

# U.S. housing-stock collapse undermines family formation

by Sylvia Brewda

It is generally believed that the American people are the best-housed in the world, and many writers attack the "American Dream" of a single-family, detached house as overconsumption. In this study, *EIR* has documented that the quality of housing supplied to Americans has fallen, that the size of housing units is inadequate, and that the number of houses available, while it has increased relative to the number of actual families, is well below that required for the families which should have been formed, and in fact has been a significant factor in the deficit in family formation, described above. Furthermore, the materials required for building this housing are increasingly derived from imports, making up yet another part of the import subsidy to which the United States is now addicted.

formation in the United States. Were the population to have continued the family formation rates and associated birth rates of 1950, we would have a ratio of families to houses of 0.79 to 1 and an average number of persons per housing unit of 3.7, higher than in 1950.

## Population control

Let us make clear from the outset that the questions of housing and of population control are closely and consciously linked. In a 1981 paper, *Worldwatch* "senior researcher" Bruce Stokes wrote, "To influence future housing demand, family planning programs must be strengthened immediately. . . . Governments in industrial countries can try to dampen demand through policies aimed at changing patterns of household formation." Inversely, the pattern of housing availability and cost will determine much of the potential for stable family formation and the development of new citizens.

In this light, we should first establish that the requirement for single-family houses for family formation is no luxury. The average apartment size in the United States in 1981 was about 900 square feet, and the size of new apartments added has fallen from 1,000 square feet to 915 square feet between 1970 and 1984. Each apartment housed an average of 1.9 persons in 1981, reflecting the reality of apartment design for singles or for the "yuppie" life-style.

Let us then look at the stock of single-family houses as it meets the requirements for families. Although size is not everything in bringing up a family, houses under 1,600 square feet in area are clearly cramped for the healthy raising of a child, and certainly too small to be adequate for a family with more than one child. Some would disagree, as does the *Worldwatch* study: "Given the smaller houses coming onto the market, . . . unless the average number of people per household continues to shrink appreciably, there may be little further increase in per capita living space. This is not necessarily bad, of course, for Americans already have nearly

Table 1.  
**Condition of U.S. housing stock**  
(millions)

	1950	1960	1970	1975	1980	1981	1983
Total	42.6	53.0	63.4	72.5	80.0	83.2	84.6
Single-family	28.2	40.3	46.9	52.6	56.4	58.2	61.5
Persons per unit	3.6	3.4	3.2	2.9	2.85	2.76	2.77

**Table 1** shows the changes in the housing stock of the United States, and the per-person availability of year-round housing units. Clearly, the number of habitations has increased more rapidly than the population. In examining the proportion of single-family detached houses to the number of families, 1950 and 1981, and remained at 0.99:1 in 1983. However, the decreasing number of people per unit and per house in large part reflects the decline in the rates of growth and family

Table 2.

**Characteristics of new single-family homes**

	1960	1970	1975	1979	1980	1981	1982	1983
New starts (thousands)	995	813	892	1,194	854	705	663	1,067
Floor space (sq ft)	1,500	1,645	1,760	1,740	1,720	1,710	1,725	
% with 1 or 2 bedrooms		13	14	17	21	21	24	24
% with less than 2 bathrooms		52	41	27	27	28	30	33
% with basement (full or part)		37	45	42	36	33	31	32

twice as much living space per person as the American Public Health Association recommends as a minimum." However, in 1981, only 29 million units of any type, including 26 million single-family residences, were available with 1,600 or more square feet of floor space.

**Table 2** shows changes in the characteristics of new single-family homes built from 1970 to 1983. There were a total of 61.5 million single-family units available in 1983, and additions were being made at a rate just over 1 million per year as of 1983-1984. The average single-family dwelling has approximately 1,540 square feet of livable floor space and less than 6 rooms. While the number of bathrooms per house has risen between 1975 and 1983, the number of bedrooms has declined, again indicating the life-style for which these houses are designed. Of the 1 million new houses added in 1983, almost a quarter had less than 3 bedrooms, leaving approximately 800,000 with a sufficient number of rooms for a two-child family.

The trend of rising square footage per house which was generally seen from 1950 to 1979 was reversed during the early 1980s, although the preliminary estimate of area for single-family houses in 1984 was the highest recorded, 1,780 square feet. These average sizes are decreased by the decline in full basements. Only 24% of the new houses built contained full basements, a decline from the 35% of newly constructed homes in 1974 and the national average of 50% of all homes, as reported in 1970. The presence of a full basement adds to the usable area of the house, for recreation, storage, and utility uses, approximately like an additional room or 200 additional square feet of space.

There is no question in the minds of the population-control advocates at Worldwatch that the family home must be compressed out of existence:

The single-family house is a peculiar development based on cheap capital, energy and resources. . . . The house of the eighties, like the car of the seventies, will be downsized to conserve resources. . . . Most new homes will have one bathroom, smaller kitchens . . . and more compact bedrooms with built-in furniture, cabinets and closets. . . . *The traditional Jap-*

*anese house serves as a model of . . . the home of the future.*

This last statement is indicative of the population-control, feudal mentality of the home industry destruction planners. The average Japanese house compresses a family of four into less than 500 square feet, composed of a combination living room-kitchen and a sleeping room with no bed but with folding "futon" sleeping bags, now become so popular in New York yuppie studio apartments. The entire family sleeps on the floor in one room, and the futons are rolled up and put in closets in the morning so that the floor space can be used during the day.

