The Coming Bold Transformation of the American City

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In 40 years, 2.7 billion more people will live in world cities than do now, according to the United Nations Department of Economic and Social Affairs. Urban growth in China, India, and most of the developing world will be massive. But what is less known is that population growth will also be enormous in the United States.

The U.S. population will grow 36 percent to 438 million in 2050 from 322 million today. At today’s average of 2.58 persons per household, such growth would require 44.9 million new homes. However American households are getting smaller. If one were to estimate 2.2 persons per household—the household size in Germany today and the likely U.S. size by 2050—the United States would need 74.3 million new homes, not including secondary vacation homes. This means that over the next 40 years, the United States will build more homes than all those existing today in the United Kingdom, France, and Canada combined. Urban planner and theorist Peter Calthorpe predicts that California alone will add 20 million people and 7 million households by 2050.

To meet this demand, completely new urban environments will have to be created in the United States. Where and how will the new American homes be built? What urban structures are to be created?

Battery Park City in Manhattan exemplifies how the quality of urban life can be enhanced by replacing waterfront roadways with parks or pedestrian infrastructure. (Left); A "highway" for pedestrians, bicycles, and transit on Jiménez Avenue in Bogotá, Colombia. (Right) Photo courtesy of Enrique Peñalosa.

It is unlikely that city building on the scale to be seen through 2050 will happen ever again. Cities are a means to a way of life: the kind of urban structures created over the next few decades will have profound consequences in terms of quality of life, environmental sustainability, economic well-being, and even happiness and the civilization for hundreds of years to come. If we consider the influence American cities will exert on the rest of the world, the way they are built will determine, as well, much of the world’s sustainability and well-being.

Over the next 40 years, the United States

Until today, the United States’ main legacy for the urban world has been low-density suburbs, which, most agree, have many shortcomings in terms of the environment and quality of life. The inadequacies of the suburbs are well known. They are high-energy-use environments: homes are large and thus consume much energy for cooling and heating; occupants’ mobility is dependent on the automobile; distances to reach jobs, shops, and recreation areas are long; and low-cost and high-frequency public
will build more homes than all those existing today in the UK, France, and Canada combined.

If traditional American cities of the beginning of the 20th century are the ideal, why did Americans leave?

Yet, in most cases the new dense city simply means higher buildings on the same lots previously occupied by lower-rise, perhaps deteriorated structures. Are multistory buildings on traditional streets—which in U.S. cities generally mean very wide streets—the future of American cities? Are children going to walk out of their homes to basic sidewalks and motor vehicle–filled—and thus dangerous and often noisy—streets? Are those the environments where new generations of American children will grow up and where a new and happier life will flourish? Is this where a better civilization will grow?
Such buildings, often with high-quality architecture, are fetching high prices and their market values have increased over time, which allays any doubts about their attractiveness. Occupants of high-density residential buildings in or near centralities—urban concentrations of offices, shops, and often high-rise housing that are not necessarily in the traditional city center—are generally highly educated young people, sought by cities for the role they play in innovation and economic growth. This reinforces the view that the new city vision is sound and correct.

Yet, did those young people seeking a more urban life have another option? Will they stay downtown after their children start school? Even if they do, is it not possible to do better than that kind of traditional dense urban environment? Moreover, would most Americans now living in suburbs be attracted to such environments?

I don’t think so. I believe a different urban model is possible: a dense city with a large percentage of buildings facing pedestrian-and-bicycle-only promenades or greenways.

I love Manhattan, as do many others, but that does not mean it is the environment most people want, or that it is what future human habitats should be like. However, some of Manhattan’s attractive characteristics could be incorporated into a new urban model that would be very different. Let us imagine a Manhattan with no waterfront roads, where all spaces between waterfront buildings and the water are parks or pedestrian infrastructure of some kind—a Manhattan where alternate streets and avenues are reserved for use by pedestrians and bicycles, with a few of those streets, green with trees, also allowing trams or buses on narrow busways. Imagine a Manhattan crisscrossed by greenways.

European cities, such as Berlin, laid out before the advent of the automobile still offer thoroughfares that are comfortable for pedestrians and cyclists. (Left) Snow does not deter pedestrians or cyclists in Amsterdam. (Right) Photo courtesy of Enrique Peñalosa

It is indeed possible that the pre–World War II city was a very pleasant environment—before cars appeared in significant numbers. Indeed, it would be more correct to say that it was before the first world war that cities were desirable. What changed? Cars appeared and radically changed the urban environment, putting human life in constant peril.

