# WHAT KIND OF CITIES WOULD MAKE SENSE?

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by

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Sense-making cities for tomorrow will have to be very different from the auto-age sprawl-centers into which we have been letting too many of today's cities degenerate.

So the much-lamented energy crisis may yet prove to be a blessing in disguise. Better late than never it may begin opening our eyes and minds to the cost, the waste, and the inconvenience of today's urban disintegration.

For hundreds of years before we let ourselves become so auto-dependent the history of city building was mostly the story of people seeking to maximize their closeness and ease of access to what they wanted. Said Pat Moynihan when a White House adviser on urban problems: "Cities should be places for coming together. The automobile has made them places for moving us apart. More than any other single factor it is the automobile that has wrecked the 20th Century American city, dissipating its strength, destroying its form, fragmenting its life."

Here, briefly, are a few of the enormous time and money wastes of our auto-age sprawl:

1. the multibillion-dollar energy waste and cost of making millions of people drive trillions of needless miles;
2. the multibillion-dollar air pollution cost that follows in the wake of all these cars and trucks;

3. the multibillion-dollar wasted-time cost of making so many millions of men and women spend up to a third of all their working hours just driving to and from their jobs or wherever else they have to go;
4. the multibillion-dollar increased-tax cost providing municipal services over the added distances of sprawl;
5. the multibillion-dollar land-waste cost of leaving so many millions of close-in acres vacant or otherwise unused, misused, or underused as development leapfrogs over them;
6. the multibillion dollar "throw-away-cities" cost of leaving so many already-paid-for municipal facilities inside the cities underused while we duplicate them at much higher prices outside.

   (Around the Twin Cities, for example, research for the state-sponsored Metropolitan Council found more than enough basic community facilities for water supply, sewer lines and sewage treatment, highways, police and fire protection, parks, etc., already installed to take care of the area's anticipated population growth for the next twenty years, but it will cost the taxpayers more than $2 billion to duplicate them out where development is now beginning to leapfrog.)

All these multibillion dollar costs and wastes add up to a trillion dollar need for a trillion dollar change in the way we have been letting our cities sprawl. So now let's begin at the beginning and ask ourselves a few simple questions that may help us all see why sense-making cities will have to be much more compact and much quicker and easier to get around in by car and bus and also on foot, why sense-making cities should concentrate as many as possible of their services, jobs, and contacts in their for-most-people easiest-to-get-to locations, why sense-making cities will have to provide high-quality outdoor recreation close to where people live instead of a long drive outside, etc., etc.

For a start, let's try asking "What kind of cities would we like to have?"

To this the simplest quick answer might be "Cities where people could enjoy the good life in safety and comfort and where business would find it more profitable to locate close to where job needers live than on land outside that is cheaper to buy but more expensive for workers to get to."

But this quick and easy answer is not much help, because no two people seem to have the same idea of what kind of good life they want and no two businesses seem to have quite the same needs for profitable operation.

That's why Carl Madden, the chief economist of the U.S. Chamber of Commerce, says "The essence of urbanism is the diversity only a good city can provide." And Jane Jacobs reminds us that 200 years ago Boswell marveled to see "How different

a place London is to different people."

So let's try wording our first question a little differently and see if the rewording won't help us start with a more usable answer:

Question No. 1 - What is the purpose of cities?

Answer - The purpose of cities is to overcome the handicaps of distance so....

1. a great diversity of people will want to live there to enjoy easier access to the great diversity of satisfactions, both indoor and outdoor, that they think they need for the good life, and so....
2. a great diversity of employers and suppliers will want to locate close to where these people live in order to take advantage of easier access to the equally great diversity that so many businesses seem to need for profitable operation.

Question No. 2 - How well do today's cities serve that urban purpose?

Answer - Small cities offer people too little choice and variety of personal and business opportunity and offer manufacturers too small a local market in which to buy and sell and too little diversity of labor skills and supporting services. That's one big reason why the combined 1960-1970 population growth of all today's 100 smallest metropolitan areas added up to less than the growth of the two biggest. Many small metropolitan areas have, in fact, been losing

population instead of gaining.

Big cities offer only a lopsided diversity, long on some diversities and short on others. Most unfortunately and needlessly they offer far too little provision for the diversity of outdoor living and outdoor recreation that is one of the biggest reasons why so many millions of taxpayers now feel they must move to the suburbs.

