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The Future Trend of Urban Land Values

By Homer Hoyt

Have urban sites been over-valuated in the past? What are the present trends? May current ideas of present land values be accepted by appraisers? Homer Hoyt, who is regarded as one of our foremost economists gives six basic reasons why land values are changing.

DURING THE 139 years from 1790 to 1929, when the population of American urban places of 2500 and over increased from about 200,000 to 69,000,000, the sales value of the ground in these towns and cities rose from less than one hundred million dollars to approximately 75 billion dollars. In this century and a third, urban site prices in most cities bounded up after every depression to new peaks higher than the top altitudes reached before, and it became an axiom of many appraisers, tax assessors, and mortgage investors that rising land values would largely offset the depreciation and obsolescence of the buildings. In fact, higher and more intensive uses of land were expected in many cases to raise ground values far above the combined value of the land and the existing building, as the six-story office buildings of the Seventies were succeeded by many 12 and 16-story structures of the Nineties, and the 40 to 100-story skyscrapers built after the turn of the century, in the Twenties. In those days it seemed that it would be possible to build up all central areas with towering structures and the land was appraised and sold on this basis. Yet, it turned out that all the office buildings in New York City, of a height of 30 stories or more, erected to date could be put on 30 acres of land, or one per cent of the land in Manhattan south of

59th Street, and it would have been impossible to find tenants at profitable rents for all the office space that would have had to be erected to sustain these values.

During most of this period of rapid growth, American cities were concentrated by the nature of the transportation facilities in congested areas. Factories were located near central freight and water terminals and most factory and office workers alike lived near the downtown offices, shops, and industries. Even when steam railroads, electric street cars, elevated lines and subways extended their tentacles into the surrounding countryside, settlement was confined to bands of a half mile from these fixed transportation routes. All these forces thus tended to force up land values on these preferred sites and to foster the unwarranted expectation that much greater areas of unutilized vacant land could be developed to the same degree of intensity.

The debacle of 1929 was no ordinary cyclical depression that was to be followed by a rise in urban site values higher than ever. Certain forces long in the making revealed themselves clearly and punctured the speculative land bubble that had almost become an American tradition. These forces were the new transportation media—automobiles, auto trucks, and airplanes— which made available for urban use far

more land than even rapidly growing cities could utilize at the very time when the upthrust in urban population was coming to an end. The monopoly feature of central urban land has been destroyed by the gasoline motor even as most of our cities are reaching maturity and approaching the period of a stationary population. The ghosts of the old land values linger on, however, and confound us in the attempts to rebuild our cities.

Our Present Problem

The time has now come to re-examine the traditional elements in our thinking on urban land values in the light of the changed conditions we are facing today.

There are six basic forces which were not operating so powerfully in our earlier period of city growth that are now tending to depress urban site values.

1. *Increase of Supply of Urban Land* — The land area within the corporate limits of American cities with a population of 30,000 or over amounts to only one-fifth of one per cent of the land area of the United States. Urban settlement was formerly concentrated in this tiny fraction of the nation's land surface because of the necessity of living within a few miles of central factories and office buildings in the days of slow transportation. The automobile, however, has made available for urban settlement the land within a radius of fifty miles from central cities. Since the area of land in the successive concentric circles around our cities increases with the square of the radius, the automobile alone has increased the supply of urban sites to an amount far in excess of the future needs of even rapidly growing cities. Since the automobile can travel into hills — and to any areas where there are surfaced roads — the area thus opened up for possible residential use is not confined to small tracts

near suburban railroad stations or narrow bands along street car routes but is co-extensive with the full area of the circle, except for land unsuited for use by reason of steep slopes or swamps. Since all of this expanded land area cannot possibly be used for urban growth, no particular tract of it has a monopoly value. It is the builder, who, by selecting a tract and building an entire community on a site, now largely creates the urban site value. These developers who operate on a large scale and who can thereby gain economies in mass production and sale of houses can, by the very magnitude of their operations, create a community on any one of a wide number of possible sites. The individual land owner as an owner of land cannot capture this value, because he does not usually possess the technique of building at low cost and hence cannot secure the urban site value by constructing a few houses and selling them with the sites on which they stand. His extra building costs, above those of the large developer, would absorb most of the residual amount that would otherwise be attributed to the land alone.

