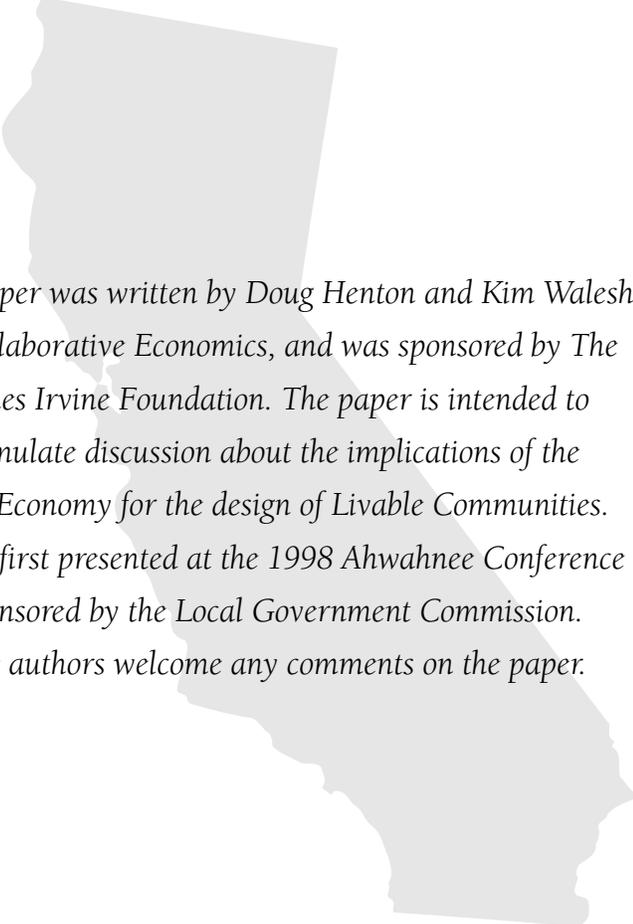




Linking the New Economy to the Livable Community

APRIL 1998



This paper was written by Doug Henton and Kim Walesh of Collaborative Economics, and was sponsored by The James Irvine Foundation. The paper is intended to stimulate discussion about the implications of the New Economy for the design of Livable Communities. It was first presented at the 1998 Ahwahnee Conference sponsored by the Local Government Commission. The authors welcome any comments on the paper.

Table of Contents

1	Introduction: Why This Paper?	2
	Where's the economy?	2
	The new regional economic context	3
2	The New Economy	4
	New basis of competitive advantage	4
	The shift to flexible specialization	7
	The New Economy and the new nature of work	9
3	What Does the New Economy Want from the Livable Community?	11
	Economic evolution and place	12
	New Economy values economic regions	12
	New Economy values distinctive quality of life	14
	New Economy values vital centers	16
	New Economy values choice	19
	New Economy values speed and adaptability	20
	New Economy values the natural environment	21
4	Principles for Linking the New Economy to the Livable Community	24
	What does this mean for civic leaders?	24
Appendices		
A	Endnotes	27
B	Recommended Further Reading	28



Introduction: Why This Paper?

Where's the economy?

The Ahwahnee Principles, developed at the annual Ahwahnee Conference of the Local Government Commission in 1991, helped launch an influential movement against conventional urban and suburban development as it has been practiced in the United States since the 1940s.

Underlying this statement of “New Urbanist” ideals is the belief that the physical design of communities and regions is seriously impairing quality of life—contributing to traffic congestion, environmental degradation, and lost sense of community. With its core principles of walkable neighborhoods, orientation to public transit, and integration of housing, shops, civic facilities, and work places, New Urbanism and the associated Livable Communities Movement have gained considerable acceptance in the last few years.

The movement, however, is not without its shortcomings. To broaden its appeal and test its relevance, the Livable Communities Movement must address at least two sets of concerns. One set of concerns focuses on the extent to which New Urbanist principles fit with the realities of the modern workplace. A second, related set focuses on moving beyond the neighborhood to create a compelling vision of metropolitan growth, integrating the various elements of a region.

Discussion of the economy has been largely absent from discussions about New Urbanism and Livable Communities. The much-heralded examples of New Urbanism—Celebration, Seaside, Kentlands—make little mention of where and how residents would earn their living. An outsider's impression of these new communities could easily be that they are so attractive precisely because no one seems to need to work! Apparently, residents who are employed must be employed in the region surrounding the new community or by the few retail businesses and civic institutions in each community's center.

Where people have discussed the economy in Livable Community circles, they have done so in terms of retail, restaurants, and other local-serving small businesses that make up the neighborhood centers. Or, discussion about the economy has associated business interests with those of “the developers” and “the building industry.”

Consideration of the wealth-creating economic drivers of the Livable Community, and the important context they provide, has been absent. New Urbanism offers a range of strategies for encouraging pedestrian shopping, but has had a hard time providing opportunities for local employment or articulating the connection to employment in the region.

Discussion of the economy has been largely absent from discussions about New Urbanism and Livable Communities.

The Ahwahnee Principles do include “Regional Principles.” Yet the New Urbanist thinkers who have focused on the region look at it from a physical design perspective. They apply neighborhood design principles to the region and make recommendations about the location of transportation networks greenspace, and regional institutions and services. But they have not yet considered whether or how these principles and recommendations might make sense in a world increasingly organized along economic regions.

The new regional economic context

Growing concern about the importance of the regional context for New Urbanism has led to interest in articulating a “New Regionalism.”

Advocates of New Regionalism, as described by journalist and author William Fulton, argue that “neotraditional neighborhood design goals must be reinforced by regional planning and economic policies to reshape the urban and suburban fabric” and that “New Urbanism will have a positive effect only if it is linked to a consistent set of policies and programs in all areas of metropolitan development.”¹ The New Regionalists believe New Urbanism can succeed only if it makes a positive, realistic connection to the region.

Now is the time to consider the regional economic context in which the Livable Communities Movement must take hold. This paper describes the important implications of the New Economy for the Livable Community. It is intended to stimulate debate about the potential “fit” between the New Economy and the Livable Community. The paper answers the following questions:

- **The New Economy:** What is the New Economy? Why is the region important for the New Economy? How is the New Economy changing the nature of work?
- **The Livable Community:** What does the New Economy want from the Livable Community? What principles can places follow to succeed in the New Economy?

We see a growing fit between where the New Economy is headed and the aspirations of the Livable Communities Movement.

We see a growing fit between where the New Economy is headed and the aspirations of the Livable Communities Movement. The shift to a new type of knowledge economy and the accompanying social change (professional women and Generation X acting on new values) provide a reinforcing rationale for building not only Livable Communities, but livable regions. Understanding the New Economy holds the promise not only of bringing new constituencies into Livable Community thinking, but of better grounding that thinking in the realities facing people, organizations, and places today.

2

The New Economy

The regional economy isn't what it used to be. In the past, when we thought about the regional economy, we usually thought about either the large Fortune 500 corporations that shaped our future (often outside our control) or the small mom-and-pop establishments that served us locally. But then the economic landscape began to change. First came the franchise chains that replaced the local retail firms with Wal-Mart, Costco, McDonalds, and Home Depot. Then came the breakup, merger, or downsizing of most of the Fortune 500 companies that we once depended on for jobs. Net job growth of the Fortune 500 in the last decade has been zero!

