CHAPTER 2

Metropolitan Economic Strategy for America's Cities and Regions

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The New American Economy

After a quarter-century of sweeping change in the global economy, the metropolitan regions of the US are positioned for prosperity. Metropolitan regions have been centers of manufacturing and commerce since the beginning of the industrialization and urbanization of America in the 19^{th} century. In more recent years, the new knowledge and information-based, technology and communications-intensive, globally oriented economy has changed the economic dynamic of metropolitan regions. Some regions have prospered as centers of the New Economy by growing new types of service industries – business, professional, financial, health – and by spawning whole new manufacturing sectors – computers, electronics, telecommunications, multimedia. Other regions have become more competitive by transforming older manufacturing industries, such as automobiles or apparel, into more productive, technology-driven industry "networks".

Our study, based on evidence from case studies of 12 U.S. metropolitan regions and analysis of quantitative data on 114 of the country's largest metropolitan regions, finds that most U.S. metropolitan regions are freshly positioned to succeed in the new global economy and to bring increased prosperity to America's families and communities in the 21^{st} century.

The New Economy Has Arrived in America's Metropolitan Regions

For years, academics, futurists, and other observers of economic change have argued that our society is entering a major period of economic transition. Now, we can say that this change has occurred and the "New Economy" has arrived in America's metropolitan regions. The U.S. is moving from a manufacturing to an information-based economy.

Figure 1: Key Dimensions of Economic Change

Key Dimension	Old Economy	New Economy
Major source of productivity gain	Better and more efficient use of energy and raw materials	Better use of knowledge, information and technology
Trade patterns	**National**	**Global**
Successful development strategies	Protectionism, import substitution	Free trade; producing for global market; metropolitan economic strategies
Geographic dimension	Company or industry towns with little diversification or clustering	Metropolitan networks of complementary firms and industries

Two fundamental forces – new technology and globalization – are driving the transformation to the New Economy, a process that began in the 1970s. Figure 1 shows some important differences between the "Old" and "New" economies.

Technological change is the first key force behind America's economic transformation. One of the most striking features of the New Economy is the emergence of whole industries engaged in the production and distribution of information. This change is not confined to the growth of specific industries like computer equipment manufacturing, software design, fiber optics, or communications media; it is increasingly found across a wide array of business activities in every industry.

The second key force behind America's economic transformation is globalization, evidenced by increasing international trade and cross-border investment. International trade has accounted for a rising share of national production for many years, in the United States and most other advanced industrial countries. Many factors contribute to globalization, ranging from relatively peaceful international relations since the end of World War II, massive technological change in communications and transportation, to increasing recognition that long-term economic prosperity involves exporting goods and services to markets beyond local and even national borders. The rise of international production and distribution networks means that successful economies often have high levels of imports and exports.

While technological advances and globalization of production and trade have been good for economic growth, the exposure of many manufacturing industries all over the world to international competition has led to significant industrial restructuring. Some of the most prominent examples are the global success of the Japanese consumer electronics industries, the recent rise of China as a major exporting nation, and America's success in semiconductors, advanced business services, and recently, automobiles.

As global competition increased in the 1970s and 1980s, many American manufacturing firms found themselves less competitive, leading to declines in both employment and world market share. Today U.S. manufacturing has become far more competitive, but the rules of the game have changed for American manufacturers. In the New Economy, U.S. manufacturing companies increasingly make use of information and technology to develop and build new, higher quality products. This requires innovating at every stage of the production process, from design and engineering to distribution and service delivery. This push for higher quality brings with it demand for higher skills and higher technology resulting in higher "value-added" and higher incomes. In the New Economy, there is a dynamic interrelationship between the information and services sectors and renewed, competitive, U.S. manufacturing industries.

Metropolitan Regions: The Building Blocks of the National and Global Economy

In the past, policymakers looked purely at national statistics to measure economic performance. Macroeconomics, as its name implies, focuses on the big picture, the nation-state. However, today it is increasingly recognized that a fundamental building block of national economic prosperity is the wealth and prosperity generated by metropolitan regional economies. In America today, nearly 80 per cent of the population and almost 90 per cent of job growth is located in metropolitan regions.