Too often, like New York, they dissipate and fragmentate their diversities in a scatteration of one-purpose neighborhoods, thereby making the diversities needed by different people and different businesses needlessly time-consuming to get to.

Question No. 3 - What is the best way to overcome the handicaps of distance?

Answer - Shorten the distances and bring everything closer together.

The more compact the city and its suburbs can be made or kept the more easily accessible its diversities should be.

The more compact the city the less its costs. A 300 page study of "The Costs of Sprawl" just released by H.U.D. and the environmental agencies brands sprawl "the most expensive form of development" and lists potential savings of up to 50% from compact cluster developments, accompanied by a 20% to 30% reduction in air pollution.

The bigger the city the greater the diversity of users and suppliers it should be able to bring together and match up. New York scatters around so many diversities that the classified telephone directory needs more than 4,200 separate headings

to list them all.

The more compact the city the better it can be served by mass transit which is bound to be underused and therefore uneconomical in low density sprawl.

The closer and more mixed the residential, commercial, and industrial land uses the better. Zoning for single-purpose land use had been disastrous for too many American cities. The sooner it is reversed to encourage multi-purpose land use (as in other countries) the better. Residential and business use can dovetail neatly together; workers and shoppers keep the streets alive during the day; people from nearby homes can keep them alive after stores and offices close.

The more diversities the city can coordinate in or near the easiest-to-get-to location the better.

The less time and money people have to waste getting together to talk face to face the better. No forseeable advance in telecommunications can offer a good-enough substitute for the personal contact a compact diversified city should provide for both people and business. The importance of these personal contacts grows with each passing year as more and more of our work force find employment in the development and transmission of information - business information, scientific information, educational information, sales appeal information, cultural information, political information, market information, and just plain news information. By some reckonings some 46% of the work force are already so employed vs. a declining 25% in manufacturing and

5% in agriculture.

Question No. 4 - Would everybody like close-together living?

Answer - Of course not. Today's great diversity of people would have equally diverse ideas about how close they would want to live to what and to whom and very diverse ideas about what they could afford and would want to spend for that closeness.

But these differences are differences only in degree. Cliff dwellers and suburbanites alike are drawn to the city to enjoy advantages only closeness can offer, and most suburbanites wish they could enjoy their kind of living without traveling so far each day to get it.

Question No. 5 - Would all business find it equally profitable to locate close to the urban center?

Answer - Once again the answer is "of course not." Closeness is worth much more to some kinds and sizes of businesses than it is to others. Many companies get to be more self contained as they get bigger, so for some (but not all) of their operations they may find it more profitable to trade maximum access for greater space - to accept less worker-accessibility on the outskirts in order to get more space than today's land prices would make it profitable to occupy at the center.

Small companies and most new companies - the companies on whose growth the city's own future growth will greatly depend - find it crucial to have maximum access to markets, to clients, to downtown supporting services and to a great variety of suppliers and labor. The bigger the city the bigger its

percentage of small businesses.

But once again, the difference is only a difference in degree. The advertising agency downtown and the factory in the suburbs are both drawn to the city for advantages only closeness can offer. Much, if not most, suburban industry would find it more profitable to locate closer to the labor center, the service center, and the transportation hub if closer-in land were cheaper and easier to assemble and if close-in streets were not so needlessly traffic-choked.

Question No. 6 - What would high density development at the center do to and for people who prefer low density?

Answer - Research sponsored by the Urban Land Institute, the Lincoln Foundation and the Schalkenbach Foundation has shown that fuller utilization of the close-in land would siphon off most of the demand that is now proliferating sprawl and so deflate the demand and price for land on the urban fringe. This would help people who want low density living to enjoy it roughly one-third as far out.

Less land waste close in would likewise help industry to find land it could afford much closer to where unemployment is concentrated and jobs are most needed. It would lessen both air pollution and traffic congestion by shortening distances, so fewer people would have to drive fewer miles in fewer cars to get where they want to go. It would take the prifit out of premature subdivision, preserve open space, permit open space recreation closer to where most people live, and save billions of dollars that would otherwise be wasted extending urban roads and urban utilities far out into the boondocks.

Question No. 7: What is the one best way to make our cities more compact and make all their diversities more accessible?