For thousands of years, children in cities had come out to the street without fear or risk of being harmed. Today, we tell any three-year-old, one who is still learning to speak, "Watch out! A car!" and the child jumps in terror—and with good reason, because tens of thousands of children are killed by cars every year all over the world. When cars appeared on the scene, very different cities should have...
been designed. For example, half the streets should have been devoted exclusively for pedestrian use and only in the other half should cars have been permitted. But nothing changed in the way cities were built except that roads became ever larger, some even becoming 12-lane highways.

Before 1900, no one was killed by cars in the United States. In 1907 there were 500 automobile fatalities. In his 2008 book Fighting Traffic: The Dawn of the Motor Age in the American City, Peter Norton describes the American city before 1920:

American pedestrians crossed streets wherever they wished, walked in them, and let their children play in them. ... [In] 1914, the Chamber of Commerce in Rome, New York, had to ask pedestrians not to ‘visit in the street’ and not to ‘manicure your nails on the streetcar tracks’ — with limited success.

In the 1920s, cars took over American urban environments, changing them forever. Norton notes that in the 1920s, motor vehicle accidents in the United States killed more than 200,000 people; in 1925 alone, cars and trucks killed about 7,000 children.

Cars also radically changed the nature of urban structures. What had been a marvelous human environment—the city—became not only noisy and unpleasant, but also dangerous to human life, particularly to children’s lives.

Cars changed desirable housing locations. Before cars took over the streets, preferred locations for the homes of the wealthy were along the cities’ main arteries. They were the most visible locations, passed by pedestrians. After cars invaded the city, the wealthy fled to secluded streets or the suburbs. In cities all over the world, Main Street mansions formerly occupied by the rich still stand, now housing government, educational, or cultural institutions. Only rarely are they still used for housing.

Before cars, floors closest to the street were the preferred and most expensive locations, and servant dormitories were in those farthest from the ground, just below the roof. (This is still the case with Paris’s classic chambres de bonne, where so many poor foreign students have been lodged.) When cars took over, that order was reversed: first-floor apartments became the least desirable and least costly, while the penthouse and apartments farthest from the street became the most expensive. Even suburban lots located at the end of the cul de sac—and thus with the fewest cars going by—are the most expensive.

Cars made urban living undesirable to many people, and at the same time made it possible for them to leave by driving to the suburbs. Cars destroyed much of a city’s quality of life, but also freed people from the city. However, cars also enslaved people because the suburbs made it impossible to live without one.

If low-density suburbs are not desirable and a return to city life in the 1920s is not desirable either, then what should the future American city be like? It is a platitude to say that the new city should be designed for people, but over the past 90 years we have designed cities much more for the mobility of cars than for the well-being of people. Moreover, the best measure of a city’s quality is how good it is
to its most vulnerable citizens—children, the elderly, the disabled, the poor—who often have no access to an automobile.

In creating the new American city, planners should question some accepted truths. Consider these examples:

- Rail is not always the best transit option, and not just because of its cost. Elevated trains damage the urban environment, and underground trains force transit users into tunnels with no natural light or views of the city.
- Expensive and inflexible light rail has been installed in many American cities although bus rapid transit systems can achieve the same results at much lower costs, both in terms of mobility and in spurring private investment.
- Curbside parking is not a constitutional right. Would it be better to eliminate curbside parking and instead have larger sidewalks and protected bikeways?
- Private waterfronts should not exist if the prevalence of public good over private interest is a democratic principle. Instead, hundreds of miles of pedestrian promenades along the waterfront could radically democratize and improve urban environments such as those along Long Island Sound.

A Different Urban Environment

In order to attract the millions of Americans who still prefer suburban living to higher-density life, it is necessary to create higher-density habitats very different from those in the traditional central city. Would it be possible to create such a habitat that would still provide much of what people seek in the suburbs—green, relatively traffic-free environments providing safe places for children to play and ride bicycles? How about a dense city without the constant threat and noise of vehicles in front of every home? Some wonderful projects have been built in the past few decades—including Battery Park City in Manhattan and Harbour Green in Vancouver, British Columbia—without a road separating buildings from green spaces and waterfronts. But the challenge is to create not only high-quality isolated projects, but also whole cities with new characteristics.
In Bogotá, Colombia, one of the world’s densest metropolises, the city built Porvenir Promenade—a 15-mile pedestrian-and-bicycle-only promenade—and more than 21 miles of greenways. Both are essentially bicycle highways. It is a simple scheme that transforms urban life. Anyone’s life would be transformed if within a couple of blocks of home it would be possible to enter a network of miles long made up of pedestrian-and-bicycle-only promenades offering the opportunity to ride a bike as a substitute for a car or just for fun, to walk, or simply to sit on a bench and read and watch people pass by, free from the noise of cars.