All over the world, growing nations are led by growing metropolitan regions. Japan's post-war growth was led by industry in the Tokyo-Osaka region. China's development was first spearheaded by the southern region of Guangdong and more recently accelerated by development in the Yangtze River Valley. The United States benefited in the 1980s and 1990s from the successes of its technology regions – Silicon Valley in northern California, Research Triangle in North Carolina, and Route 128 in New England. These three U.S. regions, and numerous others, are global leaders in broad-based applications of new technology. More recently, the renewed strength of many Midwestern metropolitan regions – the competitive comeback of America's industrial heartland – has led to substantial increases in U.S. exports of goods and services.

From Narrow Industries to Broad Industry Networks: The New Economy and the Economic Structure of Metropolitan Regions

As the nation's economy has shifted from old to new, the dominant pattern of industrial organization has changed. This is a major reason why America's metropolitan regions have become more competitive in the past few years. Whereas before, the old economy gave rise to many undiversified regions and "company towns", often dominated by one or a few large corporations, the New Economy requires greater specialization of skills, technology, and services at the advanced end of manufacturing. U.S. firms are now highly competitive in the New Economy. This trend towards greater specialization is evident in metropolitan Detroit. In the old economy, it was enough for Detroit to manufacture cars. But, in the New Economy, metropolitan Detroit no longer simply assembles most of the world's cars. Instead, it is the world capital for automobile research and development, engineering and design. Today, Detroit's global exports are not just cars and trucks. Now, it is the workers of Detroit, experts in making better automobiles, who are exporting their consulting services, ideas, engineering plans and manufacturing technologies throughout the world.

At the same time as businesses are becoming more specialized, they are also taking steps to become more flexible in order to improve efficiency and respond more rapidly to market signals. Today's business organizations are less hierarchical and often perform a less highly integrated set of functions than before. Instead of giant corporations doing everything "in-house", businesses now depend on close relationships with related firms to carry out vitally necessary activities. As a result, metropolitan regions must, and are, becoming more diversified. Diversification means creating groups of businesses within a region which all work together dynamically around central specialties. In metropolitan Detroit, to continue the example, business activity covers everything from conception to sale of automobiles and trucks. Such activity includes: industrial parks where research and design of new cars are conducted; computer companies creating software programs specialized for automobiles manufacturing; universities training automotive engineers; marketing and distribution companies; and supporting financial institutions and insurance agencies. More than anything else, the New Economy demands *close connections* between these related sets of businesses and between public and private sector institutions. Close connections are fostered by geographic proximity of firms often located within the same metropolitan region.

Groups of complementary firms and industries that settle together in the same place are called *Industry Networks*. In the U.S., most industry networks are located within metropolitan regions. Metropolitan "clustering" gives the many individual firms within each industry network diverse opportunities for close access to specialized suppliers, which help increase speed and flexibility in responding to changing market conditions. Metropolitan industry networks are the engines of growth in today's regional economies. A metropolitan region's ability to grow and prosper in the 21st century depends on its capacity to shift to the New Economy by retooling to promote high value, knowledge and information-based, technology and communications-intensive activities, within each industry network.

Industry Networks Drive Metropolitan Economic Prosperity in the United States

Economic growth and prosperity in America's metropolitan regions today are being generated by 18 major industry networks, shown in Figure 2. A majority of all jobs in the American economy are in these 18 industry networks. While industry networks take different forms in each metropolitan region, across the nation they share similar patterns of relationships among business firms.

Together, these 18 industry networks constitute 54 per cent of total U.S. employment. They were defined by examining dynamic national relationships of the sales of goods and services among major U.S. industries. The industries in a particular network are those that share common suppliers and markets. They are also, by and large, those industries that produce goods and services for export, either exporting within the U.S. between metropolitan regions, or exporting internationally.

Industry networks mainly concentrate in metropolitan regions. The relatively high regional employment and export orientation of network-related businesses and industries help to fuel economic growth and prosperity by bringing new wealth into metropolitan regions. Examples of leading regional industry networks are Transportation Equipment in metropolitan Detroit, including auto assembly facilities, parts manufacturers, and machine tool suppliers: Financial Services and Printing and Publishing in metropolitan New York; Electronics and Communications plus related Business Services in metropolitan Austin; Entertainment and Tourism, along with Transportation and Trade Services in metropolitan Los Angeles.