What has happened to the economy? In the wake of fierce global competition and the rise of information technology, a New Economy has emerged. When we look at the regional economy today, we see fast-growing, entrepreneurial firms whose names we've never heard of in place of the Fortune 500 corporations. We see an increasing numbers of home-based businesses, "tele-workers," and contingent workers who carry their "portfolio" of skills to different places of work. We see growing industries and declining industries side-by-side as communities experience the incessant waves of what Joseph Schumpeter called "creative destruction." We see networks of firms sharing a common workforce and collaborating around some projects while competing vigorously for other market opportunities. In short, we are living in a new economic era quite unlike the more stable and predictable world we once knew.

How do we understand the New Economy? We must look "inside the black box" and learn what makes this New Economy tick.

New basis of competitive advantage

How do we understand the New Economy? We must look "inside the black box" and learn what makes this New Economy tick. The first point to realize is that the New Economy is not about high tech. The idea that the New Economy means high tech has held back real understanding of the New Economy. Say "high tech," and most people turn off. They think, "that is about Silicon Valley, and it has no relevance to me!" The New Economy is not about making computers or microchips.

The New Economy is not a set of new industries; rather, it is a set of new sources of competitive advantage faced by all industries. The New Economy is about speed, quality, flexibility, knowledge, and networks. It is about applying knowledge and new ways of doing business to a wide range of products and services, from agriculture and apparel to business services, retail, and software.

Let's look at each of the features of the New Economy:

- Speed • Time is market in the New Economy.** In the New Economy, “time to market” is the name of the game. The quicker the product or service reaches market, the more successful the enterprise. Anything that impedes moving products to consumers is a barrier to profitability. Firms must learn how to translate innovative ideas into marketable products quicker than their competitors. In this environment, “transactions costs”—the cost of accessing resources and getting things done—becomes more important than “input costs”—the actual cost of materials and labor. This difference explains why firms are willing to pay higher wages and land costs to operate in environments where they can achieve higher productivity. It also explains why they are concerned about regulatory uncertainties that slow down their time to market for their products.
- Quality • Quality is the goal.** Competing on quality has become the rallying cry in the New Economy. Beyond total quality management, firms now build quality into every aspect of the process and product. This effort requires the highest level of teamwork within firms to achieve the lowest possible defect in results. Quality is also about differentiating a firm's products or services by their unique features. By competing on quality not cost, firms are about to gain a value premium from their work that translates into higher profitability and higher wages for workers.
- Flexibility • Flexibility is the new standard.** Firms need to be able to change course on a dime, to react to changes in markets, technology, and competition. Not only do firms need to reinvent themselves continuously, but they need to be able to reinvent their product offering continuously to serve increasingly sophisticated and segmented markets. Firms now have the capacity to create large numbers of highly customized products and services quickly in a process known as “mass customization” (think of Starbucks or your computer vendor!). One way firms achieve flexibility is that they focus on what they do best, and contract out the rest. They develop a web of relationships with companies and individuals that deliver just-in-time teaming, products, and services to each other.
- Knowledge • Knowledge is the new raw material.** Knowledge embodied in people (intellectual capital) is the source of competitive advantage. The successful enterprise accesses, creates, and uses knowledge. This effort includes research activities that create formal, explicit knowledge. Even more important, New Economy firms build bottom-up “tacit” knowledge within teams that constantly innovate within the firm. Tacit knowledge is how-to knowledge. In the New Economy, the knowledge, skills, and experience embodied in individuals have greater value than capital equipment or even capital itself. (For this reason, Peter Drucker and others call the New Economy “the postcapitalist” economy.)

- **Networks** • **Networks provide collaborative advantage.** A defining characteristic of the New Economy is the networking of firms. Small, medium, and large firms collaborate on projects and later compete on other projects in a process of continuous networking. These firms share common pool of talent and intellectual capital within a geographic area. Firms of all sizes develop webs of relationships to help them achieve the speed, quality, flexibility, and knowledge essential for competitive advantage. In this sense, competitive advantage is achieved through collaborative advantage.

Examples of the New Economy in Action

What are some examples of the New Economy in action? The following variety clearly suggests that the New Economy is more than high tech.

- **Entertainment/New Media:** One of the best examples of the New Economy is in one of the fastest-growing industries in California today: entertainment/new media. In 1997, 65,000 more jobs were in entertainment than in aircraft, Southern California's long-standing largest employer. Entertainment has added more than 90,000 jobs since 1995. Yet the motion picture industry today isn't what it used to be. Instead of a few major studios dominating production, today the industry is a complex web of independent producers, writers, directors, artists, and technical people who assemble and reassemble around specific projects. What has been driving much of the growth has been the introduction of new media technology that adds to the special effects and digital production values of new projects. The key to entertainment's success has been speed, quality, flexibility, knowledge, and networks.
- **Just-in-Time Agriculture:** California has remained on the competitive edge of agriculture by applying new technology, improved growing methods and irrigation, and innovative product marketing. In the Salinas Valley outside Monterey, California, vegetable growers work with processors to harvest fresh lettuce, tomatoes, and other produce from the fields; lightly pack them in vacuum-packed wrapping; and ship them to supermarkets to be sold as premade bagged salads. Because of the convenience and fresh quality, consumers are willing to pay a premium for this "just-in-time agriculture." The New Economy is in action in the agricultural fields of California.
- **Apparel:** The largest manufacturing industry in Los Angeles today is apparel, employing more than 150,000 people—20 percent of the national total. This industry is growing in Los Angeles, even as it declines in New York and other regions. Why? The answer is the marriage of distinctive design and flexible networks. California's strength has been in the design and production of women's wear, particularly sportswear and casual clothing that captures the California lifestyle and follows fashion established by the entertainment industry. Production in the region is a complex network of designers, manufacturers, and contractors who configure and reconfigure quickly to produce the latest fashion lines. More than 4,000 firms exist in the region, and 3,500 of them have fewer than 50 employees. Apparel in Los Angeles has become a model of flexible specialization based on networks and knowledge.

The shift to flexible specialization

What these features of the New Economy add up to is a profound shift in economic model—from the mass-production system in place since the 1940s to a new model of flexible specialization.

In a system of flexible specialization, networks of diverse, specialized firms work together to innovate and compete in fast-changing markets. These constellations change quickly as new opportunities and pressures arise. The emphasis of each network, and of the individual firms that compose it, is on decentralization, specialization, and learning.

“If we add up the self-employed, the independent contractors, the temps—a working definition of ‘Free Agent Nation’—we end up with more than 16 percent of the American workforce.”

—“Free Agent Nation”
Fast Company
Magazine

The result is much more diversified economic structure with an emphasis on smaller-scale economic units. In the New Economy, more than 55 percent of people work for small firms (fewer than 100 employees). Less than 20 percent work in large firms (more than 500 employees), and this percentage has been declining since the 1970s. Between 1975 and 1995, the number of self-employed workers increased 56 percent, growing from 5.7 million to 8.9 million. By comparison, the total workforce increased only 45 percent during this same period. Between 1975 and 1995, the number of part-time workers who work part-time by choice increased 58 percent from 11 million to 17 million; part-time workers because of economic reasons (for example, business conditions) increased by 18 percent from 3.8 million to 4.5 million. The number of temporary workers (that is, contingent workers) increased 1059 percent during this same period to more than 2 million or 1.8 percent of the total workforce. Taken together, small-firm employees, self-employed people, part-time workers, and temporary workers total 102 million or 63 percent of total the workforce.

