE OLD ECONOMY.

Growth in the New Economy

Our report lays down a framework for examining prosperity in the context of the New Economy. It starts by describing the difference between the Old Economy and the New Economy, particularly focusing on what this difference translates into with respect to the growth strategies of communities. It further explains the implication of the New Economy for land use, economic development and prosperity. It introduces a new concept of "place" in the New Economy, indicating that place can be viewed in the context of a location that is laden with the attributes that people, employers and economic activity want and view as important, and for which they are willing to relocate in order to attain them. It defines "economic, social and environmental placemaking" as "the use of strategic assets, talent attractors and sustainable growth levers to create attractive and sustainable high-energy, high amenity, high-impact, high-income communities that can succeed in the New Economy." By exploring existing literature on proposed drivers of economic growth in the New Economy, our report develops a series of questions that are relevant to state and local economic developers.

In developing the methodology for this study, our "New Economy Growth Theory" suggests that new drivers of growth have emerged in the New Economy from a set of previously intangible drivers in the Old Economy. The implication is that the emergence of these New Economy drivers renders strict neoclassical growth concepts of the economy inappropriate in explaining growth and prosperity. Our report contrasts the Old Economy and the New Economy.

Our "New Economy Growth Theory" is used to decompose economic growth into Old Economy and New Economy drivers. The growth model decomposes prosperity into its key elements—income growth, employment growth and population growth. The relationships between these prosperity elements and their key drivers were explored via a system of simultaneous equations that allowed a fuller accounting of the interrelationships that underpin the growth machinery. We focus on the roles of such drivers of growth as talent, knowledge workers, universities, gray infrastructure, globalization, tax policy, creativity, various amenities, industrial clusters, entrepreneurship, culture, information technology, weather or climate, and green infrastructure. We not only address the issue of relative responsiveness of growth to alternative strategies, but also the issue of the contexts (urban or rural) within which certain factors are more potent in driving growth and prosperity. The theoretical framework is an expansion of the traditional neoclassical growth model, expanded to account for the contributions of Old Economy factors vis-à-vis New Economy factors.

The analysis highlights the notion that failure to account for the set of new drivers that drive economic development today would not only limit public understanding of growth, but would also limit the ability of policy makers to act in an effective fashion. In interpreting our results, we

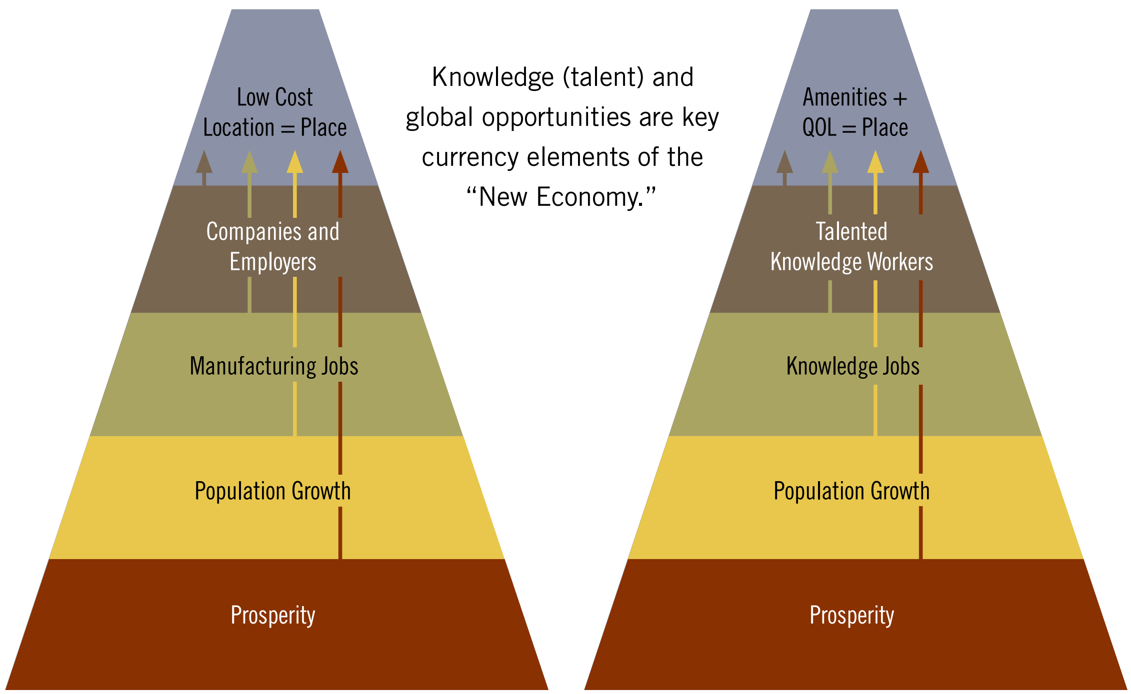
PROSPERITY

A state of stable, reliable and secure growth, with rising employment, income and overall quality of life that ensures transcendental success.

assumed that our estimated coefficients of the impact of growth drivers on growth elements (per capita income, employment and population growth) imply causality, based in part on the dynamic nature of our model, the theoretical framework and the assumption of the existence of a growth function that could be captured from cross-sectional data.