Figure 2: America's Industry Networks: Selected Economic Indicators

Industry Network	Net Employment Change 1975-95	Avg. Annual Employment Change 1991-95	Change in Real Value Added per Employee 1975-95	Change in Real Wages 1975-95	Avg. Wages & Salaries per Employee 1995
Business & Professional Services	163%	2.5%	-32%	16%	$33,399
Health Services	132%	3.6%	-29%	13%	$30,382
Entertainment & Tourism	115%	2.6%	13%	-2%	$14,478
Financial Services	61%	0.3%	16%	34%	$41,016
Housing & Construction	49%	0.6%	0%	-9%	$30,738
Medical Products	45%	-0.4%	66%	16%	$43,956
Transportation & Trade Svcs.	41%	2.0%	40%	-16%	$32,095
Industrial Supplies	31%	0.9%	62%	2%	$36,427
Printing & Publishing	23%	-0.8%	3%	1%	$33,206
Electronics & Communication	15%	-1.3%	145%	14%	$40,324
Transportation Equipment	7%	2.9%	64%	8%	$41,548
Materials Supplies	2%	-0.3%	60%	3%	$32,103
Aerospace & Defense	-11%	-8.5%	54%	10%	$44,119
Agriculture & Food Processing	-17%	-1.5%	75%	18%	$24,441
Natural Resources	-18%	-3.7%	77%	9%	$43,076
Industrial Machinery	-20%	-0.1%	86%	-5%	$38,391
Consumer Goods	-23%	-0.9%	79%	12%	$37,796
Apparel & Textiles	-28%	-1.7%	117%	0%	$20,754

Source: Best available data and projections as of August 1996, U.S. Dept. of Commerce/Regional Financial Associates.

Changing Linkages between Cities, Suburbs, and Rural Areas

The distribution of economic activity in metropolitan regions has changed with the increasing significance of industry networks in the New Economy. During earlier phases of U.S. industrialization and urbanization, businesses and manufacturing facilities located in rapidly growing central cities to gain access to labor markets, customers, and centralized transportation facilities such as water ports and railroad yards. By the 1970s and 1980s, however, many of the city's manufacturing firms and other businesses were moving to suburban areas, attracted by lower land costs and improved truck transportation accessibility with the interstate highway system. Many other factories, stores, and warehouses, hit by the increasing competition of the global marketplace, left central cities for other U.S. regions, moved facilities to other countries, or simply shut their doors entirely and went out of business. Others hung on, but with fewer workers than in previous decades. The abandonment of factories and resultant job losses in the nation's cities undermined the vitality of some inner city neighborhoods, pushing residents and businesses toward the suburbs.

The restructuring of American business to reflect the new global economy, combined with the emergence of metropolitan industry networks, has brought good news for America's cities. Their recent economic revival is based on much more than the general national economic upswing during the past few years. Today, cities have come through two decades of wrenching economic changes, emerging in a new and stronger position within the metropolitan and global marketplace.

In America's New Economy of the 21st century, unlike the American economy of 50 years ago, it no longer makes sense to divide cities and suburbs. Businesses are now closely linked within metropolitan regions, forming industry networks that operate across city and suburban boundaries. Within these industry networks, businesses have a variety of specialized needs that can only be filled through the economic diversity of the entire metropolitan region. Just as cities once grew by attracting businesses with their unique combination of economic specialization and diversification, now metropolitan regions perform the same economic functions. In this new metropolitan geography, firms within an industry network may be spread throughout a metropolitan region, but particular types of business activities tend to concentrate in certain areas. For example, development of advanced financial instruments or fashion design is generally conducted in downtown city offices, while "back office" data processing or basic manufacturing may occur in outlying suburban locations within the metropolitan region. This wide distribution of economic activity reflects cost differentials and access to skilled labor in different parts of a metropolitan region, and recognizes the competitive advantages of concentrated, specialized, and diversified business activities in central cities.