Figure 1: Employment in the New Economy, 1995

Firms with more than 500 employees	25.7 million
Firms with 100–499 employees	32.3 million
Firms with fewer than 100 employees	69.1 million
Part-time workers	22.2 million
Self-employed	8.9 million
Contingent (temporary) workers	2.3 million

Sources: Bureau of Labor Statistics, County Business Patterns, Current Population, National Association of Temporary Services

This model stands in stark contrast to the large vertically integrated, centrally controlled, and independent organizations that dominated our economy beginning in the 1940s (see Figure 2). These companies were built on entirely different sources of competitive advantage—sources more appropriate for the stable, less-open world of that time: low cost, high volume, stability, control, and capital.

Figure 2: Comparing Economic Eras

	BASIS OF COMPETITIVE ADVANTAGE	WHERE WE WORK	HOW WE WORK	PLACE
KNOWLEDGE ERA (1990s–future)	Flexible specialization Knowledge Quality Speed Flexibility Networks	Variety Large, decentralized companies Fast-growth “gazelles” Home-based businesses Independent contractors	Variety, integration Portfolio workers Reintegration of work and home	Integrated region Economic regions Distinctive quality of life Vital centers Choice for living and working Speed and adaptability Natural environment
INDUSTRIAL ERA (1940s–1980s)	Mass production Low cost Quantity Stability Capital equipment Control	Factory model Large organizations, vertically integrated	Certainty, separation Hierarchy Distinct workplaces Separation of work and home Single career path Lifetime employment	Dispersion and isolation Subdivisions Technology parks Office parks Greenfield plants Edge cities Shopping centers
EARLY INDUSTRIAL ERA (1880s–1930s)	Small-scale production Expertise Quality Customization	Crafts Craftspeople Work from home Midsized companies	Integration Integration of work and home	Connected, walkable places Walkable neighborhoods, towns, and villages City centers Factory-gate neighborhoods Streetcar/railway suburbs
AGRICULTURAL ERA (PRE 1880s)	Manual Labor Weather	Small-scale farms	Integration of home and work	Independent towns and villages

The features of the New Economy were anticipated by Professors Michael Piore and Charles Sabel in their path-breaking book *The Second Industrial Divide*, written in 1984. Piore and Sabel made the case that the end of mass production will lead to flexible specialization based on networks of technologically sophisticated, highly flexible firms.

Flexible specialization is a strategy of permanent innovation: an accommodation to ceaseless change.... This strategy is based on flexible—multiuse—of equipment, skilled workers, and the creation of an industrial community that favors innovation. For these reasons, the spread of flexible specialization amounts to the revival of crafts forms of production that were marginalized at the first industrial divide.

In a sense, the transition to the New Economy could mean a return to a work life more like that of the early industrial economy. The “first industrial divide” led people away from craft specializations and greater integration of work and home lives to a system of mass production in which people performed similar, routine functions in factories or large service businesses. The “second industrial divide,” based on flexible specialization, is leading to a horizontal networked model with more and more workers contributing their unique *craft* specialties in diverse ways. The implications of this de-industrialization of work for individuals and communities are profound.

The New Economy and the new nature of work

The shift to the New Economy is changing the nature of work itself, as is the entrance of women and younger generations into the workplace. Two features of work life in the New Economy are particularly important for thinking about the implications of the New Economy for Livable Communities.

- Rise of the “portfolio” or “craft” worker
- Reintegration of work and home life.

In the New Economy, workers build careers by developing a portfolio of skills and undertaking a portfolio of projects. Instead of selling services to one employer for a lifetime, workers sell their services to multiple employers over a lifetime or even all at once. Charles Handy, the British management guru, has been making this point for years with his idea of the “portfolio” worker who carries his skills within him to different jobs. The knowledge worker in the New Economy takes her skills and intellectual capital to different projects much like the craftspeople of an earlier era took their knowledge and tools to different jobs.

“Now for the first time in human experience, we have a chance to shape work to suit the way we live instead of shaping our lives to fit our work. We would be mad to miss the chance.”

—Charles Handy
Author

The New Economy makes possible the reintegration of work and home life. In the mass-production economy, people had to go to a work site to work because they had to access equipment kept in a central place. In the New Economy, the means of production is the personal computer. The networked personal computer has begun to make the need for distinct and separate workplaces obsolete. People can work from home, on the road, or at alternative sites.

Frances Cairncross, author of the *Death of Distance*, observes that in the near future “the home will once again become, as it was until the Industrial Revolution, the center for many aspects of human life rather than a dormitory and place to spend the weekends.” She predicts that the familiar roles of home and office will be inverted. More work will be done outside the office, but offices will remain a place for the social aspects of work. People will not only entertain, relax, and sleep at home; they will increasingly access a range of services, from health and education to investment and employment. Cairncross predicts:

In half a century's time, it may well seem extraordinary that millions of people once trooped from one building (their home) to another (their office) each morning, only to reverse the procedure at evening.

A key social factor driving the reintegration of work and home life is the entrance of large numbers of professional women into the workplace. People are seeking creative ways to meet both work and family responsibilities, and preserve quality in both. As author Sally Helgesen observed recently in *Everyday Revolutionaries*, “people are returning to a pre-industrial way of life, in which work and life, family, and employment are not rigidly divided, in which people determine the shape and scope of their labor, and in which the texture of life feels more integrated, more whole.” Reinforcing this trend is the fact that Generation X (persons born between 1965 and 1981), now emerging as young professionals, places a much higher value on balance between work and private lives than did their predecessors.

3

What Does the New Economy Want from the Livable Community?

At each stage in our country's economic evolution, economic change has led to a fundamental reconfiguration of the places where we live and work.

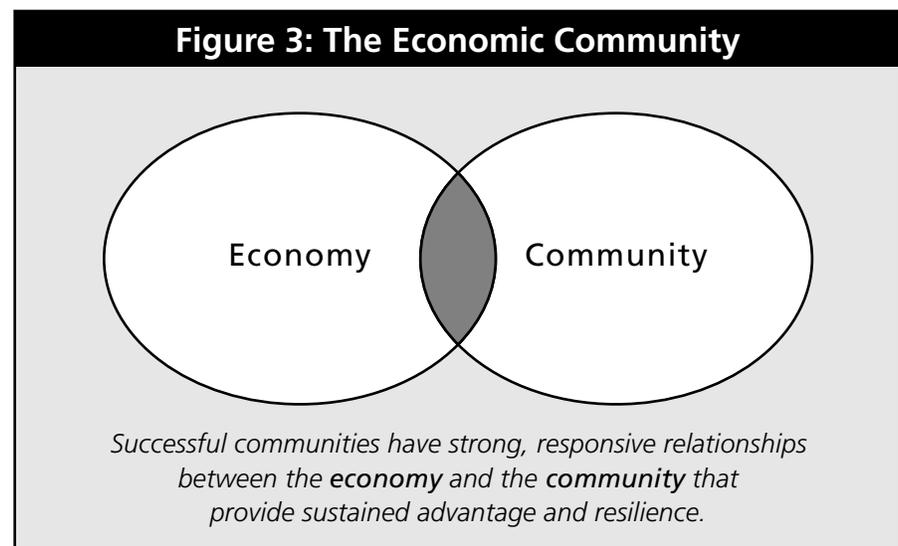
If it's true that we are moving into a new economic era, then this question is now very important. The answer to this question will determine the extent to which our current communities as well as our visions of ideal communities must or will change.