Our methodology is applied to all counties in the U.S. for which data is available for the 1990-2000 period (aggregate analysis), all metropolitan counties for the same period (metro analysis) and non-metropolitan counties (non-metro analysis). This approach allowed a direct comparison of how growth happens in more urban settings vis-à-vis more rural settings.

Place and Placemaking in the New Economy



OLD ECONOMY

- Old industrial complexes are people magnets
- Strategies focused on attracting industry
- Strategies focused on cheap land, willing workers, raw materials, low taxes, etc.
- Local orientation

NEW ECONOMY

- Great places are talent magnets
- Talented create jobs
- Strategies focused on attracting talented people
- Strategies focused on attractive tolerant places with great social, natural, entrepreneurial, creative and intellectual capital
- Global orientation

Major Findings

THE MAIN FINDINGS FROM OUR AGGREGATE ANALYSES ARE:

- *Growth is interdependent:* Employment, per capita income and population growth are synergistic in nature and tend to be mostly complementary. They tend to spiral up or down together. Increases in job opportunities tend to draw more population, offering out-of-towners greater opportunities. Pure population increase in and of itself leads to new jobs. Growing per capita income also attracts more jobs.
- *Initial positioning matters:* In general, places with high initial levels of population tend to attract more people over time, but places with high initial levels of jobs are likely to experience subsequent slower employment growth (holding other factors constant).
- *Demographic factors have growth impact:* In general, places with a high percentage of the young age group (25-34 years old) have more significant job creation potential than do others. Places with a high percentage of the retiree age group (65 years old and over) are likely to experience declining total population and per capita incomes, but have higher job growth. Places with more urban population are likely to experience population and income declines, indicating the significant challenges urban areas have in sustaining their current population and income levels. Places with a higher percentage of foreign-born population are better positioned to attract population but are less able to grow per capita income.
- *Housing market stability matters to growth:* In general, home vacancy is a population and per capita income detractor. It does not help job creation either. High median housing values imply population and per capita income growth but employment declines. Stable and rising home values are crucial for attracting population and raising income and wealth, but can undermine job growth. Rising cost of living (measured by the rent to per capita income ratio) in a place does not seem to detract from population attraction, income growth or job growth. In general, housing market performance has a significant impact on the magnitude and direction of economic growth.
- *Social problems deter economic growth:* In general, unemployment does not affect population or per capita income growth. This suggests that places that are currently economically stressed have as much chance of recovery as places that are not. Poverty, however, creates an environment where people and places are less empowered to achieve economic turnaround. The legacy effect of poverty is an economic development deterrent, with resulting declines in population and per capita income. On the other hand, places saddled with high healthcare costs do not face any extra deterrents with respect to population or job growth. However, these places exhibit lower growth of per capita income.
- *Education and knowledge development are crucial to growth:* In general, places with a higher percentage of people with a bachelor's degree or higher attract population, experience income growth and create more jobs. Investment in higher education, thus, has an overall prosperity enhancement effect.
- *The role of government is limited:* In general, a higher tax-to-spending ratio is associated with population flight. Local government tax and spending does not have a significant effect on

job creation or income growth, but lower taxes relative to services can lead to population gain.

- *Gray infrastructure investment induces growth:* In general, increased gray infrastructure is associated with enhanced population attraction, per capita income growth and more jobs. Investment in gray infrastructure can, thus, contribute to growth, but as indicated by other studies, such infrastructure is necessary but not a sufficient condition for growth.
- *Green infrastructure investment has significant growth dividends:* In general, places with greater developed green amenities (parks, campgrounds, golf courses, etc.) attract population and are better positioned for creating new jobs. Places with greater land amenities (guide services, campground sites, mountain acres, cropland, pastureland, rangeland, public campground sites, federally owned forest land, state park acres, rails-to-trails miles, acres of private forest land and The Nature Conservancy preserves with public access) attract population but are less potent in creating jobs. Places with greater water amenities (marinas, fishing lakes, bodies of water, wetland acres, rivers, and canoe rental places) are slower in gaining population but are better positioned to grow income and employment. Places with greater winter amenities are less effective in attracting population. Finally, places with a warm climate are better at attracting population but tend to be less effective in growing income and jobs.
- *Economic structure/legacy can hinder growth but not job growth:* In general, economies that are transitioned away from agriculture and manufacturing tend to have much faster growth performance in population and income. The ability to grow jobs, however, does not seem to be constrained by legacy, although the ability to grow income and attract population is.
- *New Economy assets are vital:* In general, creative class employment implies greater per capita income growth, while innovativeness (measured by patents) implies growth in per capita income and jobs. Racial diversity does not seem to have a significant relationship with income and job growth.