Cities play a series of essential roles as part of the larger metropolitan marketplace. Suburban growth cannot take place without urban economic vitality, nor can cities continue to thrive unless they are connected to metropolitan production and distribution.

Roles for Cities in the New Economy

Centers of Innovation and Advance Services: Cities bring together a specialized, highly skilled workforce that performs high value, knowledge and information-based, technology and communications-intensive activities in research, design, product development, marketing, legal, financial, engineering, and other key activities. In particular, new innovation-driven industries, such as multimedia, tend to concentrate in urban locations because of these dynamic interrelationships. Currently, the emerging multimedia industry is centered in New York's lower Manhattan, Los Angeles's West side, Chicago's near North side, and San Francisco's South of Market district.

Centers of Education, Research, and Health Care: America's cities are still the location of choice for universities, hospitals, and other research institutions. In urban settings, like New York, Detroit, St. Louis, or Los Angeles, these institutions have access to large consumer markets necessary for sustaining their high fixed operating costs. These institutions also benefit from the co-operation and shared problem solving made possible by being located near each other. Furthermore, in many different types of metropolitan regions, university research and medical institutions serve as economic magnets for related industry network expansion in the city and throughout the region.

Centers of Culture, Recreation, Sports, Entertainment, Convention, and Tourism: With museums, theaters, festival marketplaces, convention centers and sports arenas, America's cities offer unique cultural and entertainment attractions. Today, most cities are making a comeback as recreational and tourist centers and international meeting places, both in leading destinations such as Washington, DC or Baltimore, and in emerging areas such as Nashville or Jacksonville.

Centers of Transportation and Trade: Even as more highways and airports are built on the metropolitan fringe, America's cities still contain major water ports, railroad terminals, and trucking hubs. Coastal cities, such as Los Angeles or Jacksonville, as well as inland cities like Columbus and Atlanta, serve as centers of metropolitan and international transportation and distribution networks. With the rapid expansion of regional and global trade, cities are becoming more sophisticated trading posts where transportation, logistics, and related trade services providers increasingly congregate.

Market and Workforce Centers: America's cities are home to millions of workers and consumers, providing metropolitan industry networks with major economic assets and business opportunities. Urban businesses can expand and profit by developing new products and services for specialized markets within cities, and they can utilize the skills and diversity of urban residents to strengthen the metropolitan workforce and fill newly created city and suburban jobs. Unfortunately, too many inner city communities are not well connected to metropolitan economies and are underserved by educational institutions and financial markets, hampering their economic vitality. To strengthen the traditional economic role as market and workforce centers, most cities are working to connect urban families with employment opportunities throughout metropolitan regions. Cities are improving metropolitan transportation and job placement networks, increasing access to child care and health services, and rebuilding neighborhoods with businesses, jobs, schools, stores, safe streets, and affordable homeownership.

Metropolitan Economic Strategy: Building Competitive Industry Networks

There are ten broad elements of economic strategy that regions can employ to support industry network development and improve regional competitiveness and prosperity. As metropolitan economies move from the old to the New Economy, metropolitan leaders are increasingly emphasizing these strategies. The range of strategies being implemented by regional leaders reflects the changing and increasingly complex resources needed for industry networks to grow in the New Economy.

The ten elements of metropolitan economic strategy are:

- Transportation and Infrastructure;
- Research and Technology;
- Education and Workforce Development;
- Financing;

- Business Development and Attraction;
- Trade Promotion and Market Development;
- Tax and Regulatory Policy;
- Environmental Preservation and Restoration;
- Economic and Community Revitalization;
- Quality of Life.

Metropolitan regions are pursuing tax and regulatory reform, business development and attraction, and trade promotion and market development to create an economic environment that encourages growth of new and existing business firms and industry networks. Regions are increasingly expanding and targeting investment in transportation and infrastructure, research and technology, education and workforce development, and financing, because these investments relate directly to the ability of industry networks to promote innovations and add value to new and existing products and services. Regions such as Austin and Akron built local research and development capacity to encourage the successful emergence of high-technology industry such as computers, semiconductors and advanced polymer materials. Many regions are focusing greater resources on education and workforce development because jobs in the New Economy require stronger technical and analytical skills. Other regions are prioritizing environmental preservation and restoration, economic and community revitalization, and quality of life improvements as part of a comprehensive approach to build advanced industry networks by creating a more attractive region to retain skilled workers and motivated entrepreneurs.