Economic change and place

At each stage in our country's economic evolution, economic change has led to a fundamental reconfiguration of the places where we live and work (refer again to Figure 2 on page 8). The most recent industrial era has been characterized by dispersion and isolation of work and living activity, in the form of office parks, subdivisions, shopping centers, and edge cities. This change represented a radical departure from the walkable neighborhoods, vital city centers, and streetcar suburbs of the early industrial era at the turn of the century. Yet for most of us, this industrial era model is what we know about community design.

During each transition from one era to the next, the economy and the community have realigned with each other in places throughout America. As the economy changed, so did the community, and vice versa. As we move into the new knowledge era, the pace of economic and social change is only increasing. Community and business leaders will need to work harder than ever to understand the change and to maintain a symbiotic, vital relationship between their economy and community. Successful "economic communities" are places with strong, responsive relationships between the economy and the community that provide companies and communities with sustained advantage and resilience (see Figure 3).

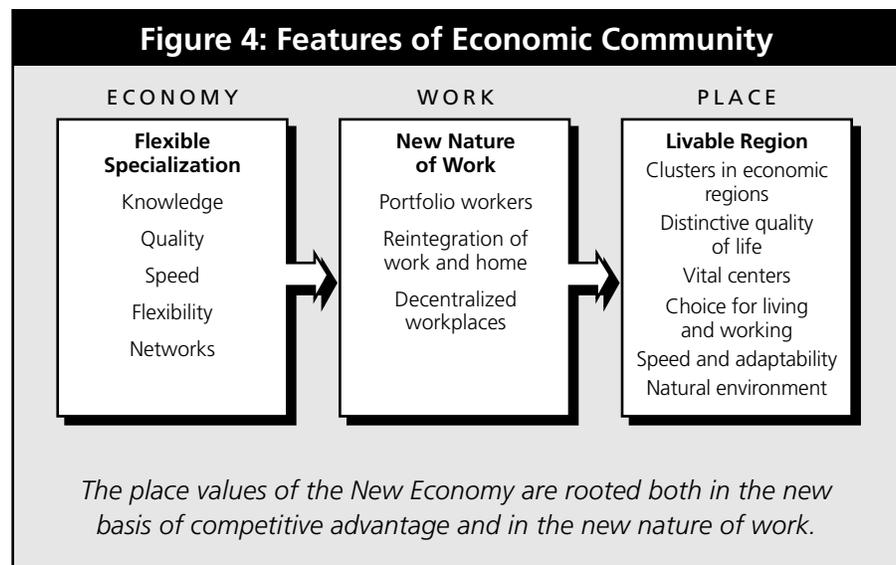
Figure 3: The Economic Community



What does the New Economy value about the tangible aspects of place? The New Economy values:

- **Economic regions**, which provide a habitat for clustering
- **Distinctive quality of life**, which attracts knowledge workers
- **Vital centers**, which offer lively amenities and opportunities for interaction
- **Choice for living and working**, which acknowledges increasing diversity of career and life paths
- **Speed and adaptability**, which allow quick access to decisions and resources
- **The natural environment** as an important and compatible element of community.

These values are rooted both in the new basis of competitive advantage and in the new nature of work (see Figure 4).



The networks at the heart of the flexible specialization model function most effectively when clustered geographically in a region.

New Economy values economic regions

The shift to a New Economy and the changing nature of work place a premium on regions as important places. They do so because the networks at the heart of the flexible specialization model function most effectively when clustered geographically in a region.

Industry clusters are concentrations of competing, complementary, and interdependent firms and industries that create wealth in regions through export to other regions. Clusters clustering typically spill over multiple political jurisdictions—including multiple cities and even counties. Clusters are important for the communities in a region because they drive the vitality of support- and local-serving industries (for example, construction, retail, restaurants).

Economists such as Michael Porter and Paul Krugman point to several benefits to firms of participating in a cluster:

- **Access to specialized workforce**—Companies can draw on large markets of people with specialized skills and experience working for related firms.
- **Access to specialized suppliers**—Companies in clusters have access to concentrations of specialized suppliers for inputs and services.
- **Access to networks**—Companies in clusters have access to information flows and technological spillovers that speed innovation.

Geography is important to clusters because firms and people gain from being in the same place. The ease and speed of sharing a specialized workforce, suppliers, and networks are enhanced by close proximity. This proximity helps reduce the “transactions costs” that are critical to the success of fast-moving firms. To benefit from the region, companies and people need fast access to resources in the region, including those based in other neighborhood, town, or regional centers.

Geographic clustering remains the most powerful mechanism for transferring and augmenting personal knowledge.

Clusters gain their power through the force of face-to-face creative collaboration. Working in teams within and across firms, people with ideas drive the New Economy. The cluster is a learning network where shared knowledge, skills, and experience help to speed up the process of innovation for the whole group of firms. Geographic clustering remains the most powerful mechanism for transferring and augmenting personal knowledge.

Learning and innovation are social activities. In his classic book, *Personal Knowledge*, Michael Polanyi makes the fundamental point that “tacit” knowledge based on personal experience is as valuable as theoretical or “explicit” knowledge. He shows that tacit sharing of knowledge is based on communications within groups. Clusters provide the means for rapidly shared “tacit” knowledge in a learning-by-talking-and-doing process.

An example of how this tacit learning works in a cluster is the personal knowledge shared at the Wagonwheel restaurant—a hangout in the early days of the semiconductor industry in Silicon Valley. Workers from different semiconductor companies would meet in the evenings to swap stories about their work. One semiconductor worker remembers that “the conversations about what had not worked well in his lab helped me to know what not to do and thus help speed up the search process in my lab.”

Recent talk about cyberspace misses the fundamental point that creative work occurs primarily in face-to-face exchange largely within teams, where people live and work in close proximity. Although electronic communication is important, it is not a substitute for the trust, sharing, and intense interpersonal interaction essential for the creative process. Although the same types of work can be done remotely via personal computer, the creative heart and soul of the New Economy (“where the action is”) will continue to be tied to place.

In many regions, a fundamental mismatch exists between the organization of the New Economy and the structure of public decision making. Now more than ever, the economy must be viewed from the regional level. Cities and other local jurisdictions make decisions about land use, public works, and regulation that ultimately affect the functioning of the region. And yet another series of decisions and initiatives are taken at the neighborhood level. Who is the steward of the region? Who is responsible for making sure the region works for the economic drivers that benefit all cities and neighborhoods?