Differences Between Old and New Economy

ISSUE	OLD ECONOMY	NEW ECONOMY
Markets	Stable	Dynamic
Scope of Competition	National	Global
Organizational Form	Hierarchical	Networked
Production System	Mass Production	Flexible Production
Key Factor of Production	Capital/Labor	Innovative Ideas
Key Technology Driver	Mechanization	Digitization
Competitive Advantage	Economics of Scale	Innovation Quality
Relations between Firms	Go it Alone	Collaborative
Skills	Job Specific	Broad and Changing
Workforce	Organization Man	Entrepreneur
Nature of Employment	Secure	Risky
Source: Adapted from Atkinson and Correa, (2002), [available at www.kauffman.org]		

Findings for Metro vs. Non-Metro Places

FURTHER ANALYSIS OF THE DRIVERS OF GROWTH IN METRO AND NON-METRO COUNTIES REVEALS THE RELATIVE IMPORTANCE OF DIFFERENT DRIVERS OF ECONOMIC GROWTH:

- *"Knowledge workers" are key drivers of place competitiveness in the New Economy.* The estimated effects of the concentration of 25- to 34-year-olds (a group expected to possess the newest vintage of knowledge and talent and to be more mobile) confirm previous findings that knowledge and creativity are associated with job creation in urban areas but not in rural areas. While attracting knowledge workers appears to be a viable strategy in urban areas, rural communities may want to pursue more fruitful strategies for economic development.
- *Education matters in attracting people.* The concentration of college-educated people amounts to faster population growth in urban areas (but not so for per capita income or jobs).
- *Colleges and universities matter, but only in metro settings.* Colleges and universities are known to be treasure troves of innovation. Their presence is associated with greater than typical job creation and population attraction. This is not so in non-metro areas.
- *Innovation counts, but more in metro areas.* Patents translate into huge job opportunities in urban areas but only have a modest impact in rural areas. Patents have, however, similar per capita income enhancement effects in both metro and non-metro areas. This further supports the notion of university-centered economic development strategies for metropolitan areas.
- *Senior citizens matter, but more in metro areas.* Some communities are considering the attraction of retired or senior citizens as a strategy for economic development. This strategy may work in urban areas but not as well in rural areas. In urban areas, the presence of senior citizens is associated with job creation and per capita income growth, two key elements of prosperity, although they tend to crowd out other age groups. In rural areas, while the presence of senior citizens means slightly greater per capita income, it actually crowds out jobs and fails to attract other age groups. This finding

is intriguing considering the widely held view that if you can't attract youth in rural areas, then attract retirees.

- *Immigrants are associated with population and job growth in urban areas.* Increasingly, immigrants are knowledge workers and possess greater entrepreneurial spirit. We find that immigrants attract other population in both urban and rural areas but add to the job base only in urban areas, suggesting that immigration-based strategies for economic development may suit urban communities. The growing presence of immigrants means a decline in income growth. This is more so in rural areas.

attract population but not employment or income.

- *Gray infrastructure development means more jobs, income and population.* The Obama administration appears to be correct in targeting some of the 2009 American Recovery and Reinvestment Act (ARRA) money toward gray infrastructure. Report results predict that such investments are associated with population growth, higher per capita income and more jobs in both metro and non-metro areas.
- *Green is good for jobs.* Green infrastructure—trails, recreation areas, parks—tends universally to be a very potent driver of growth, particularly in urban areas.

Prosperity and Place Formula: $P=\left[\alpha\dot{I}_i\right]\left(\gamma\overline{E}_i\right)\left[\sum_{i=1}^{n}\sigma_i\left(\overline{FA},\ QFA,\ MA\right)\right]^*$

*P = Prosperity; $\alpha\dot{I}_i$ = Growth in Per Capita Income; $\gamma\overline{E}_i$ = Average Employment Rate; $\overline{FA}$ (Fixed Assets), QFA (Quasi-Fixed Assets), MA (Mobile Assets) = Amenities Matrix

- *Places should try to avoid the wrong side of growth.* Employment, per capita income and population (the growth elements) tend to be synergistic and mostly complementary. They tend to spiral up or down together. The growth or decline machinery is more pronounced in urban areas than in rural areas.
- *Low taxes means greater population, more so in rural areas, but not job creation or income growth.* For communities that are focused on trying to keep taxes reasonable, relative to services provided, the report finds that such low taxes spur population (more so in rural areas). Local fiscal policy, however, does not seem to have any relationship to job and per capita income growth. Therefore, the old strategy of tax-based job attraction may only
- *It is easier to bounce back from unemployment than from poverty.* The unemployment rate does not seem to be related to jobs, income and population growth. However, the poverty rate is. Poverty contributes to the loss of population in metro areas but not in rural areas. Poverty also translates into greater loss in per capita income in urban areas than in rural areas.
- *The Midwest may be extra challenged.* The Midwest seems to have a structural limitation, which makes it less attractive for growth in population and jobs than are the Southwest, the West and the Southeast.
- Metro areas have a natural income growth edge, while non-metros have a natural population and employment edge. Holding other factors constant,

metro areas have a natural tendency to grow their average income but lose employment. However, rural areas have a natural tendency to grow population and employment but lose income.

- *Housing vacancy and property value declines can attract population and translate into job opportunities in metro areas.* With respect to housing market factors, housing vacancy means far greater attraction of population to urban areas than to non-urban areas. Higher housing values, however, mean lower job creation in metro counties than they do in non-metro counties. In metro areas, higher housing values are not associated with population and per capita income but are with population and incomes in non-metro counties.
- *High healthcare costs slow down income growth.* While expensive healthcare means lower per capita growth in metro counties, it does not for non-metro counties.
- *Manufacturing and agriculture have legacy costs with respect to growth*. Economies that are transitioned away from agriculture and manufacturing tend to have much faster growth performance in population and income. The ability to grow jobs, however, does not seem to be constrained by legacy, although the ability to grow income and attract population is.
- *Job growth is associated with the creative class in metro areas but not in rural areas.* However, income is associated with the creative class in rural areas.
- *Patents are far more associated with job creation in metro areas than in non-metro areas.* Patents have, however, similar per capita income implications in both metro and non-metro areas.