Answer - Take advantage of today's new technologies to plan them in three dimensions instead of two.

Six years ago a round table cosponsored by the National League of Cities, the Conference of Mayors, and The Council of State Governments - a round table whose panel was hailed by New York's Mayor Lindsay as "The Who's Who of Urban Development" - laid it on the line that...

"Making tomorrow's big centers twice as big horizontally for tomorrow's twice as big urban and suburban populations would be impossibly costly in dollars, intolerably costly in wasted land, unbearably costly in added travel time to and from work and to and from outdoor recreation.

Doubling, tripling, or even quadrupling their area by growing up instead of out would cost far less and add only seconds instead of minutes to everybody's travel time.

"So whether we like it or not, most urban growth in the next thirty years will have to be up, not out. Otherwise, our twice-as-big-cities will strangle in their own sprawl.

"The question is no longer whether we would like to grow upwards, but how to grow upwards in a way that we would all like. The questions is no longer whether we should plan in three dimensions instead of two, but how to use three dimensions to create cities that will be far pleasanter and more rewarding for people and far more economical and profitable for business."

"Architects, planners, builders and civic officials were all too slow to grasp the full significance of two great changes:

"1. Today's escalators and high-speed automatic elevators to make vertical transportation much quicker, cheaper and more convenient than horizontal, and...

"2. Whereas most products can be used only once at a time, the new economy of vertical transportation makes it possible to use city-center land simultaneously twenty, thirty, and sometimes even forty times over, with each repeated use sometimes more desirable and profitable than the use below.

"Land used once for a railroad yard can be (and is already being) used again for a sports arena or an office building or an apartment or all three. Land used once for a department store on the lower floors can be (and is already being) used for a block-size city park. A school building site can be used again for a football field on the roof.

"Now, at last, architects, planners and developers are beginning to correct today's multibillion-dollar waste of prime locations by learning the economics and applying the economies of horizontally stratified land use. They would have stopped the waste sooner had it not been subsidized by today's ubiquitous practice of underassessing and undertaxing underused land. Chicago's Loopside railroad yards and Los Angeles' one-level parking lots would have been built over for multiple use long ago had they been taxed at more nearly their potential multilevel land-use value, instead of a

fraction of their actual single-level value."

Planning in three dimensions involves such a challenge a challenge to re-think all our urban ideas and preconceptions in order to make almost everything about tomorrow's cities different and better that we had better make sure we know the right answers to some more questions it raises:

Question No. 8 - Where our rethinking in three dimensions begin?

Answer - By recognizing that in prime locations some activities need easy access to the street and others don't, so it is perfectly natural to stock things up.

For stores, factories, service industries, restaurants, banks, warehouses, churches, theatres and garages, etc., easy access to street and sidewalk are essential. These uses seldom require outside air or outside daylight on all sides, so they can be packed solid three, four, five or even six stories high from street to street.

For city apartments and downtown offices the higher above the street the better. In office buildings the 40th floor commands higher rents than the 30th, much higher than the 10th, and the same holds true of apartments whose economics usually limit their profitable height to 20 stories or so). These uses call for windows and a view, so they should seldom cover more than a third of the ground area.

Question No. 9 - Would cities planned in three dimensions have to be "concrete deserts"?

Answer - Just the opposite. The level rooftops above the stores, etc., and between the taller apartments and office buildings would offer architects and planners a never-before-possible chance to bring greenery and outdoor recreation right back to the city center.

Planners call cities planned in horizontal layers "sandwich cities", but architects are beginning to call them "platform cities" to dramatize this rooftop potential. They visualize space enough for a football field on top of a downtown school, ample space for lawns and tennis courts and swimming pools between apartment towers. Except for the street paving such platform development could have kept Manhattan Island green from river to river.

Question No. 10 - How much time could be saved by growing up?

Answer - Consider the 46-story Time and Life Building for example. Its elevators take you free for nothing from the ground floor to the top in 32 seconds. If the same 46 floors were laid out in two dimensions instead of three they would stretch up the Avenue of the Americas all the way from below 14th Street to Central Park South and it would take a fifteen-minute taxi ride to get to what is now the 46th floor.

Question No. 11 - Would more compact urban development in three dimensions make urban overcrowding worse?

Answer - High density does not require crowding and low density does not necessarily prevent it.