In every case, the appropriate set of economic strategies for a metropolitan region and the priorities among them can only be established directly by local leaders, and must be tailored to the unique requirements of the region's key industry networks. The following examples suggest how regions are designing and implementing metropolitan economic strategies to encourage the growth of globally competitive industry networks.

Transportation and Infrastructure

Infrastructure improvements involving state-of-the-art transportation technologies are central to industry network development strategies in many metropolitan regions. The Los Angeles region, with federal support, is building a high-speed rail and truck transportation route to move goods rapidly from the region's Pacific Ocean ports to railroad yards in the center of the city. This project – the Alameda Corridor – aims to build on Los Angeles's growing role as the hub for international trade to rapidly growing Pacific Rim economies. Metropolitan Atlanta is taking a different approach to develop itself as an emerging center of global commerce. By supporting private sector investments to upgrade the region's telecommunications capacity, building on existing regional strength in the manufacture of fiber optics networks, metropolitan Atlanta is generating a new approach to trade and transportation services by becoming a global center for transporting information and media. Other metropolitan regions, such as Jacksonville and St. Louis, are focusing on reusing military base facilities for new air transportation capacity. St. Louis is redeveloping

Scott Air Force Base into a new Mid-America Airport that will expand the region's air cargo and air passenger business.

Research and Technology

Metropolitan regions can expand their research and technology development to help build and strengthen industry networks. Several regions have had tremendous success using research and technology strategies in conjunction with business attraction and support for entrepreneurial ventures targeted to specific industry networks.

In the early 1980s, metropolitan Akron identified its synthetic rubber and polymer materials research capacity as a foundation for expanding into new advanced synthetics manufacturing. The region successfully built up its research base by expanding the existing Rubber Research Institute at the University of Akron into the College of Polymer Sciences and Engineering. Today, despite the long-term decline of metropolitan Akron's rubber tire manufacturing the Akron region is experiencing renewed economic dynamism based on the growth of manufacturing plastics and new synthetic polymers to serve as lighter and cheaper substitutes for a wide range of industrial materials.

Metropolitan Austin, one of the nation's fastest growing regions, developed its high-technology economy around the research base provided by the University of Texas. In the early 1980s, a public-private partnership designated $32 million to increase professorships so as to attract top national talent, and expand research in computers and engineering. The metropolitan region also worked hard to attract two major national semiconductor research consortiums to locate in Austin. In addition, to fostering technology commercialization, the Austin Technology Incubator was created to provide business assistance to spin-off firms from the region's university and corporate research labs. As a result, metropolitan Austin now has a large contingent of semiconductor, computer hardware and software design and manufacturing operations, successfully generating jobs and a prosperous new metropolitan economy.

Education and Workforce Development

Strategic investments in education and workforce development are becoming increasingly essential in making a transition to the New Economy, whether these investments are aimed at retraining workers displaced from declining industries, upgrading the skills of residents of disadvantaged communities to ensure their participation in the New Economy, or preparing young workers with advanced skills. Today, education and workforce development is almost always among the top priorities for every region's metropolitan economic strategy.

In metropolitan St. Louis, where the Aerospace and Defense industry network is rapidly downsizing, the region is pursuing strategies to reuse this network's highly trained workforce and technology assets to support growth in new, emerging industry networks, particularly in Electronics and Communications. In cooperation with local employers, both the St. Louis Regional Jobs Initiative and the Defense Adjustment Program are currently retraining and moving formerly displaced workers into jobs in new industries.