STRATEGIC GROWTH

A paradigm in land use that emphasizes managing assets to attract knowledge workers in order to place-make for prosperity in the New Economy.

Conclusions

THIS STUDY HELPS TO CLARIFY A NUMBER OF ISSUES ABOUT GROWTH IN BOTH URBAN AND RURAL SETTINGS. WHILE IT IS AN ECONOMETRICALLY BASED ANALYSIS IN WHICH THE RESULT WOULD HAVE TO BE TAKEN IN THE CONTEXT OF THE SPECIFICS OF A COMMUNITY, IT OFFERS INSIGHTS ON RESPONSIVENESS OF GROWTH ELEMENTS TO KEY ECONOMIC DRIVERS—DRIVERS IN WHICH POLICY MAKERS HAVE TENDED TO BE INTERESTED.

The authors intend to continue to expand the framework to account for a variety of issues, including the measurement of variables that are known to be important but for which data currently does not exist, the explanation of rapid growth versus slow growth, the further characterization of regional structural differences, and the implications of local growth for national economic growth.

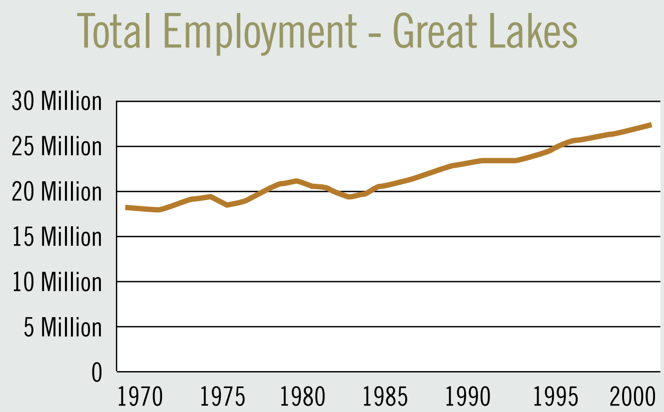
We address the issue of growth dynamics and interdependence, which has been a subject of interest to local and state policy makers. Our findings of growth interdependence may suggest that communities can find themselves in the mode of either synergistic growth or synergistic decline. Hence, economies that find themselves on the wrong side of growth may continue to spiral down if they don't employ effective strategies to avert a free fall. Urban areas would appear to be less vulnerable than rural areas.

Our findings that initial conditions matter suggest that some places face a natural tendency to either grow or not grow, and that such growth, or lack of growth, may be specific to income, employment or population. For example, holding other factors constant, places previously endowed with a high population but low employment may be better positioned for subsequent growth, compared with places that featured high unemployment and low population. While initial high levels of per capita income translate to higher levels of income in the future for urban areas, the opposite is true for rural areas. This again supports the notion that rural areas are more vulnerable.

Impact of Knowledge Workers Varies

Richard Florida and others suggest the importance of knowledge workers as key drivers of place competitiveness in the New Economy. Our estimated effects of the concentration of 25- to 34-year-olds (a group expected to possess the newest vintage of knowledge and talent) support previous findings that knowledge and creativity translate into job creation in urban areas but not in rural areas. Our findings regarding the effect of education (percentage with a bachelor's degree or higher) partly supports previous work, in that they suggest that the concentration of college-educated people helps attract population to urban areas (no income or jobs accompany such population). In rural areas, however, increases in the percentage of college-educated is associated with job creation but not population or income growth. We suggest that benefits of attracting this population group depend on place.

Our findings that an increase in creative class employment translates into new jobs only in urban areas suggest that knowledge workers count in urban settings. Taken together, these findings about knowledge workers generally suggest that while attracting them is a viable strategy in urban areas, may



not be for every community. Rural communities may want to consider other strategies that may well be more fruitful in achieving economic development.

The finding that colleges and universities imply population growth, but fewer jobs than such population in urban areas, suggests that they may be potent drivers of economic development in such areas. No such effects were observed for rural areas. Universities are also known to be treasure troves of innovation. Our finding that patents translate into huge job opportunities in urban areas, but only have modest effects in rural areas, further supports the notion of university-centered economic development strategies for metropolitan areas. The results here do not strongly support the idea of this strategy in rural areas.