New types of collaborative regional alliances may be required to safeguard the health of the livable region. Through new forms of collaboration, a “new regionalism” is emerging that provides all the stakeholders in regions—businesses, governments, third-sector organizations, citizens—opportunities to set regional direction and solve pressing problems that cut across jurisdictions. As an organic but place-dependent entity, the New Economy needs communities that care about the livability of the entire region. New Economy companies are well suited to provide some of that new regional leadership, because they do not see the boundaries.

New Economy values distinctive quality of life

The New Economy values quality of life more than the old economy, because it values people more than the old economy. People—particularly skilled workers and entrepreneurs—choose to live in places that offer both attractive career opportunities and an attractive lifestyle. Companies increasingly move to, start up, and grow wherever the talent for the New Economy wants to live.

The New Economy values quality of life more than the old economy, because it values people more than the old economy.

- Research shows that quality of life is an especially important screening factor for firms in technology businesses or that employ highly skilled workers in knowledge-based service and production.
- For most firms, retention of current workers is even more important than recruitment of new migrants. Entrepreneurs and workers committed to a place are the core material out of which indigenous economic development occurs. Research shows that the perception of declining quality of life in the community leads to lower retention of skilled citizens.

“Livability is an economic imperative.”

—Robert Solow
Nobel Prize-winning
Economist

Livability and quality concerns are becoming more important with economic change. In the New Economy, quality of life has become a community’s most valuable economic asset. Quality of life is a resource that can be augmented or degraded. Quality-of-life resources need to be managed for their long-term contribution to the community. Just as companies now compete on quality, so too will communities compete on quality now.

In the old economy, growth typically was associated with degradation of quality of life. In the New Economy, growth will change—but must not degrade—the quality of life.

Communities need to consider how economic change and growth can actually *enhance* quality of life. Most communities cannot be what they once were, but with care they can be better.

Austin, Texas, is an example of a community that explicitly promoted its distinctive quality of life—laid-back lifestyle, water resources for recreation, indigenous music—to lure high-technology firms. As Robert Barnstone, a real estate developer and former city council member, described, “In the technological age, what matters is what’s in people’s brains, and a lot of the brightest people come here because they want the lifestyle. And that is a commodity of the information age.”²

Yet success has brought substantial changes to Austin’s quality of life—escalating housing costs, increased traffic, threatened environmental and water resources. Austin monitors how residents feel about quality of life, to aid efforts to preserve quality in the long run. Austin’s survey data show that the more highly educated citizens are, the more likely they are to perceive decline (72 percent of people with graduate degrees perceived decline versus 35 percent with high school diploma.) Also, skilled persons who perceive decline were more likely to plan departure from Austin in the next five years.³ This information helps create new constituencies to tackle tough quality-of-life issues on a regional basis.

Santa Barbara, California, is an example of a place that has become attractive to New Economy workers because of its distinctive quality of life. Once known as a tourist and retirement destination, Santa Barbara has become a hotbed for new media and software designers. Because of its excellent quality of life and beach location, Santa Barbara has been able to attract and grow a significant number of software design firms that serve clients in the Los Angeles area. The cluster has decided it wants to locate in downtown Santa Barbara to have access to the amenities and opportunities to get together provided by its lively main street. Fears of “too much” growth are now

reopening old growth—no growth fissures in the community. What’s changed is that now the software cluster is an active partner working with environmental organizations and community activists to develop land use principles that safeguard both quality of life and economic vitality.

The New Economy thrives on change, yet wants certainty that quality of life will be preserved.

The New Economy thrives on change, yet wants certainty that quality of life will be preserved. Land-use chaos and unmanaged development trends, in particular, are a turnoff. One of the biggest benefits of Portland’s land-use planning process was that it created certainty for those in the development business. An unintended but equally powerful benefit was the signal it sent to emerging industries about the quality and nature of future development. For this reason, Intel and other technology companies are strong advocates of the regional plan, which includes explicit long-term designations for transit corridors, multiuse developments, urban greenspace, and urban-growth boundary.

Companies want communities to know and be clear about their desired future direction. As Bill Agnello, vice president, Real Estate and the Workplace for Sun Microsystems, explains, “Regions need to decide what they want and then tell us. Do they want to grow out, grow up, or not at all? It’s too hard, and too inefficient, for us to guess.” Instead of defining what they do not want, communities must define what they do want to be. The New Economy presents opportunity for each community to make distinctive choices that fit with its history and values.

New Economy values vital centers

The New Economy values the vital centers of regions, towns, and neighborhoods. These centers promote the interaction, accessibility, and creativity on which the New Economy depends. Creativity is encouraged by work and living environments that allow for a lot of interaction among people. Chance encounters in hallways, restaurants, neighborhoods, and conferences lead to new partnerships and solutions to tough problems. The proximity, density, and publicness of vital centers stimulate interaction among people. Vital centers are typically filled with the kinds of places conducive to planned meetings as well as chance encounters—places to eat and drink, conference and meeting facilities, recreation space and facilities, parks and plazas, business service centers.

Physical places that promote “sociability” have become a critical component of the New Economy. Successful places develop centers full of places where people come together. The Irvine Company in southern California learned this lesson from its growing concentration of knowledge-based companies in the software, computer and communications hardware, and biomedical industries. Companies enjoyed

the pristine physical environment of the Irvine Spectrum office park, but believed it lacked a sense of community and opportunities for interaction. Executives complained the Spectrum looked like a “neutron bomb” hit it—that there were a lot of buildings and cars, but no visible people. What they really wanted was places where people could come together, including soccer fields, restaurants, cafes, health clubs, public spaces, and shared meeting spaces. Across all four clusters, leaders knew the economic value of increased interaction among their employees.

In the New Economy, companies and people want to be where the action is, and increasingly creative work is concentrating in urban centers. Continuing concentration of industries like entertainment, multimedia, fashion, and financial services suggests that face-to-face contact remains important in the New Economy. The fact that everybody knows everybody is essential. “We could work anywhere,” said Zachary Zaidman, a founder of a \$2 million game company in San Francisco’s Multimedia Gulch, “But you want to be where the excitement is, where people are doing the same thing, where there is this creative energy.”⁴ Peter Hall, the urban historian, believes that twenty-first century cities will reassume their role as the valued creative centers of society.

The scale of the modern workplace is fitting into downtown-type centers. An assumption underlying New Urbanist thought has been that “massive big box retailers and workplaces dominate the American economy.”⁵ Although these organizations are visible, they are not the drivers of the New Economy.

The New Economy matches better than the old with the type of mixed-use, downtown environments advocated by New Urbanist thinkers. As the economy decentralizes, small companies and small workgroups of larger companies fit more easily into town centers. Neither polluting nor dangerous, New Economy work can take place in the homes and buildings in the town center—as it did in the pre-industrial crafts age.

Software and other PC-based services are particularly appropriate for downtown locations. Just like lawyers, accountants, and other downtown types who work in high-rises, all a software developer needs is a desk and a computer—whether the developer works for a big company like Adobe or Netcom or for a smaller start-up company. Many software companies are two- to ten-person operations that do not require much physical space. From 1993 to 1997, employment in San Jose’s downtown software industry increased from 50 to 2,800 workers. This increase resulted from a concerted strategy of incubating software start-ups, attracting expansions of several large “anchor” software companies, and rejuvenating downtown streetlife. Demand

The New Economy matches better than the old with the type of mixed-use, downtown environments advocated by New Urbanist thinkers.

has increased for a new wave of apartments and condominiums to accommodate the workers who now want to live downtown as well.