2. *Slackening in the Rate of Urban Population Growth* — There has been a high correlation in the past between the rise in urban site values and the anticipated rate of urban population growth. It is not the absolute population but the increase in population that creates a demand for the utilization of unimproved land for urban purposes. An absolutely static population might conceivably occupy the same abodes for centuries, as was the case in the early Middle Ages, without raising any expectations whatever that farm land adjacent to settled urban areas would be needed for home sites. The rate of growth of the urban population of the world from 1800 to 1930 was the greatest the world has ever known, with 38 cities reaching a population of one

million for the first time. In the United States the decennial rate of increase for places of 8,000 and over, exceeded 30 per cent for every decade from 1790 to 1930 and averaged 51.2 per cent for each decade, as the following table shows:

**Increase in Urban Population in
Places of 8,000 or Over
in the United States
(1790-1940)**

Census Year	Urban Population	Percentage of Increase Per Decade
1790	131,472	—
1800	210,873	60.9
1810	356,920	67.5
1820	475,135	33.5
1830	864,509	81.4
1840	1,453,994	68.3
1850	2,897,586	99.0
1860	5,072,256	75.2
1870	8,071,875	59.1
1880	11,365,698	40.7
1890	18,244,239	60.5
1900	25,018,335	37.3
1910	35,570,334	41.9
1920	46,307,640	30.2
1930	60,333,452	30.1
1940	64,896,083	7.6

Average increase per decade—1790 to 1930
— 51.2 per cent.

This remarkable rate of city growth for 140 years led to expectations of a continuation of this same rate of gain for decades, if not centuries to come, and the land values of the Twenties were based on this assumption. In the decade from 1930 to 1940, however, the population of urban places of 8,000 and over increased only 7.6 per cent or about one-seventh of the decennial rate of growth for the preceding 140 years.

These past rapid rates of growth of the United States were made possible by the admission since 1820 of 38,393,925 immi-

grants, mostly in the prime of life, and by very high native birth rates. The urban rate of growth at a rate even more rapid than that of the United States was the result of rapid industrialization made possible by the application of steam, electric, and automotive power to industries for the first time in the world's history. At first, the cheapening of the prices of manufactured goods increased the volume of output so rapidly that constantly more persons were required for factory employment.

The number of manufacturing wage earners in the United States, which meant mostly city employment, increased from less than two million in 1869 to 9,099,372 in 1919, which was the peak prior to World War II. In the period from 1899 to 1937, the physical output of manufactured goods quadrupled, but the number of industrial wage earners only doubled, as a result of the increased technical efficiency of industrial processes. The point was reached after 1919 where the output of goods could not be increased fast enough under peacetime conditions, even with rapidly expanding new industries like automobile manufacturing, to employ more labor in all industries. The total number of wage earners in American manufacturing declined from 9,099,372 in 1919 to 8,838,743 in the boom year of 1929, and to 7,886,567 in 1939. Manufacturing, which is the chief source of employment in our great cities, is thus failing in its power to create added jobs and as the technical efficiency of industry has been speeded up by the war, it will be increasingly difficult for factories to provide much more than the pre-war number of jobs in the future. Hence, it is difficult to predict a future rate of growth of our cities at a more rapid rate than for the nation as a whole. A projection of our present birth and death rates, without any appreciable immigration from abroad, would

indicate that we are approaching a population ceiling of about 155,000,000 which will be reached by 1965 or 1970. Our urban population in places of 2,500 people or over, can scarcely exceed a total of 85,000,000 or approximately 10,000,000 more than at present, by the end of the next 25 years. The average rate of urban growth for all American cities will thus be less than five per cent for each decade in the future, compared with 51 per cent in the period from 1790 to 1930. There will be many cities in which population is declining, and such growth as does take place will probably be chiefly on the periphery of cities where the availability of large tracts of land will prevent concentration of demand on a few spots. Thus, the forces which were chiefly responsible for the rapid rise in urban land values in American cities from 1790 to 1929 — a rapid population growth that was concentrated on a very limited land area — will probably be conspicuous by their absence in the future.

3. *Higher Building Costs* — The value of real estate properties is determined by the net yield that can be derived from the joint land-and-building product. Land is the residual element, and its value is the capitalized sum of the net incomes remaining after operating expenses, interest, taxes, and depreciation on the value of the building are deducted. Hence, the greater the construction costs, the less will be available for the land. The amount a merchant can afford to pay in rent is determined by the volume of sales; the amount a householder can pay in rent is determined by his income. This fixes the total that can be paid in rent for the joint land and building. If the building absorbs more of this joint return, the land is worth correspondingly less. Average construction costs today are 100 per cent higher than in 1915 as a result of an increase of 100 per cent in whole-

sale building material prices and of 200 per cent in average wages in the last 30 years and the failure to offset all of these added labor and material costs by improvement in the technical efficiency of the building industry. Since any given site does not possess the same degree of monopoly advantage as formerly because of improved transportation, a builder or developer does not have to pay relatively as much for the land, while the powerful building trade unions require him to pay more for labor.

4. *Lessened Concentration of Demand for Urban Land* — There are certain types of land uses, such as the stock and commodity exchanges, in which the market forces tend to concentrate the activities in a limited compass. Brokers must meet where communication lines come to a focus to establish a national market. Even in these areas, where centralizing forces still tend to operate, there has been a decline in the volume of business and a resulting fall in ground values. In a recent study of land values in the financial center of New York City, Robert H. Armstrong states, "Wall Street, in the billion share year of 1929, had visions of two billion share years in the next decade and land values in the area were based on these hopes. With the volume of stock transactions sinking to 126,000,000 shares a year in 1940 and recovering to only 279,000,000 shares in 1943, it now seems highly improbable that the billion share level of 1929 will ever be reached again. The lessening in the total volume of financial transactions and stock market trading has drastically lowered the value of land in Wall Street." Similarly, the high cost of construction compared with relatively low office rents makes it unlikely that many new tall office buildings will be erected in the next decade. With present buildings in Manhattan over 30 stories high

occupying only one per cent of the land area south of 59th Street, there can be no justification for valuing land in central areas on the basis of anticipated use by new high buildings at profitable rents.

