

SUSTAINABLE URBANISM AND BEYOND

RETHINKING CITIES FOR THE FUTURE

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THE MARRIAGE OF ECONOMIC GROWTH AND SUSTAINABLE DEVELOPMENT

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Starting in the 1820s, accelerating in the nineteenth century, and coming to a crescendo in the mid-twentieth century, the industrial economy provided wealth for societies and households unlike the previous 10,000 years of the agricultural economy and the 6,000 years humans had previously been building cities. Per capita income was essentially flat for millennia before 1820 but, starting in Britain and the United States, a rapid increase in wealth occurred that was unprecedented in human history. As the industrial era peaked in about 1970 in the developed world, the average U.S. citizen earned thirteen times more in real dollar terms than his ancestor 150 years earlier.¹

A new way of building the built environment accompanied the industrial economy, a way that had never been seen in human history. This new way of building human settlements was pioneered in the late nineteenth and early twentieth century but really took off after the Great Depression and the Second World War. That method, known as “drivable suburban,” includes:

- Extremely low-density development
- The nearly exclusive use of cars and trucks for all trips to and from home, shopping, and work
- The separation of different types of real estate (for-sale housing, apartments, retail, office, industrial, etc.)
- The separation of different income and racial groups from one another

As North Americans were “seeing the USA in their Chevrolet,” they were making themselves wealthier. The real estate industry and the transportation system linking that real estate included the road builders, raw material providers, automobile companies, financial industry, insurance industry, oil industry, commercial bankers, and real estate developers. Directly and indirectly these industries provided at least 40 percent of the country’s jobs and GDP.

Drivable suburban development became the *de facto* domestic policy of the U.S. after the Second World War. This policy was re-enforced by legal codes at the federal, state, and the local levels and massively subsidized by all levels of government directly (grants for infrastructure, particularly roads) and indirectly (mortgage tax deductibility and U.S. government guarantees for mortgages). North Americans in particular loved the freedom of the road, the privacy of suburbia, and the subsidies that allowed them to get what

they wanted, all while putting a foundation under a booming economy.

The real estate industry by the 1970s had perfected drivable suburban development, which could be summarized by the nineteen standard product types. These were well-understood formulas for neighborhood retail centers, entry-level housing, walk-up apartments, office and industrial parks, etc. These standard products were easy to finance for initial development and were traded like Monopoly cards, and, most importantly, there was convenient, abundant, free parking. From 1970 until 2000, real estate and the infrastructure that supported it built more office, retail, and residential square footage than had been collectively built in the previous two hundred years in the United States. The financial industry also figured out how to get around the most difficult aspect of real estate over the millennia: how to easily, cheaply, and quickly sell and buy it. Through the use of stock-exchange-traded housing and commercial companies and the development of the secondary residential and commercial mortgage market, real estate became the fourth asset class on Wall Street, joining cash, bonds, and stock, during the 1990s.

The year 1970 marks not just the peak of the industrial era in the developed world, it marked a leveling off in worker earnings in the United States which was followed by the leveling off in other parts of the developed world, such as Japan and western Europe. Household incomes, as opposed to worker incomes, continued to increase due to a second wage earner going to work, and consumption continued to grow due to reduced savings and increased debt, but these trends began to run their course, paving the way for the Great Recession of 2008. The year 1970 marked the perfection of drivable suburban development in our metropolitan areas, which have over 80 percent of developed world population today. The result was a geometric increase in land use consumption compared to population growth in the U.S. In Europe and Japan the combination of less land and national government controls reduced that ratio, but land use still increased much more rapidly than population growth. For example, metropolitan Atlanta had a commuter shed of about 65 miles north to south in 1990 with 3.1 million in population. By 2000, it had a 110 miles commuter shed, a 38 percent increase in population (4.2 million) but over 200 percent increase in land area. Atlanta's land use consumption was over five times its population growth.

The industrial age and the drivable suburban development pattern it spawned created a dynamic the world had never seen before: as more growth and development took place, the quality of life and the environment was reduced. While wealth increased, industrial economic growth led to a desiccation of the environment that is only comparable to the mass extinctions of previous geologic eras. As Malcolm Cowley wrote in 1929 in *Harper's* magazine about growing up in central Pennsylvania at the nadir of the environmental destruction caused by industrialism, "There were no longer any deer in my country. The white pines, which once covered it, were reduced to a few weevil saplings. The trout had been poisoned by sawmills or sulfur from the mines." There was a trade-off during the industrial era; industrial growth meant environmental degradation and rising social problems. Industrial economic development was environmentally unsustainable even though it delivered unimagined wealth.

Real estate development followed the same principle; more drivable suburban growth eventually destroyed the early promise of suburbia—open space, the convenience of car commuting, and clean air. Residents did not welcome a new strip mall adjacent to a subdivision since it degraded the very reasons they moved to suburbia. The over-development of the drivable suburban landscape generally provided the incentive to move further out to the ever-expanding fringe to start the process over again. Drivable suburban development became the personification of evil as movies portrayed real estate developers as the standard bad guys, along with Nazis, crooked politicians, and car dealers. In essence, industrial-era real estate has an underlying principle: *more is less*. More growth means lower quality of life, just as during the early industrial era before federal environmental regulation was forced upon industry.

