

Repairing the American Metropolis

BY DOUGLAS S. KELBAUGH

Suburban sprawl, poor planning, and bad policy have reduced many of America's urban centers to dust. Can new policies resurrect the nation's fragmented and polarized metropolises?

quiet revolution has been going on in town planning and architectural circles over the last decade. Established zoning and urban design ideas are being questioned and reversed. Urban planners and designers are reviving and reinterpreting ideas that prevailed before the automobile spread our cities apart and hollowed out their cores, before mass transit became the transportation mode for an underclass, before municipalities within a region cut each other's throats and their own tax bases competing for public revenues, before burgeoning suburbs grew to dominate their metropolitan regions, before television kept us inside our houses, and before telephones and home computers reduced face-to-face interaction in a depleted public realm.

Policymakers and planners, especially the New Urbanists, are promoting new forms of metropolitan and regional planning and governance to get a handle on our huge, fragmented metropolises. As they do, a sense of malaise sweeps the country, marked by a fundamental dissatisfaction and alarm with the direction that U.S. metropolitan development

has taken in recent decades.

This development has degraded the natural environment and diminished the human community. While the citizenry may disagree about what constitutes salvation and what is possible for the future, there is a growing understanding that we cannot continue to spread ourselves endlessly across the countryside; to live by, for, and in our automobiles; to produce tons of waste and pollutants for every man, woman, and child. We are sucking the planet dry of energy and resources and letting our older communities wither, particularly the rusty and polarized cities in the eastern United States. There are some difficult tradeoffs ahead, and our choices are not going to please everyone.

Eight Imperatives

ven if most citizens are against sprawl, they are also against density— leaving society at one of those arterial traffic lights in suburbia, where turning left takes forever and continuing straight leads nowhere.

If we are to repair the American metropolis, we must effect dramatic

change in the way we view development, the needs of the citizenry, and the respect we afford our older, established communities. While such change is ambitious—and even daunting-when regarded in one sweep, it becomes more manageable when it's broken down into a series of steps. With that in mind, here are eight policy initiatives that will reverse our current destructive development patterns, revitalizerather than abandon-older communities, decrease the sense of isolation many suburban residents feel, and achieve increased environmental protection.

Get Priorities Straight

o accomplish this, we must make infill and redevelopment of existing urban centers and towns—whose social, physical, and institutional infrastructures are already in place—a higher priority than new suburban development. Investment in suburbia has often meant a disinvestment in cities.

Urban growth boundaries around towns and cities represent an effective way to encourage infill and redevelopment of existing areas and preserve the hinterland. Ample open space and interconnected riparian and wildlife corridors should be protected in perpetuity as greenways and nature preserves, on both sides of the urban growth boundaries that all metropolitan areas should draw.

A network of pedestrian and bike paths should link existing population centers as much as possible. Urban villages (compact, mixed-use nodes in a city), pedestrian pockets (compact, mixed-use nodes in suburbia, connected by rail or bus transit), transit-oriented-developments (a later version of pedestrian pockets), and traditional neighborhood developments should normally be

developed within existing urbanized areas. But new development can be justified outside the urban growth boundary if it is compact, balanced, self-contained, and stand-alone.

Inside the growth boundary, development can be intensified by infill strategies that make use of underutilized space, much like a lawn is thickened by annual seeding. Outside the boundary, dense,

sumerist society, where it has repeatedly been shown that even widely accepted social or environmental imperatives will not change behavior if they are not accompanied by economic incentives or penalties. Being ethically right is not enough.

The most effective economic policy for reducing vehicle miles traveled would be a much higher gas tax. Despite its political unpopular-

Ample open space and interconnected riparian

and wildlife corridors should be protected

in perpetuity as greenways and nature preserves.

properly designed communities can occasionally be laid down like already-thickened sod grass.

Experience with design charrettes, community workshops, and studios has shown that it is easier to reach consensus for new development and growth if it's situated in underutilized parts of towns and cities rather than in mature neighborhoods. Accordingly, the least-utilized sites should be designed and developed first, reducing the political turmoil and complexity of inserting new development into established neighborhoods.

Break the Car Habit

e must stop subsidizing the automobile by adopting new and more robust taxes and regulations that will make market prices more commensurate with the true and total costs—chiefly environmental impacts—of automobile use. Mobility is a means; society's ends—such as education, the arts, parks, housing—not its means, deserve tax dollars.