Sure it's true that many slums are overcrowded, but most of them are overcrowded at low densities, and they are overcrowded in low buildings. Population density in Harlem is less than on Park Avenue; population density in Bedford-Stuyvesant is lower still. Population density in Watts is not more than 20 per acre.

At the densities that command the highest rents from those best able to afford to live as they like (i.e., on New York's Park Avenue, Chicago's Gold Coast or San Francisco's Nob Hill), there are only three U.S. cities whose entire population could not live, work, shop, skate, swim, play tennis, worship, attend concerts and go to the movies on the 28,000 acres within three miles of the center, leaving all the land outside that three mile circle for heavy manufacturing, golf courses, market gardening, low-density living, and acre zoning.

Question No. 12 - Does planning in three dimensions mean planning "skyscraper cities"?

Answer: Certainly not. In all the 3,022,260 square miles of our 48 contiguous states I doubt if there are much more than two square miles where land is so high priced and demand to concentrated that forty-story construction can justify its added cost and I don't believe there are fifty square miles where building even twenty stories is economic.

In all the world today there are hardly a hundred buildings that exceed 45 stories. Combined ground coverage of all 100 of these taller towers is well under half a square mile!

Question No. 13 - Would such compact cities be fun to live in?

Answer - Not necessarily. Without better planning for fun they could be just as dull as today's public housing and just as dull as what the late famed architect William Wilson Wurster used to call "that expensive slum on Park Avenue".

But for most people living close could be made a lot more fun than city living today or suburban living today. With so many families to share the cost, every cultural activity and every indoor and outdoor recreation except hunting, fishing, skiing, and perhaps par-4 golf could be brought almost within everyone's walking distance at far less cost than today in both money and time.

Fun is not a function of acreage. New Yorkers get far less use and fun out of Central Park's 846 acres than the Danes get out of 22 acres of Copenhagen's Tivoli Gardens, among whose trees and flowers are six big restaurants, an open-air theatre, a dance hall, two bandstands providing almost continuous afternoon and evening music, a lake, and an amusement park complete with a miniature railroad. There is plenty of room in Central Park for 200 tennis courts instead of today's 30, half a dozen skating rinks instead of today's two , a dozen par-3 golf courses instead of today's none, and all the merry-go-rounds anyone could want instead of today's one.

Said AIA's past president Morris Ketchum: "Central Park is a beautiful dead spot in the daytime and a dangerous place at night."

It is high time to start giving much more thought and spending much more money to make our cities good places for outdoor as well as indoor living, instead of devoting so much thought and money to getting out of them. We need to develop a whole new urban package that will give people with children what they need inside the city, instead of making parents who can afford to go move out.

Question No. 14 - If planning in three dimensions is such a good idea, why were none of today's cities planned that way?

Answer - Because until recent years we lacked the tools to build that way, including:

1. We did not have air conditioning.
2. We did not have artificial daylight from high level electric lamps. These two new tools combine to make planning for stores, factories, and many other uses independent of outside air and ventilation.
3. We did not have today's new water pollution controls that could make the waters inside our cities safe for less money than city dwellers now spend driving far out to lakes and beaches. New York has 370 miles of waterfront - far more than any other city in the world, but all this

wonderful natural resource is still wasted by using its rivers as open sewers for untreated sewage.

4. We did not have today's long-line high tension electrical distribution that could make all but a few in-city factories completely smokeless and chimneyless because their power comes from miles away.

5. We did not have central steam plants that make household furnaces uneconomic in densely populated areas and thereby obviate and obsolete the smoking chimneys for which we did not have today's high speed electronic elevators and escalators. Too few people seem to realize that elevators are already the No. 1 mass transportation vehicle; research for the Building Owners and Managers Association found that they carry more millions of passengers the horizontal equivalent of four or five times as many millions of miles each day as all other forms of mass transportation combined. They are the cheapest, fastest, safest, and cleanest of all means of transportation; they offer the only mass transportation that can be (and already very largely is) fully automated, the only urban mass transportation that pays billions in taxes instead of needing a subsidy, and they may well change the face of our cities as much between now and

1999 as the automobile has changed them since 1899.

The Lord only knows what more tools for building better cities more compactly tomorrow will bring, but it is high time to begin making better use of the tools we already have to make our cities better.