An opportunity exists for the New Economy to “fit” with the New Urbanist goal of preserving built heritage. Small software companies seem ideal for fitting into old, oftentimes eccentric downtown space. As Andy Brandt, president of Inroad Software, explains about Boulder, Colorado, “You could be looking at an old Victorian house, and you’ll find a gaming operation in the basement.”⁶ In Montreal, a New Economy is being resurrected where the old once stood—an abandoned marine-fitting warehouse on the city’s waterfront. A nearly abandoned group of warehouses and manufacturing lofts south of Market Street in San Francisco is now “Multimedia Gulch,” a thriving neighborhood of more than 35,000 multimedia workers.

Not only can software-related companies fit into smaller urban spaces, but the people who populate them are often turned off by massive office developments. New Economy people and companies value the lively mix of activity in town centers. As the *Wall Street Journal* reported in its study of San Jose, “It’s a lot more fun to be in a locale where you can go for a walk and have a nice dinner, or shop or take in a hockey game, than it is to be isolated in some sprawling suburban office park where a little truck comes by at lunch time and sells microwave burritos.”⁷

This generation of well-educated young people—raised in the suburbs—likes the city and its cultural and social amenities.

The small firms in Multimedia Gulch, and the Generation X workers who drive them, value the proximity to cafes, restaurants, and nightlife. Nationally also, new media activity is locating in the 24-hour urban locales rather than suburban campus environments. This generation of well-educated young people—raised in the suburbs—likes the city and its cultural and social amenities. Young people are an asset in the new media industries—they work long hours and have the combination of computer and artistic skills valued by the emerging information-based industries. Twenty- and thirty-year-old programmers, the fuel for the new media industries, are given to keeping odd hours. They want to live and work close to home, and a more round-the-clock sociability. The City of San Francisco asked multimedia firms whether they would locate to Treasure Island after designating it a “new media zone”; companies refused, citing the inability of people to get together for coffee or lunch.

In addition to valuing vitality of urban centers, the New Economy values the work-life integration that can occur in mixed-use neighborhood and town centers. Peter Drucker, the management guru, predicts that the future organization of work will be more akin to that of pre-industrial cities, with an intimate mixture rather than separation of living and working places. If this prediction is true, then the neighborhood street will once again be an important setting for everyday

life. More than ever, we will value places to meet, to see and be seen, and to get our work done. Copy centers, cafes, restaurants, mail centers, public meeting places—for many people working from home or in small businesses these places have become the important foundation for worklife. The physical structures of our community must make cohesion of working and living more, rather than less, difficult.

New Economy values choice

The New Economy values choice of places to work and live within regions, and choice among regions. Not only is today's workforce more diverse by typical measures—gender, age, race, ethnicity—but people no longer experience life in lock-step, predictable patterns. Diversity and complexity shape daily life. People work in flexible ways, and work flexible hours. They balance work and home responsibilities at the same time and over the long run. People of all ages reinvent themselves, by choice or chance, many times over. Managing transitions has become a key to success. Not only do people *need to choose* among many options for living and working, but they increasingly value *having the choice*.

Community design must accommodate the increasingly diverse work and life patterns that characterize the New Economy. People should be able to live and work in the same community or region, even as their life situations change. A principle for The New Regionalism is to “provide people with meaningful choices about where and how they live, recognizing that citizens of every region have a wide range of needs, values and goals for themselves and their communities.”⁸ This principle fits with the realities of the New Economy.

The old economy coexisted with a model that segregated certain types of housing from each other (subdivisions from apartment complexes) and housing from workplaces. The New Economy argues for a more integrated mix of housing within communities, so that people can remain connected to place and relationships as their lives change.

“We are building a city of choices. No single solution is for everybody.”

—Paul Schell
Mayor, Seattle

Seattle Mayor Paul Schell is using choice as an organizing principle for Seattle's strategy. “We are building a city of choices,” he explains. “No single solution is for everybody.”⁹ He accepts that people's choices in housing, transportation, education, recreation, and living and working styles will differ dramatically.

Some aging baby boomers, for example, are starting to move back into town centers, trading their large homes for an apartment, condominium, or townhouse more in the heart of a community. They want to be where the action is, and have easier access to amenities and services. Many will remain connected to the economy, but want a different and more flexible lifestyle. Today's young people, raised in the suburbs, seem to value lively urban environments more than did

“Speed is the foreshortening of product cycles from years to months to even weeks.”

—Stan Davis and
Christopher Meyer
*Blur: The Speed
of Change in the
Connected Economy*

their predecessors. And a sizable number of people, when they start to raise families, will still want the traditional single-family home.

The New Economy values choice among regions that provide distinctive habitats. A good news story is that all the exciting activity in the New Economy need not be in one place! Any region in the world is capable of participating in the opportunities created by the New Economy. Regions participate in the New Economy by creating distinctive habitats that can grow high-value businesses. The goal is to be able to contribute something unique and different. Some regions may position themselves as R&D wellsprings, others as high-value, quick-turnaround centers for a particular industry or industries. Some regions will leverage their geographic position or entrepreneurial bent. Still others will be conduits for information flows, goods and services flows, or financial flows.

Just as successful companies develop and sustain core competencies, regions develop niches where they can sustain competitive advantage by investing in talent, technology, and specialized infrastructure.

New Economy values speed and adaptability

The New Economy values speed and adaptability in communities. The New Economy has moved into a new time dimension, and values communities that move there too. The game is to reduce transactions costs—the time companies take to make changes and access resources in a community.

New-Economy companies value communities that can expedite decision making on facilities. Time-based competition means that product life cycles are now measured in months, not years. As Stan Davis and Christopher Meyer write in *Blur*, “Speed is the foreshortening of product cycles from years to months to even weeks.” The old adage “time is money” has become “time is market,” as failure to get new facilities up fast can completely shut companies out of markets.

For example, in the early 1990s, Silicon Valley’s decision process for permit approvals—whether the answer was yes, no, or maybe—was incredibly slow. Explained Robert Perlman, vice president of Intel, “The eighteen months it took to get a building permit to expand an existing facility in Silicon Valley exceeded the time it took to design a new chip or to build a new facility elsewhere.” With the help of volunteer process improvement experts from the private sector, Valley cities have reengineered processes and slashed permit turnaround times while maintaining community safeguards. Today, public-private teams are piloting a Smart Permitting system so that companies can file applications for building permits on-line. Companies, planners, architects, and builders work on-line to monitor status and consider modifications.

Companies need to be able to reconfigure buildings quickly to meet changing needs.

Companies need to be able to reconfigure buildings quickly to meet changing needs. Companies in traditional office park and campus settings are demanding “flex space” that can be quickly reconfigured as needs change. Companies moving into downtown settings can move into space that has been used previously for manufacturing, warehousing, commerce, or living. The key is in being able to reconfigure space quickly. To keep pace with the New Economy, buildings should be capable—physically and legally—of being used in different ways over the short and the long term. Instead of controlling specific business use, planners may find it more desirable and practical to plan for building type, and let economic use find its level. The kind of basic community infrastructure (street grid, building types) advocated by New Urbanists may provide the kind of flexibility required by small and fast-growing New Economy companies.