As the dangers of climate change came to the fore, research shows that over 70 percent of greenhouse gas emissions come from the built environment, 40 percent from our buildings, and 30 percent from the car-based transportation system. Drivable suburban development is environmentally unsustainable. The more is less principle also led to the rise of neighborhood groups starting about 1970. Prior to 1970, few neighborhoods were organized. Today, virtually every North American neighborhood is organized . . . generally to fight real estate development. It is probably the largest democratic movement of the era. This is a rational reaction to the more is less principle and it has led to NIMBY (not in my backyard) opposition to nearly all growth, forcing growth further out to the fringe. If drivable suburban development could be stopped at a certain point, the promised benefits could be maintained; future growth would just have to be

accommodated further out on the metropolitan fringe, as many counties and towns have demonstrated.

Just as we got it right, the market changes

As the industrial economy subsumed but did not completely obliterate the agricultural economy that preceded it, a new economic era is subsuming the industrial. The knowledge economy, whose workers are the “creative class,” began to grow in the 1970s but really only began to change society and the built environment in the 1990s. The high-tech boom, followed by the crash, of the 1990s was the coming-out party for the knowledge economy.

The mid-1990s was also the first sign that the market had changed in terms of what it was demanding for the development built environment. The baby boomers, coming of age at the peak of the industrial age, were raised on popular television programs such as *Leave It to Beaver*, *The Dick Van Dyke Show*, and *The Brady Bunch*, all set in the suburbs. The Millennial generation, who are coming of age with the introduction of the knowledge economy, were raised on shows such as *Seinfeld*, *Friends*, and *Sex in the City*, all set in safe, exciting, walkable urban places. These different aspirations for how to live showed where the next phase of development was going.

The redevelopment of many American downtowns in the mid- 1990s was the first sign of this change on the ground. Now the transformation of the suburban landscape, particularly dead and dying strip malls and former suburban town centers, is demonstrating how broad and deep this new method of development is. It is actually a throwback to the pre-industrial city; the market is demanding “walkable urbanism,” the way cities were built for thousands of years before the introduction of the automobile.

Walkable urbanism will act as an economic propellant similar to the one that turbocharged the economy in the mid-to-late twentieth century. It will provide a foundation under an economy that, as of this writing, is badly lagging every past recovery since World War II. There has been a structural change in how the built environment will be built just as there was a *structural* change sixty years ago. The pendulum that swung from building walkable urban cities in the nineteenth and early twentieth centuries to only building drivable suburban places over the past sixty years is swinging back. The real estate crash that started in 2006 was heavily concentrated on fringe drivable suburban housing development. This massive overbuilding drove down the mortgage industry and the banking industry and plunged the economy into the deepest recession since the 1930s. The subsequent bailout was unprecedented in size as well as in character—it is actually the bailout of drivable suburban sprawl. There are trillions of dollars invested in the wrong product in the wrong location, some of which are showing signs of becoming the next slums.

More is better

Building walkable urban places, whether in the center city or the suburbs, has demonstrated that as you build more restaurants, housing, and offices in a walkable urban manner the quality of life improves. More people are active on the street, which means there is more demand for new things to do; property values go up, as do property taxes; and a virtuous, upward spiral of value creation occurs. In essence, building the built environment no longer means *more is less* but *more is better*. Revived downtowns and former dead strip malls, occupying 10 to 20 percent of a jurisdiction’s land mass, are in many cases producing more than half of public-sector revenues, effectively subsidizing bedroom communities. Walkable urban residential values in 2010 are the most expensive on a sales price per square foot or per square meter basis in most U.S. metropolitan areas versus comparable drivable suburban housing in well-to-do neighborhoods. Only ten years earlier, just the opposite was the case.

This phenomenon is referred to as gentrification, either the most beloved or reviled word in the English language. Why? Rising real estate values mean that the poor and middle class cannot live in walkable urban places due to the supply shortage caused by the pent-up demand. That means society will have the obligation to replace the current affordable and workforce housing policy of “drive until you qualify” with a conscious strategy to build mixed-income communities.

The walkable urban future is built upon the emerging knowledge economy, which is far greener than the formerly dominant industrial economy. In the industrial economy, separating land uses made sense: Given a choice, who would want to live next to a noisy, polluting factory? Regional malls were disconnected from

residential neighborhoods by hundreds of acres of surface parking lots, fronting eight-lane streets or freeways and turning their dumpster-lined backs on their residential neighbors. Today's walkable urban places make wonderful neighbors for the surrounding residential communities. Housing located in high-density suburban neighborhoods within walking distance to downtown centers see a 40 to 100 percent price premium on a price per square foot or per square meter basis compared to similar houses just beyond walking distance. Residents of such areas live in suburban splendor but can walk to great urbanism—the best of two worlds. The price premiums and numerous consumer research studies point out that it will probably take a generation to catch up with the pent-up demand since in a good year we add about 2 percent to the inventory of the built environment.

