



Of the total 2.3 billion acres of land in the United States, some 60 million acres are occupied by our cities and towns.



In the City of Philadelphia there are a reported 40,000 parcels identified by the city as vacant. These lots represent a valuable but wasted resource for homes, businesses, recreation and public services. Nearly every city and town suffers from similar underutilization of its landed area.



Every community also has diverse types of residential development, influenced by multiple factors associated with location, population size and diversity of economic activity.



Across much of the United States, most newer single-family detached housing units have gotten larger and larger even as the average household size has steadily declined from 3.7 people to 2.6 people. Developers offer more standard features in homes, more frequently on small parcels of land when located in densely populated areas.



If a homebuyer wants more acreage, generally speaking, the option is to go further and further from the older suburbs of most cities. As land values climbed during the 1990s, developers adopted other strategies to reduce the land cost component of each housing unit constructed.



One solution is to gain approval for higher density development. No longer viable single-family dwellings are purchased and demolished to make better economic use of the location. Another response is:



To build upward. Multi-story condominiums and cooperatives have become the norm in many city centers. And, in many suburban neighborhoods where land values have skyrocketed ...



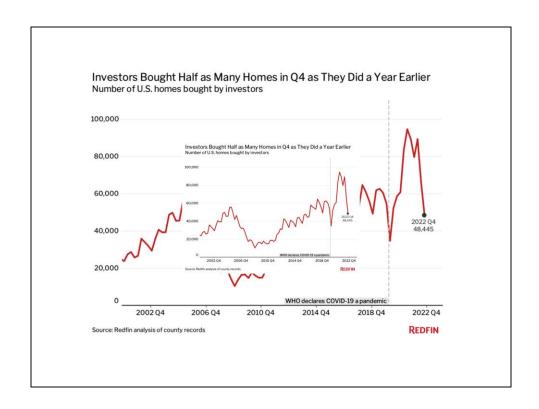
And, then, there is the special case of a handful of cities, where the most expensive parts of the cities attract wealthy purchasers of second homes. As one market analyst has observed about Manhattan property:

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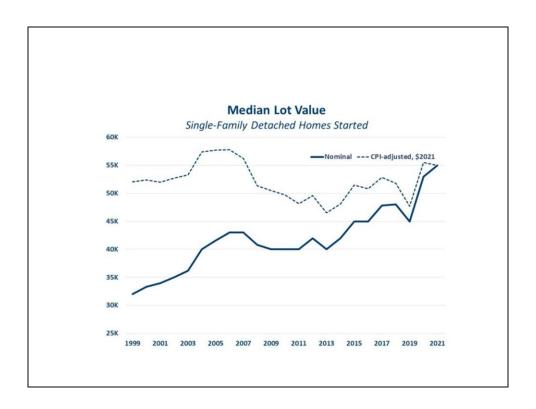
The national median existing single-family home price reached \$393,000 by the end of 2022, and at the end of September 2023 reached \$431,000. Despite higher mortgage interest rates, property prices have not fallen back for a couple of reasons.



One reason is that people who obtained mortgage loans at record low rates of interest are not about to sell in the current rate environment unless they have sufficient equity to purchase another property without the need for mortgage loan financing. Also, demand continues to outpace the construction of new residential properties. As this chart shows, investors have since the end of the last property market cycle in 2010 each year acquired hundreds of thousands of residential properties. Analysts forecast that by 2030 they will hold around 7.6 million properties, or more than 40 percent of all single-family properties available to be rented.



Back in 2017, a study by economists at the University of Illinois examined land transactions in the United States during the years 2005 through 2010. They looked at sales across over 300 metropolitan regions to come up with a total value of urban land in the country. The figure they arrived at was \$25 trillion.



This chart comes from the National Association of Home Builders and tells us that the median price paid by builders for a building lot was \$55,000 in September of 2022. Prices for a building lot in New England began at around \$200,000. An additional \$35,000 to \$65,000 is added to meet the costs of preparing the building lot for construction.

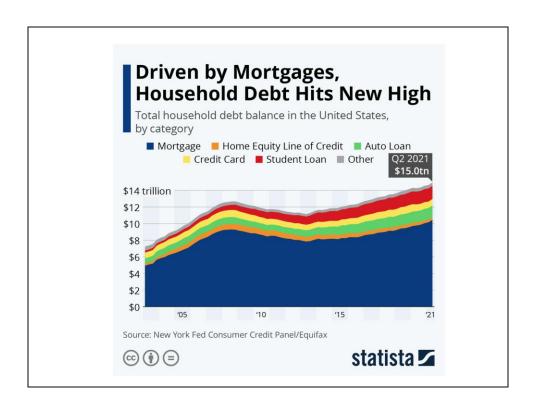


As a rough comparison, we can calculate the land value under all of the nation's residentially-improved land, that is, land parcels that are developed with some type of residential structure. Statistics are not available on the number of vacant residential lots across the United States, although there is some vacant but developable land everywhere.