Pocketbook issues are often the most critical ones in a secular, con-

ity in America, no single legislative stroke would do more to reduce sprawl, fuel consumption, traffic congestion, and air pollution. There are secondary economic measures, such as congestion pricing, which taxes vehicles driven at the busiest times and places, and pay-as-you-drive auto insurance that would reward vehicle owners for driving less. There are also location-efficient home mortgages that would provide home buyers with credits for low auto ownership and usage.

Specifically, mortgage lenders need to recognize that households in certain neighborhoods tend to depend less on automobiles and, accordingly, have greater discretionary income to devote to mortgages. The policy could be administered by statistically rating neighborhoods according to mass-transit availability and proximity to workplaces. This policy should also extend to discounts for energy-efficient housing and for in-home offices, both of which can significantly reduce household operating expenses and free up money for other purposes.

In addition to these economic

policies, there are several regulatory policies that will help reduce reliance on automobiles; among them is adoption of low- and zero-emission vehicle requirements for a percentage of the automobile fleet in the region and state. Increased fuel efficiency standards and deregulated shuttle vans and taxis would help reduce the environmental impacts

the conventional automobile, which is oversized and overpowered for most household trips. Because niche vehicles may actually increase vehicle miles traveled by satisfying pent-up or latent demand, and because station cars, like park 'n' ride lots, extend the radius of sprawl, all three should be used cautiously and as temporary solutions until

We must bear in mind the true cost of the automo-

bile; it typically costs about \$600 per month to buy,

maintain, park, insure, and operate an automobile.

of driving and encourage use of public transportation. Other policies might offer incentives for use of hybrid and electric vehicles, especially ones charged by solar voltaics and their own braking systems. Electric vehicles that plug into the grid simply shift the energy production and air pollution from the auto to the electric power plant.

There are also technological policies that would encourage the development of hypercars, station cars, automated highway tolls, and niche vehicles, such as bicycles, golf carts, and vans. Hypercars are ultralight, high-performance electric-drive hybrid vehicles that can theoretically get up to 300 miles per gallon. Station cars are small electric rental cars made available at transit stations for transit riders to drive to their homes, to work, or to shops.

Automated highway tolls establish value pricing by electronically recording and charging drivers according to time—for example, during high-congestion periods versus low-use times—and distance of travel. Niche vehicles are smaller, cleaner, cheaper, and more efficient vehicles that can be substituted for

land use patterns and transportation are better integrated.

Get Transit Back on Track

e should reform federal, state, and local transportation policy to support public mobility, access, and walkability, not just public roads and private cars and trucks. Comprehensive regional transit systems are badly needed. And most metropolitan areas need all the help they can get in the form of wider sidewalks, bike lanes, van pools, jitney taxis that carry multiple passengers going to different destinations, local buses, express buses, busways, dedicated bus lanes, trolleys, light rail, commuter rail, high-speed intercity rail, and passenger ferries in port cities. Studies suggest that if plans link land use and transportation, as well as cluster housing and jobs, every person-mile of mass transit, whether bus or light rail, will displace the need for four to eight person-miles of car travel.1

A light-rail system is often the best way to transport the largest number of people during the busi-

est hours in the most crowded corridors, especially ones that run on dedicated right-of-ways. Buses, especially ones with direct access ramps to high-occupancy-vehicle lanes, may work better in lowerdensity metropolitan areas, where population is too dilute to support the capital costs of rail. The price of building a rail transit system is high, but the cost of not acting is often higher, and operation costs are often less than buses. When evaluating these costs, we must bear in mind how high the average true cost of the automobile is; it typically costs about \$600 per month to buy, maintain, park, insure, and operate an automobile. Added to that is the societal costs of right-of-way land, roads, bridges, police, gasoline subsidies, congestion, noise, pollution, and highway injuries and deaths.

Many households spend 25 percent or more of their income on cars—as much or more than they spend on shelter. Communities with compact, mixed-use patterns of development that allow families to downsize from two to one automobile free up enough money to support another \$60,000 of mortgage or college loans.

Estimates for all monetary and nonmonetary costs both to the driver and to society run as high as \$1.05 per mile.² Other studies, which make more-conservative assumptions and do not quantify as many of the nonmonetary costs of auto use, estimate approximately half this cost. In a metropolitan region of, for example, Seattle's size—3.3 million population and 23 billion vehicle miles traveled—this amounts to an annual cost of \$15 billion to \$25 billion, or \$5,000 to \$8,000 per person.³

In either case, automobile dependency, a large and growing tumor feeding on most regional economies, can make mass-transit costs suddenly look economical. We must also remember that, when a region invests in rail transit, it is buying more than a transportation system. Indeed, it is buying a permanent land-use pattern that will structure the region in more predictable, sustainable ways and that will impart a greater regional consciousness and common identity than asphalt and rubber tires ever could. Consider, for instance, that rail is the metaphorical skeletal system of a region. Bus lines and high-occupancy-vehicle lanes are the sinew, and neighborhoods and districts are the flesh and muscle.