The more is better principle means that for the first time in nearly two hundred years *sustainable development equals economic growth*. Places with high quality of life have become the most economically productive places in the economy. Self-reinforcing places engage in the virtuous upward cycle of value creation.

The more is better principle also offers the opportunity for turning NIMBY into YIMBY, “yes in my backyard.” Tysons Corner in Fairfax County, Virginia, outside of Washington, D.C., is the largest suburban commercial district in the U.S.: 44 million square feet (4.1 million square meters) of drivable suburban hell that is nearly universally loathed. The county approved a new master plan in 2010 allowing the total size to more than double, based upon the four new Metrorail stations and partially paid for by the property owners, and a commitment toward a walkable urban transformation. The surrounding neighborhood groups *supported* the plan because they want Tysons Corner to be like nearby Arlington County, which has seven rail transit-served, walkable urban places that replaced strip malls over the past twenty years. Arlington residents love the convenience and increased quality of life and property values. Their county gets 55 percent of its tax revenues from these seven places. Twenty years ago these abandoned strip malls were becoming slums.

It is probable that the next long-term economic trend, following the agricultural, industrial, and knowledge economies, is probably even more sustainable. The *experience* economy adds value by enriching citizens' lives through businesses, non-profits, and government. This was first seen when the tourism industry as eco-tourism, history-tourism, and cultural tourism provided far more depth and enrichment to the consumer, helping to make tourism the largest industry in the world. Here tourism occurs in a special environment, which tends to be either wilderness or a walkable urban place. No one has ever seen a television travel show or the travel section of a Sunday newspaper that highlights a regional mall and suburban sprawl; it focuses on wilderness or great urbanism.

The transition to the experience economy will apply to all facets of everyday life. For example, the Apple store has taken the computer shopping experience to a whole new level. It is a combination of education, entertainment, and personal service, all in a high-design place. Many customers come back for education on a periodic basis, even weekly, and naturally end up buying more Apple products. Apple's announcement that it would enter the retail business was met with a great deal of skepticism. Disney, the master merchandiser, had just admitted their stores were underperforming, so what hope would Apple have? In the retail sector, a successful department store, like Nordstrom, earns \$500 per square foot (\$47 per square meter) annually. The highest-selling retailers tend to be jewelry stores (high-value, small products in small spaces), which can earn \$1,500 per square foot (\$140 per square meter). Apple stores earn \$3,000 to \$5,000 per square foot (\$280 to \$467 per square meter). They are not only in a different league; it is an entirely different game—a different economy. Since the stores' relatively highly educated staff is adding new value, Apple is investing in their employees with high-quality training and higher-than-average compensation.

The industrial economy trained low-paid manual laborers for more highly paid jobs requiring more highly skilled labor, fueling the growth of the middle class. The knowledge economy did the same thing for geeks. Richard Florida, the scholar who determined the role of the “creative class” in the knowledge economy, sees the “great reset” of the next economy that is now taking place by the investment in service workers, who make up 78 percent of the workforce (compared to 2 percent in agriculture and 10 percent in industry). By making service jobs more creative in the experience economy, education and compensation will rise. Who knows how many currently low-paying businesses and organizations will be reinvented in the experience economy?

The experience economy will probably locate most of its assets and jobs in walkable urban places. Yes, the wilderness will have its role to play. But the bulk of the experience economy will be in small, medium, and large downtowns, suburban downtowns, transformed regional malls, and even a few greenfield places (e.g., Disney versions of walkable urban places). However, customers seem to want *authentic* experiences, not experiences

manufactured, packaged, and helicoptered to a market-researched location. This desire for authenticity, particularly among the rising Millennial generation, means that places that invest in themselves, their parks, sidewalks, cleanliness, friendliness, their people, their educational system, will have an advantage in the marketplace. If you want to experience the wonder and excitement of downtown Savannah, midtown Manhattan, or Dupont Circle in Washington, you will have to visit, move your work there, or move your house there, spending money and bringing more self-reinforcing value to the place. These places will offer the potential of transformative, maybe even self-actualizing, experiences.

The experience economy will be even more economically and environmentally sustainable than the knowledge economy; it might even be more socially equitable. Assuming green transportation on foot, bike, or public transit—which work best in walkable urban places—and high-density buildings—which are inherently more energy efficient (unintentionally sharing heat with your upstairs neighbor)—recent research is leading to the conclusion that energy usage and greenhouse gas emissions could drop from 50% to 80% the level of the drivable suburban way of living. Given that the built environment is the largest energy user and greenhouse gas emitter, the walkable urban experience economy would be the major means of addressing climate change, not to mention many other foreign policy, economic, and health challenges faced by the U.S. and the developed world today.

The possible result: Sustainable development equals economic growth.

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