<b>\$</b>	431,000 (median price of a residential property
<b>4</b>	0% as a conservative land-to-total-value ratio
□ \$	172,400 is the median land value per residential
prop	erty
<b>□</b> \$	172,400 multiplied by the total households in the
	ed States (124 million) = \$17.8 trillion

## \$21.4 TRILLION

If we use 40% as the land-to-total value ratio for our median price of \$431,000, we get a median land value of \$172,400. Multiply this figure by the number of households in the United States and we get a rough idea of the total residentially-developed land value.



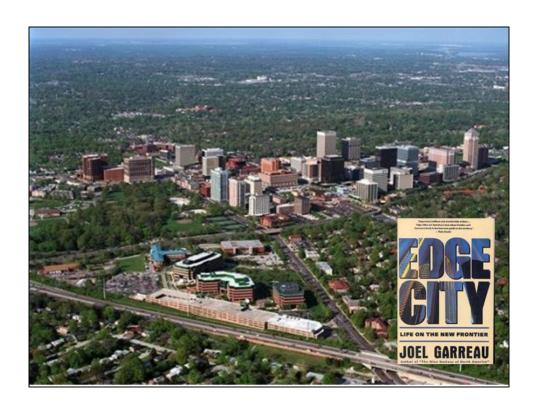
As property prices resumed their climb after 2010, so did the aggregate mortgage loan debt of U.S. households. At the end of June 2022, the total reached \$11.4 trillion. The average loan balance was around \$220,400. However, the combination of amortization of loan principal and rising land values raised average home equity to \$185,000.



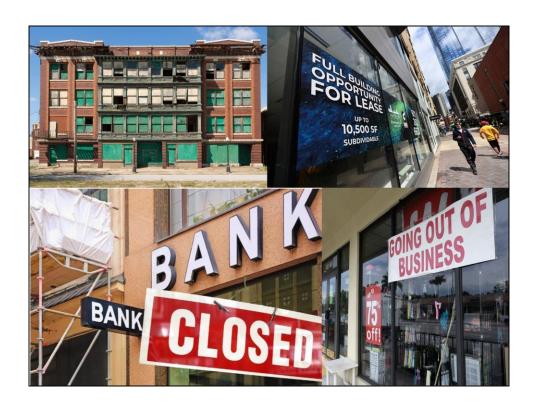
As large as the aggregate value of residential property might seem, this value is but a small portion of the commercial land value in the financial districts of our cities.



The higher land values become, the higher we build to lessen the cost per square foot of the buildings we need for commerce and residences.



Others are forced to the periphery or decide to leave the region altogether in an effort to lower costs of living, costs of doing business and to protect profit margins. One result, as described by author Joel Garreau, is the creation of the "edge city."



When asking prices for land become too high or too long, threatening to absorb too much of the income of businesses and individuals, an economic crash – recession or depression -- is the result.

Peaks in Land Value Cycle	Interval (years)	Peaks in Construction Cycle	Interval (years)	Peaks in Business Cycle	Interval (years)
1818	-		-	1819	-
1836	18	1836	-	1837	18
1854	18	1856	20	1857	20
1872	18	1871	15	1873	16
1890	18	1892	21	1893	20
1907	17	1909	17	1918	25
1925	18	1925	16	1929	11
1973	48	1972	47	1973	44
1979	6	1978	6	1980	7
1989	10	1986	8	1990	10
2006	17	2006	20	December 2007	18

Source: Fred E. Foldwary. The Depression of 2008. Berkeley: The Gutenberg Press, 2007.

Research by economics professor Fred Foldvary supported the direct correlation between property market cycles and the recurring experience of economic booms-and-busts.



Professor Steve Hanke, at Johns Hopkins University commented on Fred Foldvary's research as follows:

"These data talk, and the most interesting thing they say is that every 18 years we can expect the culmination of a credit-fueled real estate and ensuing business cycle. This, of course, doesn't imply that all recessions are preceded by a real estate cycle. It only says that all real estate cycles have spawned economic downturns. ..."



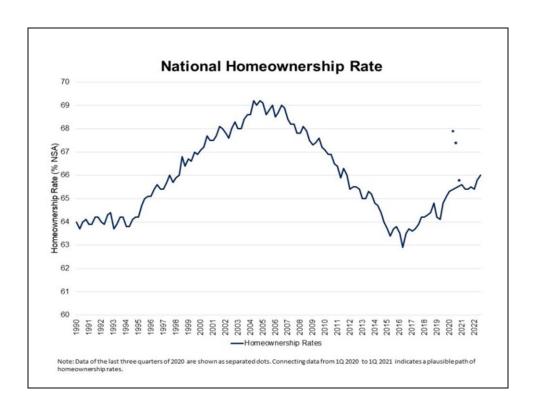
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Steve Hanke. "The Great 18-Year Real Estate Cycle," Globe Asia. February, 2010

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After falling from a high of 69 percent in 2007, the rate of homeownership in the U.S. has climbed back up to 66 percent. Millions of households lost their residential property to foreclosure or were forced by prolonged unemployment to sell and become renters. Hundreds of thousands of others have experienced either periodic or long-term homelessness.