The Transportation Equity Act (TEA-21), the historic \$200-billion federal transportation funding program that is the biggest single public-works bill ever passed, has set aside some \$40 billion for transit. In the best of all worlds, we wouldn't have to subsidize mass transit, but as long as the deck is so heavily stacked in favor of the automobile, we must spend extra tax dollars on bus and rail to keep their ticket prices competitive.

It's also important that we not overlook what is perhaps the most beneficial mode of transportation: walking. It begins and ends every transit trip and is the cheapest, healthiest, cleanest, and often the most enjoyable way to move around. It was once the most common way to commute to work.

Consider, for instance, that during the last decade of the 19th century, roughly 60 percent of the workers in Britain walked to work; the percentage of people who take the bus to work doubled over the last century; and the percentage of British automobile commuters more than doubled from 16 percent to 36 percent in the single decade of the 1950s.⁴

Walkability may be the single best test—and pedestrian activity the best measure—of a healthy, functional city. It takes five ingredients to get and keep people walking. First, development must be compact, so distances are walkable. Second, communities must be densely populated so there is a sufficient number of people living, work-

national economy. But at the regional scale, there is no one captain at the helm and no regional rudder.

Once the planning body has been established, these metropolitan regions should develop urban design guidelines that clearly and simply codify design principles. These guidelines should succinctly prescribe and graphically illustrate de-

Automobile dependency, a large and growing

tumor feeding on most regional economies, can

make mass-transit costs suddenly look economical.

ing, shopping, and recreating within a walkable radius. Third, a community must boast a rich, interesting, and convenient mix of uses, so there are destinations worth walking to. Fourth, the walking environment must be safe from crime and dangerous automobile traffic. And fifth, the city must offer a regional transit system so that the pedestrian can explore the entire metropolis.

Four out of five of these prerequisites will not provide true walkability; it takes all five. A shopping mall, for instance, satisfies the first four criteria, but essentially nobody walks to or from it, and it is, therefore, auto-dependent.

Hammer out a Plan

here needs to be a master plan for the metropolitan region and a planning body with the authority to take a synoptic view of the region, no matter how many municipalities or counties are involved. If artificially cheap gasoline and land are the twin propellers driving the huge American tanker aground, the engine turning those propellers is the metropolitan economy, not the

sired architectural and urban outcomes and promote regional architectural types, language, and materials. Municipalities should also adopt design and development goals for individual neighborhoods as a complement to existing zoning ordinances and the more-regional comprehensive plans.

Citizens should always be encouraged and given the chance to play an active role in generating and adopting these guidelines and plans. Citizen participation is a matter of common decency and democracy, but it also represents a practical method for dealing with obstructionists, including NIMBYs (Not in My Back Yard) and BANANAs (Build Absolutely Nothing Anywhere Near Anybody). Often, the best and most-potent ideas come from citizens at community meetings and design charrettes.⁵

Similar guidelines and plans should be developed for exurban and rural areas beyond the urban growth boundary to help ensure that low-density development is also environmentally, socially, and economically sound and sustainable.⁶

Build More Granny Flats

ike walkability, accessory dwelling units and live-work units are a good measure of the social health of a city. An accessory unit is part of, attached to, or adjacent to the primary dwelling unit and can be rented out or provided to a family member, like a widowed parent or grandparent. A live-work unit is one

allowed, but also encouraged, to convert spare rooms into accessory units, home offices, or even rental offices. There are also many detached garages in older neighborhoods, and these could accommodate accessory apartments. These garage apartments, offices, granny flats, studios, and teen lairs can be surprisingly spacious, with high ceilings and up to 600 square feet

Indeed, it's essential that cities tie public funds to local land-use and development plans that nurture compact, affordable, and coherent communities and support walking, bicycling, and use of mass transit.

Funding should be contingent on completion of regional and neighborhood plans and should be coupled with tax incentives that nurture investment, renovation, and new construction in historic areas and central cities. State and federal funds should not be used to support development outside urban growth boundaries, and matching funds for roads, sewers, storm drainage, and water service should be earmarked to take advantage of existing infrastructure and support increases in mass transit, bicycling, walking, and car pooling to reduce vehicle miles traveled.

Energy and clean-air regulations should also encourage this type of transportation and land-use planning. In short, policies should strengthen transit-rich metropolitan cores, which will reduce air pollution.