In the Detroit region , where the decrease in automobile assembly jobs during the 1980s and the increase in economic isolation of inner city neighborhoods have reduced opportunities for low skilled and even moderately skilled workers, numerous job training and placement initiatives are underway. These programs have two goals: to train workers, particularly inner city residents, with advanced technical skills to supply the region's restructured automobile industry network; and to help attract businesses back to the central city. 'Focus: Hope' a large community development corporation in Detroit's inner city provides state-of-the-art technical and applied training that is not typically offered in high school or post-secondary vocational education programs. 'Focus: Hope' has successfully helped prepare thousands of young, urban workers for high-paying automobile industry-related jobs in Detroit and throughout the metropolitan region.

Financing

Availability of capital plays a critical role in a metropolitan region's ability to nurture start-up firms, develop small businesses, and help industries modernize. Metropolitan New York is particularly interested in encouraging the development of multimedia industries that bring together the region's strengths in entertainment, media, publishing art, and advertising. However, many small firms that make up the multimedia industry are often stymied by lack of capital for risky ventures, particularly in metropolitan New York's high-cost business environment. In response, new venture capital funds have been established in the region. The New York City Partnership and Flatiron Partners have each pledged $50 million to capitalize new venture funds. The Partnership's fund is targeted to promoting new business and job expansion in distressed neighborhoods. In the high-technology economy of metropolitan Austin, start-up firms play an important role in facilitating the transfer of innovations to the marketplace. The Austin region has begun strengthening its venture capital base through the Texas Capital Network, linking private venture capital firms and individual investors with appropriate start-up firms.

In other metropolitan regions, strengthening access to capital in impoverished areas is viewed as a key mechanism for stimulating business growth in the urban core. The recently established Los Angeles Community Development Bank will be the largest of its kind in the country and will provide $1 billion for business loans, loan guarantees, venture capital investments, capital grants, and technical assistance to small businesses in disadvantaged neighborhoods. In Detroit, an organization of corporate executives, Detroit Renaissance, launched the for-profit, $52 million Detroit Investment Fund in 1995 to target loans to businesses that relocate to the city.

Business Development and Attraction

Business development and attraction efforts have long been a central component of economic development programs. Typically these efforts include tax incentives, marketing campaigns, and technical assistance to small businesses. These efforts help bring new employers to an area, but they do not always focus on the quality and staying power of the new jobs created. Today, regions are rethinking their approaches to business development and attraction by targeting key growth industry networks. The industry network approach helps direct scarce resources to build critical mass in existing and emerging industry strengths within the metropolitan region. Although particular programs continue to consist of tax incentives, marketing and public relations campaigns, trade missions and direct financial and technical assistance to local businesses, these efforts are now more often tightly coordinated with a metropolitan region's overall economic strategy.

The Austin and Nashville regions are two cases in which a highly targeted business development and attraction strategy was crucial to the emergence of an entirely new industry network. In metropolitan Austin's plan to focus on developing its electronics industry, an early and critical component was the attraction of two semiconductor research consortiums. The first, Microelectronics and Computer Technology Corporation (MCC), a private consortium, arrived in 1983. MCC helped make the region attractive to other computer and microelectronics researchers and manufacturers, including 3M, and Dell Computers, a local start-up company. A few years later, Austin attracted Sematech, a national semiconductor research consortium supported by private industry and the federal government. Building on these technology research assets and those of the University of Texas, the Austin region continued its aggressive efforts to attract semiconductor and computer research divisions, suppliers, and manufacturing firms. Today, the region has one of the most highly concentrated Electronics and Communications industry networks in the country, and has expanded into computer software development and telecommunications equipment manufacturing.

Trade Promotion and Market Development

The increasing globalization of business competition and rapidly shifting market demand means that business access to new markets, both foreign and domestic, is absolutely essential. Regional trade promotion and market development strategies can play an important role in helping metropolitan businesses combine their resources to gain access to new global markets.

In the St. Louis region, where the economy is still dominated by aerospace and defense and a range of consumer and industrial manufacturing industries, transitioning to new markets is essential. The metropolitan region is, therefore, working with aerospace and defense subcontractors to identify new uses and markets for their products. Metropolitan St. Louis also has established a World Trade Center to facilitate connections between foreign buyers and regional producers of agricultural, transportation, medical, and other products. For metropolitan Detroit, growing demand in China and other Asian countries for automotive and other transportation equipment presents important new business opportunities. Expanding international trade linkages and promoting the Detroit region's products abroad are, therefore, central elements of the metropolitan economic strategy.