Companies value mobility within a region. Although information now flows electronically, companies still need to move people and products. This need is especially important for just-in-time production, where products are shipped from specialized suppliers to manufacturers, and from manufacturers to end users on at least a daily basis. Congestion is no longer just a source of frustration, but a significant quantifiable economic cost.

Last, New Economy companies value fast advanced communications infrastructure. Companies want both to cluster together and to connect to the outside world. Although many companies are small, their bandwidth needs can be significant. Not only are companies accessing information over the Internet, but they are developing and distributing products and executing transactions. Companies are working across multiple sites and communicating internationally. Every worksite in every building should be connected to high-speed data networks, telephony, and video. Prewiring is now emerging in residential construction so that work can come to people, instead of people going to their work.

New Economy values the natural environment

The New Economy values the natural environment as an important quality-of-life asset. Knowledge workers value access to greenspace both within and surrounding developed areas. As former county supervisor Sunne McPeak used to say, “My constituents are entrepreneurs by day, and environmentalists by night.” This reality opens the possibility for the New Economy to work in concert with community leaders concerned about environmental preservation.

For example, companies dependent on knowledge workers have been some of the biggest advocates of Portland’s protected greenspace within and surrounding contained urban areas. As Bill Calder,

a spokesperson for Intel, told the *New York Times*, “This is where we are headed worldwide. Companies that can locate anywhere will go where they can attract good people in good places.”

Increasingly, the New Economy recognizes that protecting the natural environment is in its long-term self-interest. In Austin, the Chamber of Commerce recently released a study that described the healthy environment as one of the area’s prime economic assets, one whose preservation should be a paramount concern. The opportunity is to tap the leadership and resources of the New Economy to address environmental challenges. As Brigid Shea, executive director of Save our Springs Alliance and former city council woman in Austin, explains:

We’re trying to see if we can’t marshal the intellectual resources of the high-tech community, the economic self-interest of the business community, and the preservation instincts and passion of the environmental community to grow smarter, to grow so that we don’t foul our nest. I really think it can be done.¹⁰

The New Economy brings the potential for a type of qualitative growth that is more compatible with environmental preservation and conservation.

In California, the Sierra Business Council, an association of 400 businesses in the rural foothills of California’s Sierra Nevada mountains, is focused on an “economic future grounded in environmental quality.” The Business Council developed the *Sierra Wealth Index* to describe the financial, social, and environmental “capital,” that is the foundation of the region’s economy. More recently, the Business Council developed a set of principles for sound physical development of the region. In the New Economy, businesses can emerge as advocates for the environment.

The New Economy brings the potential for a type of qualitative growth that is more compatible with environmental preservation and conservation. This change is a shift away from the quantitative growth model that emphasized that “more is better.” As the President’s Council on Sustainable Development observed:

To achieve our vision of sustainability, some things must grow—jobs, productivity, wages, profits, capital and savings, information, knowledge, education—and others—pollution, waste, poverty, energy, and material use per unit of output—must not.

Rural areas can participate in exciting New Economy activities that are attracted to their special environment and lifestyle. People have always been attracted to places of natural beauty. But now the New Economy makes it possible for people to work in out-of-the way places. Some may choose to be lone eagles on a mountain top. But others are searching both to get away from it all and to be with like-minded, stimulating people. The opportunity is for rural areas

to develop miniclusters of New Economy activity. The key is in being able to preserve the attractive natural environment while enjoying the new form of economic vitality.

The “cleaner” nature of the New Economy makes it possible to locate homes, workplaces, and recreational areas closer together. Before the industrial age, work was performed in homes and buildings near the center of town. The industrial age brought heavy machinery that required special power plants—factories that were noisy, dirty, and often dangerous. Because of the changed nature of work in the New Economy, less need exists to separate dirty workplaces from clean homes.

The New Economy Comes to the Sierra

Oakhurst, a small tourist town of 13,000 on the way to Yosemite, illustrates how the New Economy has reached into the Sierra. With three Internet service providers in town, technology workers are now finding work in Oakhurst. Begun in 1979 as a kitchen table enterprise, Sierra On-Line has grown into a 200-person, \$200 million computer game company. Programmers, musicians, writers, and artists have come from all over the country to settle in Oakhurst and relish the lifestyle. As Mike Jones, a Seattle native who works at Sierra On-Line says, “I’ve had offers to go elsewhere and work for a lot more money, but I’d rather be in Oakhurst. The property values are good, people are nice, and this is what you see from the window!”

With internet connectivity, a New Economy cluster is in the making—attracted by the Livable Community. There are now several spin-off games companies from Sierra On-line, including WorldPlay Entertainment, which provides content for America Online, as well as a number of computer stores and telecom providers that sell pagers and cell phones. Key elements of a cluster are coming into place, including fuel for the knowledge worker. As Monika Moulin, marketing manager for Sierra Net, one of Oakhurst’s Internet service providers, remarks, “You can finally get latte here now.”

Summarized from an article in the San Francisco Examiner, March 1, 1998, page D-1.

4

Principles for Linking the New Economy to the Livable Community

The New Economy is based on new ways that business operates and new ways that people work. Companies today compete on speed, quality, flexibility, knowledge, and networks. The same is true not only for high-tech businesses, but for most industries, including agriculture, apparel, business services, and entertainment.

People in the New Economy work in a variety of ways from a variety of places. They sell their portfolio of skills to multiple companies over their lifetime, or even simultaneously. People seek—and the New Economy makes possible—greater integration of work and home life. The New Economy stands in stark contrast to the mass-production industrial economy of the 1940s to 1980s.

The New Economy values a different kind of community design. The New Economy values:

- **Economic regions** that provide a habitat for clustering
- **Distinctive quality of life** that attracts knowledge workers
- **Vital centers** that offer lively amenities and opportunities for interaction
- **Choice for living and working** that acknowledges increasing diversity of career and life paths
- **Speed and adaptability** that allow quick access to decisions and resources
- **The natural environment** as an important and compatible element of community.

What does this mean for civic leaders?

The following ten principles provide direction for civic leaders thinking about the implications of the New Economy for their Livable Community.

- 1. Know thy economy—get beyond the “traditional” players.**
The New Economy is complex and goes way beyond the large companies, retailers, business service providers, and developers that are most visible in most communities. Get inside the “black box” and understand what is really driving your community’s economic vitality. Talk to the invisible companies and workers, find out how their world is changing and what they need to be successful in your community.

2. Be regionable—the New Economy needs a livable region.

Companies and people cluster geographically because they gain from being in the same place. Proximity makes it easier to share a specialized workforce, specialized suppliers, and powerful information networks. Clustering typically occurs in economic regions, crossing over political boundaries. Understand the economic region that is home to your community. Challenge your city and neighborhoods to build not just a Livable Community, but a livable region.