But the methods of collecting public funds must be adjusted along with the funds' allocation. The differential in tax base across the American metropolis can be shocking. Consider, for instance, that among the 244 school districts in the Chicago region, the tax base disparity is 28 to 1; that is, the more affluent communities have 28 times more assessed value in real estate than their low-income counterparts, which translates into more revenue for public services and lower tax rates. This results in a difference in spending per pupil of 3 to 1.7

In his book *Metropolitics*, Myron Orfield makes a compelling case that regional revenue sharing is essential to the solvency of problem-ridden inner cities, decaying first-ring suburbs, and infrastructure-poor

For many decades, living above the shop and

renting accessory units was a common source of

both low-cost housing and workplaces.

where the living quarters are attached to—typically above—a workspace that can be used by the residents or rented out. Accessory units are usually rented, while livework units are typically purchased.

Some American cities have ordinances that empower owners of single-family homes to add an accessory apartment within or attached to their home or to open an office on the ground floor of the house. Some ordinances allow detached garage units. Live-work units are the most effective way to eliminate the commute trip, and accessory units may be the most cost-effective and quickest way to provide affordable rental housing units.

A metropolis needs thousands of both. Indeed, for many decades, living above the shop and renting accessory units was a common source of both low-cost housing and workplaces—one that a whole generation of lower-income Americans has been denied.

Most cities have a large stock of big, older homes that were built when family households were larger. The owners now should not only be of floor space over a three-car garage, even more if a second floor, mezzanine, or loft level is created.

It is also possible for the residents of garage apartments to work in the garage below, with activities spilling out into the alley in good weather. This arrangement can work well for artists, craftspersons, cottage industrialists, and shop owners. Garage units also provide crime surveillance along the alleys that course through many cities. In most cases, the additional income stream makes the primary dwelling more affordable, because accessory units have a relatively low cost per square foot. Banks would be smart to recognize this additional income in their mortgage underwriting.

Fix Funding and Taxing

urrently, there is little effort to coordinate the outlay of government funds with a city's overarching development goals. This lapse only tends to perpetuate development and transportation problems and must be corrected if metropolitan cores are to be revitalized.

new outer suburbs.⁸ If these poorer communities were afforded the legislative clout they deserve, they would hold a legislative majority over the larger—and richer—second-ring suburbs. Only with that sort of legislative clout are they likely to get an equitable distribution of resources, one that is commensurate with their problems and their census figures.

Recalibrate Governance

overnments must be reconfigured to empower both the region and, even more important, the neighborhood. Indeed, more cities should be divided into boroughs, which, in turn, should be divided into official neighborhoods of, if numerically possible, 5,000 to 10,000 people. With its dwellings, school, stores, community center, library, firehouse, church, synagogue, and mosque or temple, the neighborhood is the optimum and natural social and physical unit for building community. Devolving more municipal governance to neighborhood councils and establishing a city-wide department of neighborhoods are two possible strategies for improving governance.

While we empower neighborhoods, we must also strengthen the political base and economies of metropolitan regions, which have increasingly become the engines of prosperity in a global economy. Municipalities are typically too large for managing neighborhoods and too small to compete internationally.

Consider, for instance, that metropolitan New York has a bigger economy than Mexico; Chicago's gross metropolitan product is bigger than Sweden's gross national product; Hong Kong's economy is as big as that of Indonesia, the world's fourth most populous coun-

try; and Detroit boasts greater economic output than Poland. In short, what's good for major metropolitan regions is usually good for their municipalities and neighborhoods, at least in generating wealth. Equitable distribution within the region is another matter.

Clearly, regional governance makes more and more sense, as does regional tax revenue sharing, which of these endeavors become easier to preserve and enhance with regional government.

Poor people of color, who tend to be concentrated in the urban core in racially segregated census tracts, have been physically and psychologically separated from the new opportunities and resources on the metropolitan periphery. Although they have begun to move to the sub-

The neighborhood is the optimum and natural

social and physical unit for building community.

brings greater economic and social equity to a region and reduces competition among municipalities for tax revenues and jobs. This zerosum competition requires tax-needy and job-hungry towns and cities to give excessive tax breaks to businesses that can play one municipality off against another.

Although regional coordination of real-estate taxation will ease intra-region competition, it will not reduce inter-regional or national competition for new tax bases and jobs. There will always be a role for chambers of commerce and competitive tax rates and incentives, but these efforts can be all the more competitive if they are regionally conceived and coordinated.