Why not think differently? Why not create cities with hundreds or thousands of miles of such pedestrian and bicycle infrastructure? Bus lanes or trams could be added to some of these greenways or promenades, providing impressive, low-cost, pleasant surface mass transit. Children living in high-rise buildings facing greenways or large parks, without roads separating buildings from greenways, could walk out of their homes into massive green and pedestrian spaces. Buildings’ car entrances would be on the side opposite the greenway or promenade.

Where Are 74 Million New American Homes to Be Built?

Where should the millions of new homes the United States needs over the next four decades be constructed? These millions of new American homes will generate millions of daily vehicle trips. Anything but an optimal location will account for billions of hours per year of unnecessary transport time, massive energy expenditures, and a lowering of the quality of life.

Optimal locations for the new homes will be as close as possible to city centers. However, beyond some remaining brownfields, what now surrounds American urban centers are low-density suburbs. Ideally, that is where the new American city should be constructed. If high density for the 74 million new homes to be built in the United States over the next 40 years is not achieved in the existing suburbs, where is it to be built?

There are several ways in which suburbs can be turned into high-density environments. One is simply changing zoning regulations to allow multi-story or other higher-density structures where houses with gardens now stand. For that to happen, it would also be necessary to scale up the infrastructure with larger water and sewage pipes, new schools, larger parks, and wide sidewalks. Other regulatory changes could include allowing mixed uses on at least some streets that are now exclusively residential. This process would produce higher densities in the right locations but would not produce a significantly different urban structure. Certainly it would not produce the seed of a new urban civilization in the United States.

A more radical way to create well-located low-density suburbs would be to initiate large programs of demolition, redesign, and reconstruction, which would lead not only to higher density, but also to a different urban model—cities with hundreds or thousands of miles of pedestrian-and-bicycle-only promenades and greenways, as well as miles of bus-only or tram-only roads.

After several failures in radical urban redevelopment and the scathing criticism of them by Jane Jacobs, Americans were left if not traumatized, at least paralyzed—wary and afraid of initiating any radical urban redevelopment projects. If a couple of neighbors say hello to each other in a neighborhood, it is deemed to be “vibrant,” and any government-led effort to demolish it becomes unthinkable. Jacobs was not as influential in Europe, where there have been many government-led urban reconstruction projects over the past few decades.

Even decayed and dilapidated suburbs near the center city have been passed over for intervention in the United States. State and local governments stood by while large areas collapsed and have done little, if anything, to intervene. Birmingham, Alabama, is a case in point. The dynamic University of Alabama at Birmingham has been growing steadily in the center of the city, but few of its professors and researchers live downtown. Only two miles (3.2 km) west of the campus lie hundreds of acres of deteriorated, dilapidated, almost collapsed suburbs, with many abandoned homes caving in and schools closed and boarded up. In the vicinity is the now practically unused Legion Field stadium and its many acres of parking. A new city could be created there. Yet, no public or private initiative dares propose a radical reconstruction of those hundreds of acres of well-located low-density suburbs.

Of course, urban redevelopment is not only for run-down neighborhoods. Some of the best
redevelopment sites may already rank among a city’s most desirable suburbs if they are located near a centrality and offer abundant parkland and transit service. Eminent domain is an integral part of democracy. Every democratic constitution states that all citizens are equal before the law, and if that is so, then the public good should prevail over private interests. It would be unthinkable that a necessary road or airport could not be built because one homeowner refused to sell his or her land.

If density and good location are required for a high quality of life for millions of people for hundreds of years to come, as well as for environmental sustainability, it seems use of eminent domain is appropriate. Moving is not so traumatic; millions of Americans do it every year for myriad reasons. And selling a home or contributing it as equity to participate in a large redevelopment project can be very profitable for the individual. In addition, home sellers can stay in the area, relocating to the new buildings built there.

Large redevelopment projects are regarded with suspicion because people do not trust government. Yet government is unavoidable in the creation of cities. The city must define a master plan and decide the width of roads and sidewalks and the height of buildings; it must build mass transport and buy land for parks.

The easiest thing would be to do nothing and let the market slowly define what form future cities will take. But a tremendous historic opportunity would be missed. We build cities not for the next few decades, but for at least the next few centuries. The United States provided most cultural and urban models to the world in the 20th century. It can now create the more sustainable and happier city model that the urbanizing developing world will look to as an example.

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