Question No. 15 - If tomorrow's city must be stratified and planned in three dimensions, why can't we see the evidence today?

Answer - Only because we close our eyes to what is already happening in almost every important city today - mostly in bits and pieces but now on a bigger and bigger scale, not just in big cities like New York and Chicago, but also in smaller cities like Yonkers, Hartford and Hoboken.

Cincinnati started it by putting a new hotel in a terrace garden atop a new department store. Rochester went Cincinnati two better by putting a hotel on top of an office building on top of a department store on top of three levels of underground parking. Hartford put a three-city-block park on a solid base of stores, banks, restaurants and garage space and that started people asking why parks should ever need to be down at the traffic level; now San Francisco is going Hartford many times better by projecting 45 acres of park-like greenery open to the public on the store-and-garage rooftops between the new tall buildings between Nob Hill and the Embarcadero. Pittsburgh made a big rooftop park over the big garages between the towers of Gateway Center; now New York is planning a big river-front park over its new sewage

plant and the Urban Development Corporation offered to finance a big one-story factory in Yonkers with a city park on the roof and tall apartment towers over both ends. Chicago, San Francisco, Pittsburgh, Denver and New York (to mention just a few) are all putting apartment towers on top of office towers. San Francisco has demonstrated that a third-floor terrace up over stores and a parking garage makes a much better base for row houses than down at the traffic level. Chicago is starting the first "vertical shopping center" budgeted to concentrate on three acres more retail sales than all the stores in downtown Kansas City, all sandwiched between a three-level underground parking garage and a 20-story Ritz Hotel surmounted by 40 stories of luxury apartments.

New York put Madison Square Garden and an office building over a railroad terminal and now New York is building five schools that will use the lower floors under five tall new apartment houses. Washington is wrapping business offices around seven or eight parking levels in hard-to-rent interior space. Booming Atlanta is boldly pushing plans for spending a billion dollars to make its downtown "America's first multi-level platform city".

Paris is raising the towers of its "instant Manhattan" Quartier de la Defense (15,000,000 sq. ft. of office space, 6,500 apartments, four hotels, schools, day-care centers, etc.) on a 440-acre landscaped pedestrian platform over a big shopping center, a railroad station, a three-expressway interchange,

parking for 32,000 cars, and an express subway stop ten minutes from the Place de l'Opera.

Milwaukee is projecting a new 19-acre enclosed urban shopping core above which the terrace level will provide 14 acres of greenery and outdoor recreation space around five apartment towers and a new hotel.

And booming Houston is starting to invest hundreds of millions of private capital in a 33-block 74-acre downtown complex planned in three dimensions "as a prototype of what the city of tomorrow should be, not a projection into the future of what the city is today" - a complex in which the whole ground level will be raised two or three floors above the auto traffic, resting on two or three levels of parking and service areas and surmounted by office towers, apartments, hotels, and stores, accessible from pedestrian malls running through many acres of greenery and recreation facilities.

And now one final question:

Question No. 16 - What will all this sense-making cost?

Answer - It will cost a lot less than it will cost to let our cities go on underusing and wasting millions of close-in acres and sprawling further and further out into land that should be left open country for years to come.

But it will cost a lot more money - many many billions more - than all the urban subsidies government can possibly be expected to provide.

So we'll never get sense-making cities unless and until government lets us harness the profit motive to providing what we want for our cities and their people and their businesses instead of harnessing the profit motive (as now) to so many things we don't want. We won't get really good land use as long as so many cities penalize and too often prevent private investment in needed improvements by taxing improvements more heavily than the combined local, state, and Federal tax on any other major product of American industry except hard liquor, cigarettes, and perhaps gasolene. We won't stop urban decay as long as the state and Federal governments go on subsidizing obsolescence and decay by letting the owners of aging buildings depreciate them over and over again as often as the relic is sold, with the fastest redepreciation reserved for the very worst structures.

And there isn't a chance in the world we can get good land use in and around our cities as long as local governments continue to assess and tax misused and underused land so lightly that its owners can hold a million dollars worth off the market at a net tax cost seldom if ever exceeding $10,000 a year while they wait for inflation and an enormous community investment of the peoples' money and other taxpayers' money to multiply its selling price, giving them an equally enormous unearned increment as their reward for not letting their land be put to good use when needed for orderly urban growth or redevelopment.