Tax and Regulatory Policy

Burdensome taxes and regulations are often cited as an impediment to business competitiveness. Many metropolitan regions are moving to streamline their regulatory processes and ensure fair and efficient tax policy. In metropolitan New York, for example, which has very high business start-up costs and high effective tax rates, officials are moving to lighten the tax burden on small businesses. This effort is part of the regional strategy to support multimedia, computer software, and other advanced technology industries that are dominated by small, specialized business operations. Several city agencies also are streamlining regulatory procedures by consolidating government inspections and application processes for business licenses and permits.

Environmental Preservation and Restoration

The quality of the environment is becoming an increasingly important factor in attracting businesses and workers to a metropolitan region. Industries used to be concerned about the physical environment mainly as a source of cheap and abundant natural resources like water, coal, or wood. Today, raw materials account for a smaller portion of business inputs, while the attraction of talented, skilled workers is a much greater need for many industries. Furthermore, extensive economic development has left many regions with limited open space and reduced ability to cope with environmental pollution. Many regions have, therefore, recognized that they cannot forgo environmental quality in pursuit of economic growth. Indeed, some regions are finding that environmental preservation and restoration is one of their main assets for generating and enhancing economic prosperity.

Metropolitan Los Angeles is one of the best known examples of the competitive disadvantages of environmental pollution and regional sprawl. In recent years, air pollution and traffic congestion have detracted from the region's attractive physical environment. Air pollution has become a deterrent in the Los Angeles region to the extent that some businesses have decided not to expand within the region, or even to leave. To address its environmental problems, metropolitan Los Angeles is pursuing several major transportation, regulation, and business development initiatives that are helping to generate new growth industries. The Los Angeles region is now creating business incubators and services to support the development of industry networks in the region, based on new technologies for reducing pollution and restoring the environment, including electric vehicles, intelligent vehicle highway systems, and materials recycling industries.

The Jacksonville region is already reaping the benefits of a metropolitan economic strategy focused on environmental restoration. Once suffering from severe air pollution generated by local paper mills and heavily dependent on employment from these mills, metropolitan Jacksonville's public and private leaders worked together, beginning in the 1980s, to invest in pollution control and cleanup. These investments helped revitalize the competitiveness of the paper industry. Moreover, environmental improvement helped make the region more attractive, directly enhancing efforts to build new industry networks, including Entertainment and Tourism, and Health Services.

Economic and Community Revitalization

One dramatic characteristic of the shift from the old to the New Economy across the nation has been a change in the functions and economic health of America's city centres. Particularly in older industrialized regions where the urban core once housed numerous large factories, the decline of manufacturing and the movement of businesses out of cities undermined their economic vitality, especially in certain inner city neighborhoods. Income and racial disparities between cities and suburbs worsened in many regions. Nevertheless, America's cities have maintained certain key economic functions, such as fostering innovations, generating interactions in knowledge and creativity intensive businesses, and providing entertainment, sports and cultural amenities. These functions are vital to maintaining the global competitiveness and growth of industry networks that operate throughout the region. Consequently, metropolitan regions are increasingly recognizing that strong city centres are critical to the entire region's economic vitality. Public and private metropolitan civic leaders are undertaking economic and community revitalization strategies, not only to ensure that prosperity is shared by disadvantaged groups and neighborhoods within the region, but as a direct means of increasing the region's overall economic prosperity.

For economic and community revitalization strategies to be successful, they must link disadvantaged people and areas to opportunities in the New Economy. Metropolitan Detroit is doing this with the substantial support of the region's corporate and government sectors. Focusing on an inner-city area that has been designated as a federal Empowerment Zone, Detroit is providing tax incentives, training programs, and business financing to encourage new business development in the city's poorest neighborhoods. These efforts are particularly oriented toward attracting firms and supplying skilled workers for jobs in the region's rebounding Transportation Equipment, Industrial Machinery, and Industrial Supplies industry networks. Private sector employers, notably the major car and truck manufacturers headquartered in the region, are supporting these efforts with commitments to contract with inner-city, minority-owned auto parts supplier firms located in the Detroit Empowerment Zone and surrounding urban neighborhoods. Business and civic leaders also are making substantial new investments in rebuilding downtown Detroit. Most recently, General Motors decided to consolidate and relocate its world headquarters in the Renaissance Center in downtown Detroit. Additionally, the city is experiencing a revival of development in the downtown, including new baseball and football stadiums, an opera house and a theater. Finally, employers throughout metropolitan Detroit are investing in people living in the inner city who need suburban jobs by using job training and placement networks and non-profit community-based organizations such as ‘Focus: Hope’.