3. Recognize that knowledge loves quality. The New Economy values quality of life, because it values people. People—particularly skilled workers and entrepreneurs—choose to live in places that offer both attractive career opportunities and an attractive lifestyle. The New Economy thrives on change, yet wants certainty that quality of life will be preserved. View quality of life as a valuable economic asset, and manage it for its long-term contribution to the community. Understand what longtime residents and new arrivals value about your community. Send a consistent message that quality of life will be preserved. Monitor changes.

4. Be fast and flexible. The New Economy has moved into a new time dimension, and values communities that move there too. Companies need to be able to reconfigure buildings and create new facilities quickly. People need fast access to regional resources and the ability to connect outside with advanced communications infrastructure. Consider ways to speed up permitting processes while safeguarding public interests. Focus on improving regional mobility. Develop a planning approach that facilitates flexible use of buildings.

5. Appreciate the value of vital centers. The New Economy values the vital centers of regions, towns, and neighborhoods. These centers promote the interaction, accessibility, and creativity on which the New Economy depends. They also can allow more cohesive work-living arrangements. Develop the vital centers that are attractive next-generation people and entrepreneurs. Connect the centers so people can participate in different center environments. Use physical design to improve cohesion of working and living.

6. Learn the value of fitting in. The small scale of some New Economy workplaces fits well into mixed-used downtown environments. Neither polluting nor dangerous, some New Economy work can take place in the buildings and homes of centers—as it did in the pre-industrial crafts era. Software and other PC-based services are increasingly attracted to downtown locations for their accessibility and liveliness. Bring the New Economy downtown. Consider how small companies and small

workgroups of larger companies can integrate into downtown centers, and increase their vitality. Develop housing for New Economy workers attracted to centers.

- 7. Choose choice.** People in the New Economy have increasingly diverse work and life patterns. People work in different ways and work different hours. People no longer experience life in lock-step predictable patterns; change is the name of the game. Design communities to accommodate the increasingly diverse work and life paths that characterize the New Economy. Provide people with meaningful choices about where they live and work. Create a more integrated mix of housing within communities so people can remain connected to place and relationships as their lives change.
- 8. Help people get together.** The New Economy values the face-to-face interaction that occurs through chance meetings as well as planned encounters. Physical places that promote sociability have become critical for building strong economies and communities. Create and integrate the kinds of places where people meet—places to eat and drink, conference and recreation space and facilities, parks and plazas, civic centers, business service centers.
- 9. Discover entrepreneurs by day, environmentalists by night.** The New Economy values the natural environment as an important quality-of-life asset. It also brings potential for a type of qualitative growth that values environmental preservation and resource conservation more than the quantitative growth of the past. Tap the leadership and resources of the New Economy to address environmental challenges and grow smarter. Define the type of qualitative growth that benefits people, moving beyond “more is better.”
- 10. Realize that creativity wins.** The new source of competitive advantage is creativity—creating new products and better ways of getting work done. Creative people want to be where the action is, where others are. They are attracted to distinctive places that are open to new people and ideas. Build on what is special about your community. Differentiate it from others. Work to embrace new ways of living and working, to blend the talent and enthusiasm of newcomers and oldtimers.



Endnotes

- ¹ See Fulton, William, “The New Urbanism: Hope or Hype for American Communities,” *Lincoln Land Institute*, 1996, p. 29.
- ² In Verhovek, Sam Howe, “Austin Rides A Winner: Technology,” *New York Times*, January 31, 1998, p. A7.
- ³ See Myers, Dowell, “Internal Monitoring of Quality of Life for Economic Development,” *Economic Development Quarterly*, Vol. 1, No. 3, 1987, p. 268.
- ⁴ In Kenneth Howe, “Business Around the Bay,” *San Francisco Chronicle*, March 4, 1996.
- ⁵ See Fulton, William, p. 12.
- ⁶ In Joshua Macht, “It Takes a Cyber Village,” *Inc., Tech* 1997, No. 4, p. 79.
- ⁷ See Wartzman, Rick, “Capital of Silicon Valley May Live Up to Its Name,” *Wall Street Journal*, June 6, 1997.
- ⁸ Following a 1995 Meeting of the Congress for New Urbanism, Harry Dodson, Robert Yaro, and Armando Carbonell issued a New Regionalist Challenge to the New Urbanists. The four key principles are in Fulton, William, *The New Urbanism: Hope or Hype for American Communities*, p. 22.
- ⁹ In Neal Peirce, “Building a City of Choices,” *Washington Post Writers Group*, February 14, 1978.
- ¹⁰ In Verhovek, Sam Howe, “Austin Rides A Winner: Technology,” *New York Times*, January 31, 1998, p. A7.

B

Recommended Further Reading

Cairncross, Frances, *The Death of Distance: How the Communications Revolution Will Change Our Lives*, Harvard Business School Press, 1997.

Davis, Stan and Meyer, Christopher, *Blur: The Speed of Change in the Connected Economy*, Perseus Books, 1998.

Fulton, William, "The New Urbanism: Hope or Hype for American Communities," *Lincoln Land Institute*, 1996.

Geddes, Robert, "Metropolis Unbound: The Sprawling City and the Search for Alternatives," *The American Prospect*, November-December, 1997.

Helgesen, Sally, *Everyday Revolutionaries: Working Women and the Transformation of American Life*, Doubleday, 1998.

Henton, Douglas; Melville, John; Walesh, Kimberly, *Grassroots Leaders for a New Economy: How Civic Entrepreneurs Are Building Prosperous Communities*, Jossey-Bass, 1997.

Henton, Douglas; Melville, John; Walesh, Kimberly, "The New Economic Geography of America's Regions: How the New Economy Makes Place Important Today," *The Regionalist*, Volume 2, Number 4 (Winter 1997).

Katz, Peter, *The New Urbanism: Toward an Architecture of Community*, McGraw-Hill, Inc., 1994.

Peirce, Neal R., "Building A City of Choices," Washington Post Writer's Group, February 14, 1998.

Piore, Michael, and Sabel, Charles, *The Second Industrial Divide*, Harper Collins General Books, 1984.

Sierra Business Council, *Planning for Prosperity*, 1997.

Verhovek, Sam Howe, "Austin Rides A Winner: Technology," *New York Times*, January 31, 1998.

Wartzman, Rick, "Capital of Silicon Valley' May Live Up to Its Name," *Wall Street Journal*, June 6, 1997.

For more information, contact:

Nick Bollman
Senior Program Director
The James Irvine Foundation
One Market, Steuart Tower,
Suite 2500
San Francisco, CA 94105
415-777-2244
www.irvine.org

Report prepared by:

Doug Henton
Kim Walesh
Collaborative Economics
350 Cambridge Avenue
Palo Alto, CA 94306
650-614-0230
www.coecon.com

Other publications in this series:

*California Regions Take Action:
The Emergence of California Civic
Entrepreneurs.* May 1998.

*Getting Results and Facing New
Challenges: California's Civic
Entrepreneur Movement.*
January 1999.



THE JAMES IRVINE FOUNDATION

One Market, Steuart Tower,
Suite 2500
San Francisco, CA 94105
Telephone: 415-777-2244
Facsimile: 415-777-0869
Internet: www.irvine.org

© 1999 The James Irvine Foundation.
All rights reserved.