To compete nationally and internationally, metro regions need to attract and retain a well-educated, talented, and productive workforce. To be attractive to such a workforce, the region must be livable and affordable. It must also offer good schools, cultural assets and events, strong neighborhoods, good health care, recreational amenities, historic districts, sports teams, museums, and zoos and aquariums. These amenities must be available to all citizens, not just the advantaged. All

urbs, too, it is usually to inner-ring suburbs that are often as economically stressed as the inner city.

For instance, over recent decades the population of the city of Detroit, once the nation's fourth largest city, has fallen from just under 2 million to just under 1 million. Most of the remaining people are low-income African-Americans. Myriad separate municipalities have been created that not only vie for tax base and jobs but usually try to keep out the needy poor who are often racial and ethnic minorities. Racial and economic fragmentation usually goes hand in hand with sprawl. Indeed, John Powell, a leading American intellectual on race issues, has taken the stance that "bringing racial awareness to regionalism is the single most important civil rights task facing us todav."10

Shifting power up to the county level is not optimal or even necessarily an improvement because counties, like municipalities, usually have outdated and arbitrary boundaries. A truly regional government—one that corresponds to a region's populated area, transit system, water system, public school districts, or urban growth bound-

ary—is needed. Representation on a regional council should reflect the fact that a region's older, central cities usually play a greater psychological, cultural, institutional, and commercial role than their residential population count might suggest. To that end, leaders should retain the boundaries and names of existing cities and towns but slowly and deliberately shift appropriate decision making from the increasingly obsolete mosaic of municipalities up to the regional entity and down to neighborhoods.

At the federal level, the Department of Housing and Urban Development should be changed to the Department of Neighborhoods, Towns, and Cities, to reflect a more holistic approach to urbanism. Meanwhile, parallel changes should take place in the corresponding state agencies and departments. Federal and state programs could be orchestrated to focus on particular places and neighborhoods rather than remain a shotgun of separate programs, which now number in the hundreds. The General Services Administration, for instance, which is the nation's largest landlord, should be compelled to locate new and leased buildings for housing federal facilities within the centers of towns and cities and in central business districts. And federal facilities should no longer be exempt from local land-use laws, including design

guidelines that encourage compatibility with local architecture and urbanism.

As with most other sweeping reform initiatives, education should form the keystone of efforts to devise more-effective development and transportation strategies. To that end, we should make quality public schools the physical, social, and cultural hubs of our neighborhoods by locating community centers, public libraries, gyms, museums, and even selected social services in or adjacent to the school buildings.

Quiet Revolution

ursued alone, these eight initiatives will help nudge the United States toward a more enlightened strategy for urban planning and revitalization. Pursued as a unified strategy, they will inspire a bold new vision to guide our development and transportation efforts and establish new, vital roles for our aging and often neglected urban centers. And ultimately, they may transform the quiet revolution in town planning and urban design into a fullscale juggernaut that will redefine the shape and role of America's cities and neighborhoods.11

Douglas S. Kelbaugh is dean of the A. Alfred Taubman College of Architecture and Urban Planning at the University of Michigan, Ann Arbor.

NOTES

- 1. J. Holtzclaw, "But I have to Drive! Why?" The Location Efficient Mortgage Partnership (Washington, DC; May 1998).
- 2. Alan Durning, "The Car and the City," *Northwest Environmental Watch* (Seattle, WA: Sasquatch Books, 1996), p. 62.
 - 3. Ibid, pp. 48-49.
- 4. C.G. Cooley and J. Turnbull, "Modal Choice and Change: The Journey to Work in Britain Since 1980," *Journal of Transport Geography* 8 (2000), pp. 11-24.
- 5. William Morrish and Catherine Brown, *Planning to Stay* (Minneapolis, MN: Milkweed Editions, 1994). This is a particularly good guide on involving residents in planning and designing their neighborhoods.
- 6. Randall Arendt, *Crossroads, Hamlet, Village, Town* (Chicago, IL: American Planning Association, 1999). Arendt examines a century of rural and suburban design practice and principles in Britain and America.
- 7. Myron Orfield, *Metropolitics* (Washington, DC: Brookings Institute/Lincoln Institute of Land Policy, 1997), p. 163.
 - 8. Ibid.
- 9. Joint Center for Sustainable Communities, "An Action Report" (Washington, DC: June, 1998), p. 6.
- 10. John Powell, "What We Need to Know about the 'Burbs'," interview in *New Mexico Designer/Builder* (January 2000), p. 33.
- 11. This article was adapted from a chapter in the author's upcoming book *Repairing the American Metropolis: Common Place Revisited* (Seattle, WA: University of Washington Press, 2002).