Quality of Life

Another significant way that regions make investments to support their metropolitan economic strategy is to preserve and improve the quality of life for the region's residents. Quality of life concerns include affordable rental housing and home-ownership, community safety and security, health-care, public and private schools, and access to recreational and cultural activities. The quality of life that a region can offer is increasingly important in attracting and retaining thriving businesses and skilled workers.

Indeed, improving the quality of life is seen as one of the top economic development issues in the New York metropolitan region. New York's leading industry networks depend on attracting the world's "best and brightest" professionals to maintain high rates of innovation and global competitiveness. Yet, the region's quality of life challenges are severe, including high housing costs, crime, and congestion. These problems hamper the ability of businesses to attract and retain talented personnel. In order to respond more effectively to quality of life problems, metropolitan New York is moving towards more neighborhood-level strategies for, amongst other things, reducing crime, improving public schools, expanding affordable homeownership and preserving open space.

Alternatively, other regions have used their "good quality of life" as a prime attraction for new residents and business. Metropolitan Portland's accessibility to a scenic natural landscape and the priority it has given to preserving a clean, attractive urban environment has set it apart from other regions in the competition for new and relocation businesses. Similarly, metropolitan Austin, Atlanta, Jacksonville and Nashville have benefited from having warm climates and reputations as attractive communities. Each of these regions has been making concerted efforts in recent years to improve its quality of life by developing cultural and recreational amenities. The Jacksonville region is a particularly noteworthy example of such a metropolitan economic strategy. Having made investments in new technologies at local paper mills to reduce air and water pollution and restore the region's environmental quality, metropolitan Jacksonville has now turned to developing an Entertainment and Tourism industry network in the region. Adding to the attraction of nearby ocean beaches, the city of Jacksonville recently acquired a National Football League team – the Jaguars – and built a new downtown stadium in addition to constructing major shopping and entertainment facilities along its historic downtown riverfront.

Conclusion

America's metropolitan regions are taking advantage of tremendous new opportunities for growth and prosperity offered by the New Economy. From the renewed automobile industry in Detroit and the synthetic polymer materials industry in Akron, to country music-related entertainment and media in Nashville and international trade services in Jacksonville, America's metropolitan regions are developing knowledge and information-based, technology and communications-intensive, globally oriented industry networks to lead the U.S. economy into the 21st century.

The economic transformation of America's metropolitan regions is occurring at different paces in each region and is due to technological and competitive forces beyond the control of any one set of business and civic leaders. However, public and private sector metropolitan leadership recognize that regions can shape their own destinies. Metropolitan regions are collaborating – through formal or informal mechanisms – to invest in resources that will improve the global competitiveness and job creation capacity of their key industry networks. By seeking to provide state-of-the-art-transportation and infrastructure, advanced technical business and job training, environmental cleanup, targeted business attraction, trade promotion, downtown redevelopment, and a range of other industry network needs, metropolitan regions are working together across cities and suburbs to build a more prosperous future for everyone.

Metropolitan regions cannot do it alone. Many of the most pressing needs of regional industry networks, such as transportation and infrastructure investment or public school reform, require resources beyond the capacity of many metropolitan regions. By offering information and technical assistance as well as direct funding, state governments and the federal government must be key partners with metropolitan regions in targeting investments, incentives, and regulatory changes to support the priorities of their metropolitan economic strategy. Working together in a new nationwide, public-private partnership, America's metropolitan regions, states and the federal government can generate a stronger national economy and greater economic prosperity and quality of life for every family and community in the 21st century.