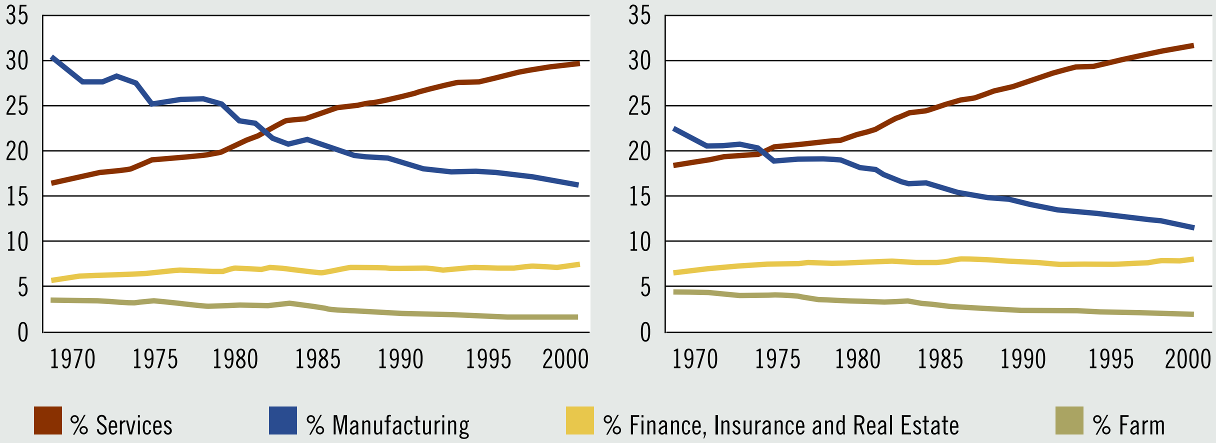
Attracting Seniors, Immigrants

Some communities are considering the attraction of retired or senior citizens (65 years old and over) as a strategy for economic development. This strategy may work in urban areas but not in rural areas. In urban areas, the presence of senior citizens translates into job creation and per capita income growth, two key elements of prosperity, although they appear to crowd out other age groups. In rural areas, while they are marginally associated with per capita income growth, they may actually crowd out jobs and fail to attract other age groups. This finding is intriguing considering the widely held view that if you can't attract the youth in rural areas, then attract retirees.

Immigrants have been the subject of economic developers in recent years. Because more and more immigrants are knowledge workers and immigrants are said to take more risk and possess greater entrepreneurial spirit, places, such as Philadelphia, Boston and Minneapolis, are developing programs to attract targeted immigrants. Our findings that immigrants are associated with increased populations of others in both urban and rural areas but with the job base only in urban areas suggests that immigration-based strategies for economic development may only suit urban communities. In both urban and rural communities, the effect of a growing immigrant population is also a marginal decline in per capita income. This may suggest that while immigrants are increasingly entrepreneurial and knowledge workers, the vast majority of immigrants may be low-skilled non-knowledge workers. One avenue that is currently being considered by local officials is to target high-net-worth immigrants and use the EB-5 Visa provision of the immigration laws to lure them to invest in their communities in exchange for becoming permanent U.S. residents.

Shares of Employment - Great Lakes

Shares of Employment by Sector - U.S.



Effects of Housing Vacancy and Affordability

In recent years, the housing vacancy rate has increased virtually everywhere in the U.S., while property values have dropped. Our results suggest that such changes make urban and rural communities more affordable but they translate into declining per capita income. The job creation benefit of lower property values and median housing values suggest that while individuals might be adversely affected, their communities can benefit from the job opportunities that arise from affordable housing. One implication of our results is that as the economy heals and property values stabilize, job creation induced by affordable housing will slow down, but income will stabilize. The effect on population is difficult to determine.

Poverty May Hamper Recovery

Our findings suggest that communities can easily rebound from a bad economy if the decline has only manifested itself through higher unemployment. However, we find instead that poverty creates a situation in which the potential for growth is hampered. With increased poverty come the loss of population in metro areas (no significant loss in non-metro areas) and the loss in per capita income in both metro and non-metro areas. This may explain the difficulty faced by many poverty-stricken cities in recovering from economic decline. The results of our study suggest that high healthcare costs have little effect on economic outcomes, except for the fact that they are associated with higher per capita income in metro areas.

In regard to communities that are focused on trying to keep taxes reasonable, relative to services provided, our findings are that such low taxes are associated with higher population (more so in rural areas). Local fiscal policy, however, does not seem to be related to job and per capita income growth. Therefore, the old strategy of tax-based job attraction may only attract population but may not affect employment or income.

Gray, Green Infrastructure Impacts Growth

The Obama administration appears to be correct in targeting some of the 2009 ARRA money toward gray infrastructure. Our results suggest that such investments will not only attract population, but will create higher per capita income and jobs in both metro and non-metro areas. Urban areas are better positioned to benefit more from such investments, as their infrastructure spending effects on population and employment appear to be far greater. However, rural areas seem to have the ability to better translate such investments into per capita income enhancements.

Green infrastructure tends universally to be a very potent key driver of growth, particularly in urban areas. For example, a proportional improvement in developed amenities is associated with job growth that is seven to eight times more pronounced in urban areas than in rural areas. Water amenities translate into 13 to 14 times more jobs in urban areas than in rural areas. Good weather conditions translate into almost 10 times greater impact on population attraction in urban areas, compared to rural areas. The only green infrastructure factor that seems to have a better effect on per capita income and job growth in rural areas, compared to urban areas, is winter amenities. The finding that green infrastructure also works for rural areas is encouraging, but investments in such infrastructure seem to have a better payoff in urban areas.

New Economy is the Way Forward

Our findings regarding economic structure and legacy issues clearly suggest that the way forward for communities is to transition to the New Economy. The growth dividends of increasing depth in such New Economy sectors as high-scale and other service industries far outweigh the dividends from manufacturing or agriculture. The positive role of agriculture seems to emerge in non-metro areas but not in metro areas, although the relative sectoral marginal returns of agriculture fall below those of services and manufacturing. The results also suggest that the ability to grow jobs is not constrained by the extent to which both urban and rural areas are entrenched in manufacturing or agriculture.