The building of branch department stores in the suburbs likewise makes it improbable that central department stores will expand materially in the future. At the same time far more land has been zoned and sold for commercial use on outlying street car thoroughfares than can ever be actually developed for that purpose.

Central factories and loft buildings are losing ground to locations in industrial districts on outlying belt lines where ample land area permits one-story factories with a continuous flow of the manufacturing process on each floor level without interruptions or problems of elevation.

The automobile has likewise made so much outlying land available that concentration of living quarters in large central apartment buildings is necessary only in the largest cities and even in these metropolitan centers there is sufficient ground for tall buildings to permit ample light and air.

Thus, in every type of land use, commercial, industrial, and residential, there is a lessening of the pressure of demand for central sites, which would cause a piling up of stories and land values at a few pivotal locations. When central cities cease to grow, the existing land uses are frozen. Hence, no element of value due to higher and better uses can be added to the net returns earned on the land by existing uses. One site may be profitably developed with an office building, apartment, or store, and still an adjoining vacant site may have no possibility of such use, when the demand for offices, stores, or apartments is saturated.

5. The Increase in Real Estate and Income Taxes — Early land speculators—like the Astors, Hetty Green, Marshall Field,

and Russell Sage—reaped fortunes in an era when land prices near rapidly growing cities were at a low level and real estate taxes were low. The increase in municipal expenses outstripped by far even the former rapid rates of increase in population and land values. In Chicago from 1830 to 1930, the city taxes increased 50 times as fast as the population of that most rapidly growing great metropolis in the world. In New York City, the total city expenses, which are met chiefly by levies on real estate, have increased six fold since 1910. It was formerly possible to earn a substantial return on some well selected urban sites by the appreciation in the ground value. The so-called “unearned income” or exceptional profit gained by the mere holding of unimproved land can now be reaped only in rare cases, as the ordinary taxes on most vacant city parcels are now so high that even if vacant urban sites are received as gifts, they can seldom appreciate rapidly enough to offset the outlays for taxes alone. The much higher rate of taxes within the corporate limits of cities compared with the suburbs, moreover, discourages the utilization of vacant city land and accelerates the movement of population to the suburban fringe.

Under present income tax rates, a married man with two dependents cannot have an income of over \$25,751 a year after taxes, regardless of his total annual income. It is probable that high federal income tax rates will be maintained after the war to meet interest charges on the huge public debt. Hence, few will be able to maintain elaborate estates or mansions as in the past, and there will be scant demand for land for such purposes.

6. Increasing Rate of Obsolescence of Neighborhoods — The rapidly increasing rate of obsolescence of most existing residential neighborhoods in American cities.

due to the migration of higher income groups to the suburbs, and their replacement by lower income groups, is likewise lowering site values in most city residential areas. If a new building is erected in an old neighborhood, it immediately loses much of its value because of the adverse environment. The land then can have no value if it cannot be put to any profitable use. These forces of neighborhood deterioration are steadily lowering the land values under most of the present home areas in American cities. It is well recognized that residential land values are at their peak when a neighborhood is new and that they gradually decline as the neighborhood reaches maturity and approaches old age.

Summary

Aggregate urban site values in American cities, which reached the approximate figure of 75 billion dollars in 1929 as a result of the anticipation of the continuation of the extraordinary rate of urban growth of the preceding century, have today a real value based on earning power of less than half this amount. There is little prospect that urban land values will ever again attain the 1929 peak level in terms of dollars of 1929 or 1943 purchasing power. In

fact, the present land values that are solemnly entered on assessment rolls are in many cases fictitious values that could not be realized at a sale. When present structures wear out in most residential areas of our cities, there will be little if any use to which the land can be put in small parcels. The only hope of realizing any substantial value for many central areas is for large private or municipal corporations to acquire square miles of this land, wreck existing obsolete structures, recast the antiquated street pattern into a modern livable pattern and erect thereon residential or industrial structures of moderate density.

It follows that urban land can no longer be regarded as the largest single element in our national wealth, as it was in 1929, and it cannot be relied upon as a major source of revenue for operating our city governments.

To avoid pitfalls that might lead to overvaluation of urban sites, it is not enough merely to discount the possibility of future increases in urban land prices. Appraisers must also be on their guard against accepting current notions of present land values, which may be based on false assumptions in regard to one or more of the six forces we have just discussed.

My Summer In a Garden

THE THING generally raised on city land is taxes.

— Charles Dudley Warner