The literature extensively discusses the role of diversity in economic development, particularly in urban areas. In our aggregate analysis, metro analysis and non-metro analysis, we found no positive job, income or population effects for diversity. Our measure of diversity may be constrained by the fact that we utilized a measure of racial diversity, the Simpson index, which may not necessarily measure the presence of specific minority populations.

Finally, the Midwest and Northeast regions seem to have structural limitations that make them less attractive in growth in population and jobs than are the Southwest, the West and the Southeast.

Policy and Strategy Implications

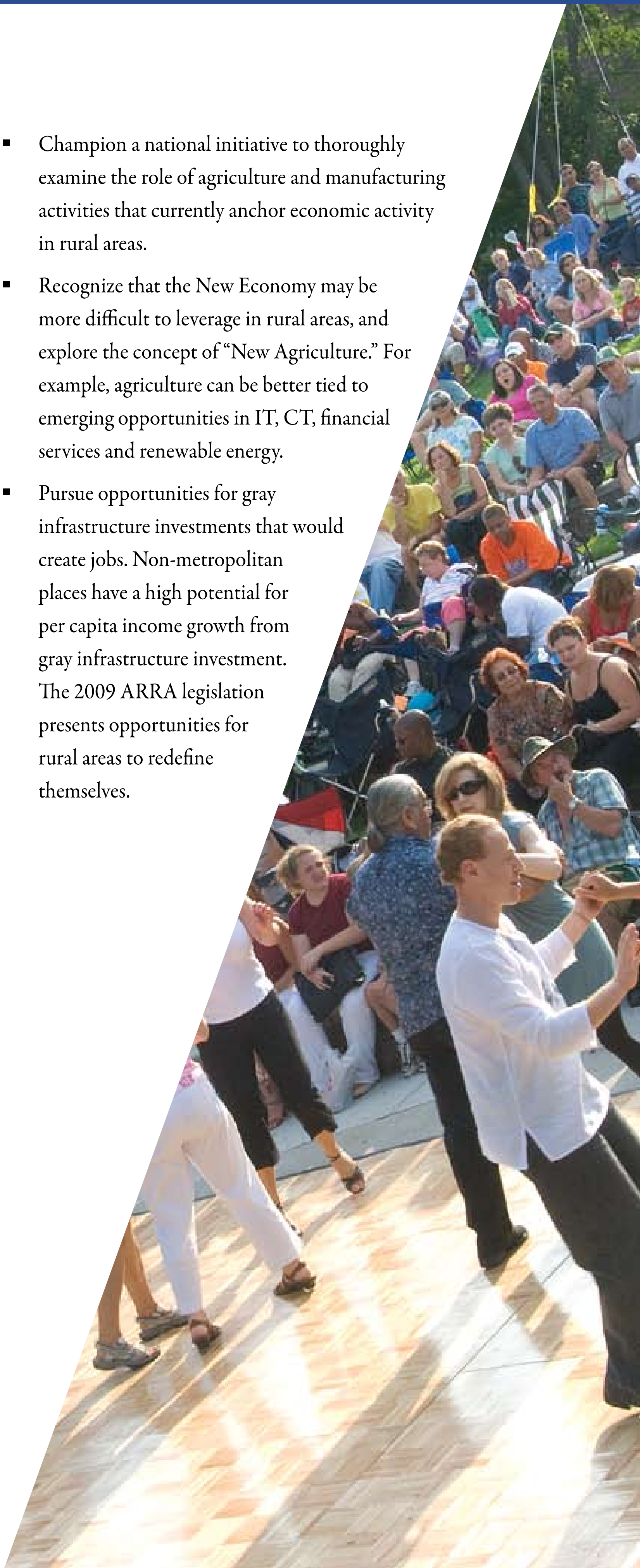
THE FOLLOWING ARE AMONG OUR POLICY AND STRATEGY IMPLICATIONS:

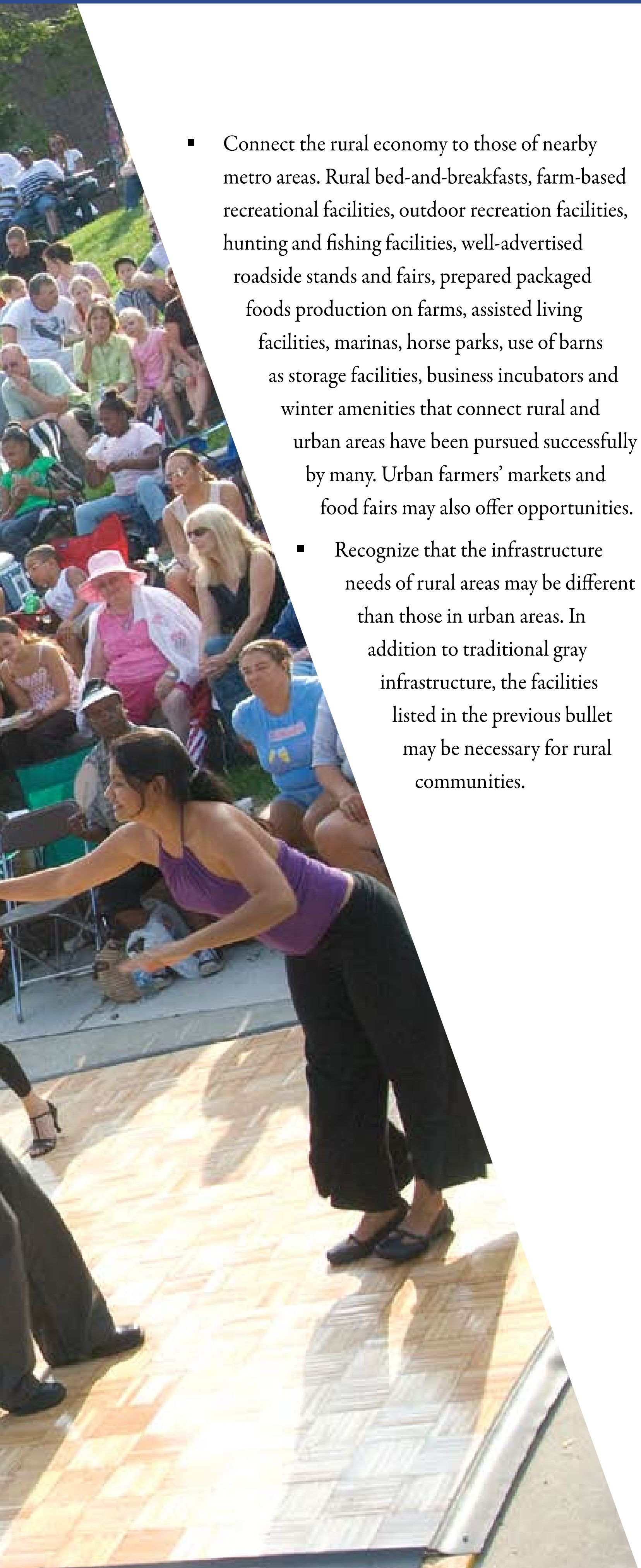
For urban areas:

- Focus on population attraction, especially knowledge workers, such as 25- to 34-year-olds, the creative class and college graduates, as well as targeted immigrants.
- Harness the inherent knowledge base of universities, especially leveraging the fact that they produce both knowledge workers of the future and intellectual property.
- Place-make to attract knowledge workers through such green infrastructure investments as trails, parks, recreational areas, amusement places and so forth.
- Manage urban unemployment to avoid the onset of concentrated poverty, as this would prolong economic hardship and make it more difficult to rebound from economic decline.
- Avoid getting into a cycle of decline whereby population, income and employment spiral downward. The synergistic relationship between these growth elements suggests that struggling communities must find creative and innovative ways to jump-start a recovery cycle.
- Recognize the systemic potential of jobs to be drained out of urban areas over time. Cities in particular must have a unique job creation strategy that leverages their unique assets and that builds on their relative comparative advantage, vis-à-vis non-urban places, in the New Economy.
- Old industrial places built on an industrial legacy should be working aggressively to diversify their economies and nurture the emergence of New Economy sectors. High finance and general service, for example, are expected to be more potent generators of new opportunities than is manufacturing.
- Focus more on strategies to attract New Economy growth rather than on strategies that focus on fiscal competition, which are largely ineffective in job creation. In fact, the latter strategies have a tendency to attract population, making the job of economic development more difficult.
- Avoid chasing the past or making investments in growth that will not last. Instead, make strategic investments in New Economy infrastructure, which, on the surface, are difficult to understand because of their indirect effects on jobs and income.
- Consider attraction strategies for senior citizens, especially in the cases of urban communities that have shrunk considerably. Recognizing that seniors may crowd out other population groups that may be central to the transition to the New Economy, careful use of this tool is advised.
- Leverage the current high inventory of vacant properties and low property values to target knowledge workers, the creative class, and the 25- to 34-year-olds through marketing programs to attract economic activity into a city.
- For cities in the Midwest and the Northeast, consider the possibility that prosperity is more of an uphill battle and develop creative strategies to compensate for regional structural limitations.

For rural areas:

- Recognize the structural disadvantage faced by rural communities and the possibility that economic growth may be more favorable to metropolitan areas. Furthermore, factor into decision-making the possibility that it may become increasingly difficult for rural areas to compete for the drivers of growth in the New Economy.
- Recognize the more limited impacts of growth drivers, such as knowledge workers, college graduates, 25- to 34-year-olds and colleges and universities, in rural areas. Employ other creative strategies.
- Recognize that rural communities are generally more dependent on traditional industries, such as agriculture; nurture such industries in order to maintain the economic base they currently afford.
- While agriculture offers little in terms of the potential for additional employment and income growth, the projected effect of intensifying agricultural activities is still positive. Rural communities should recognize the fact that agriculture needs an infrastructure of support, which could include favorable policies, agricultural development strategies, agricultural rights protection, industry marketing and favorable zoning provisions. Rural communities really need to re-examine the role of agriculture in the rural economy and how well their policies support the industry.
- Champion a national initiative to thoroughly examine the role of agriculture and manufacturing activities that currently anchor economic activity in rural areas.
- Recognize that the New Economy may be more difficult to leverage in rural areas, and explore the concept of "New Agriculture." For example, agriculture can be better tied to emerging opportunities in IT, CT, financial services and renewable energy.
- Pursue opportunities for gray infrastructure investments that would create jobs. Non-metropolitan places have a high potential for per capita income growth from gray infrastructure investment. The 2009 ARRA legislation presents opportunities for rural areas to redefine themselves.





- Connect the rural economy to those of nearby metro areas. Rural bed-and-breakfasts, farm-based recreational facilities, outdoor recreation facilities, hunting and fishing facilities, well-advertised roadside stands and fairs, prepared packaged foods production on farms, assisted living facilities, marinas, horse parks, use of barns as storage facilities, business incubators and winter amenities that connect rural and urban areas have been pursued successfully by many. Urban farmers' markets and food fairs may also offer opportunities.
- Recognize that the infrastructure needs of rural areas may be different than those in urban areas. In addition to traditional gray infrastructure, the facilities listed in the previous bullet may be necessary for rural communities.
- Population attraction may offer an opportunity to repopulate rural areas. Rural communities should, however, note that unless job opportunities are created, such growth may not bring meaningful benefits.
- Recognize the fact that service and manufacturing activities yield significantly better returns with respect to employment and income. Explore service activities that are synergistic with the asset base of rural communities.
- Pursue a national initiative to explore the New Economy elements that align with rural economies.
- While first-generation Americans are not easily attracted to many rural areas and may well be less productive there, it is advisable to explore ways of attracting high-net-worth foreign investors whose resources can make a difference. By leveraging the EB-5 Visa provision of immigration law, opportunities may well emerge to grow the rural economy.
- Pursue opportunities for partnerships with foundations to address the issue of rural poverty and prevent further downward spiral in rural economies.
- Data was not available to fully explore the roles of business incubators, emerging farm businesses, bed-and-breakfasts, roadside stands and other market connectors between agriculture and the non-farm public. The roles of these agriculture-related strategies need to be better understood.

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Final Thoughts

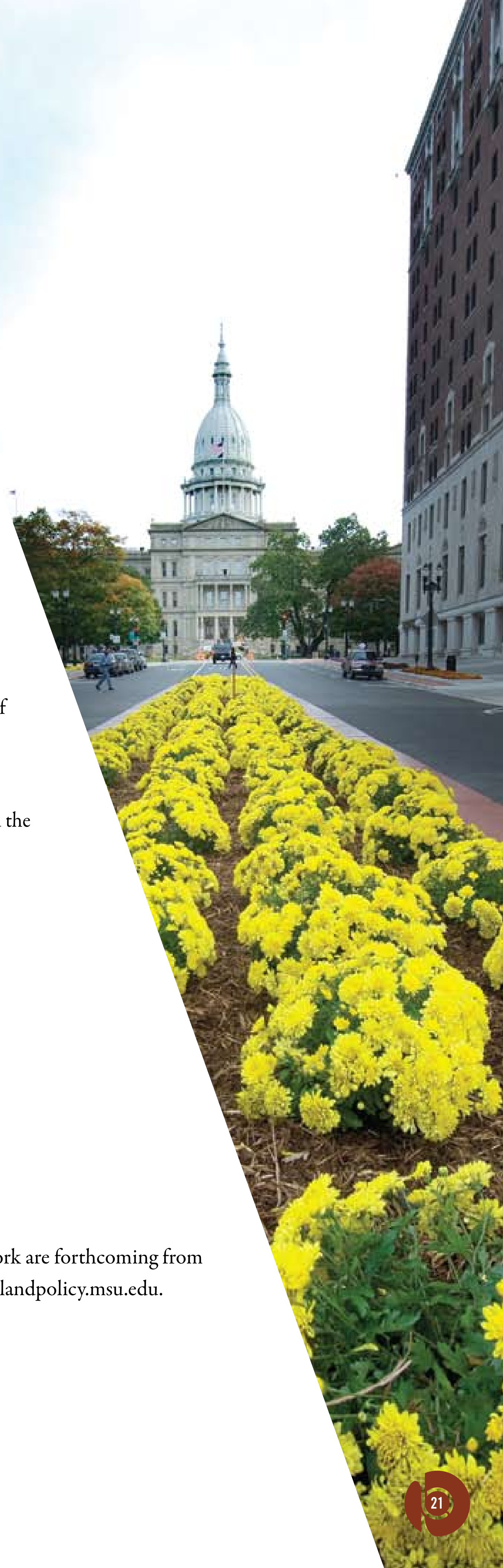
THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 OFFERS RURAL AND URBAN AMERICA A UNIQUE OPPORTUNITY TO RE-INVEST IN THEMSELVES.

What is more important is how various communities spend this money.

Shovel-ready gray infrastructure projects seem likely to create jobs. However, the effects will only be long-lasting and bring meaningful change in the transition toward the New Economy if the investments are put into infrastructure that can attract New Economy growth.

We urge communities across the United States to consider the title of this report: "Chasing the Past or Investing in Our Future."

"Placemaking for Prosperity in the New Economy" requires an understanding of the critical assets of a community and region—and the unique opportunities this creates for the people living there.



The Full Report

The full report is available for download at www.landpolicy.msu.edu/ChasingthePastReport

This Summary Report is also available online at www.landpolicy.msu.edu/ChasingthePastReport/Summary

Additional research reports elaborating and expanding on this work are forthcoming from the Land Policy Institute. Check our website for updates at www.landpolicy.msu.edu.

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