The Japanese housing stock is the fluke product of a totally resource-scarce society making a sudden, sharp shift from rural to urban living after the war. Immediately as the Japanese population was crammed into this hideous urban housing situation, *population growth collapsed* in Japan, and today Japan is plagued with actual labor shortages.

Worse, we spoke above of a Japanese *house*, which is a comparative luxury. The average Japanese dwelling, upon which the yuppie "new housing" is actually designed, is a tiny one-room apartment, with futons, which houses an entire family of four in a single room. Families on a floor of the building share a communal kitchen and toilets. There are no bathing facilities in the building at all, but public "neighborhood baths" down the block.

In the United States itself, the quality of the houses currently being built is far lower than in earlier periods. In some cases, this decline is built into the standard of measurement. There are other characteristics which indicate the loss in quality. In the 1960s, for example, floor construction included cross-bracing, adding rigidity to wood floors. Now that this has been abandoned, an exuberant child can make the entire floor "give" noticeably. In earlier periods, ceilings were built with beams less than 18 inches apart, where now "russed" construction is used. Although the frame may be as strong, the attic space is far less useful, since one cannot walk or store heavy items there. The construction standard, "Number 2" lumber, has become less sturdy, while lower-grade lumber, taken from rapidly maturing Southern Pine,

is also being used.

Detailed statistics on the construction materials used in single-family homes have only been maintained since 1974, after the changes just described had begun to occur. Since then, however, there has been a noticeable decline in quality. **Table 3**, taken from a series of reports and unpublished statistics of the Research Foundation of the National Association of Homebuilders, shows changes in construction for the sample of houses which they cover.

Table 3.  
**Changes in construction standards 1975-83**

	1975	1980	1983
Floor space (sq ft)	1,600	1,700	1,635
Lumber for frame (board ft)	7,800	7,900	7,148
Other lumber (board ft)	2,000	1,800	1,780
Material for exterior sheathing (sq ft)	5,300	4,800	4,515
% with full basement	34	30	24
Exterior wall sheathing material (%)			
Fiberboard	59	36	25
Plywood	27	18	15
Gypsumboard	14	6	5
Aluminum foil covered	0	12	22
Foam	0	26	28

Per thousand square feet of floor area, the amount of framing lumber has declined over the last 10 years from 4,875 to 4,372 board feet. Other lumber used declined from 1,250 to 1,089 board feet per 1,000 square feet of floor space. The amount of exterior sheathing per 1,000 square feet of floor decreased from 3,312 to 2,761 square feet of material.

Look for a moment at the exterior wall sheathing materials shown in Table 3. Wall sheathing provides a combination of insulation and "racking strength," particularly in high winds. In fact, the sheathing used in a typical wood-framed house was described in 1962 as "an outer sheathing

of wooden boards, plywood or other material, which serves as a bracing to the structure and provides a solid surface to which one or more variety of outer facing materials can be attached."

In 1974, plywood, which adds the greatest strength, made up 27% of the exterior wall sheathing used, and fiberboard and gypsumboard supplied the remaining 73%. By 1983, two new types of sheathing had appeared, foam and aluminum foil-faced board. These materials, which made up 50% of the sheathing applied, provide absolutely no racking strength. They have come into heavy use both because of costs and because they do provide reasonable insulation. In the climate of high energy costs and insulation hysteria created by the succeeding oil hoaxes, the metric of insulating capability has assumed an overriding importance, and structural considerations have taken a back seat.

While most Americans assume that the building codes provide them with housing which is structurally sound and reasonably durable, lobbyists against these codes, who have already had some effect, include the same groups calling for population reduction to decrease housing demand. Bruce Stokes writes, "the final element of supply-oriented housing policies involves government restraint rather than encouragement. Inappropriate housing standards, zoning ordinances, and building codes can add to the cost of a house. . . . Local building codes . . . often set standards requiring that walls be constructed of brick, so many inches thick. . . ."

The changes in building materials may not yet have come to an end. The Worldwatch study states, "recent studies indicate that refuse paper can be converted into roofing material and that waste sulfur is ideal for building blocks."

The houses built in this way, with increasingly less material, and less structural support, are not becoming less expensive. The median price of a single-family house, shown in **Table 4**, doubled in the 14 years between 1950 and 1964, doubled once more in the 12 years between 1964 and 1976, and then again in 8 years, between 1976 and 1984. This financial policy was defined and enunciated by the Carter administration, as a crucial part of their assault on population growth. In an interview with *EIR* in late 1980, Deputy Treasury Secretary John Mingo expressed his appreciation for the financial burden of home-buying. "Variable-rate

Table 4.  
**Median price of a new single-family home**  
(dollars)

1950	1960	1970	1976	1979	1980	1981	1982	1983	1984	4/85
9,800*	20,500	23,400	44,200	62,900	64,500	68,800	69,300	75,300	97,200	105,800

Mortgage rates on new housing (%)										
	5.0	5.6	8.3	8.8	10.5	12.3	14.1	13.1	12.0	

\* 1949 data.

mortgages, renegotiable-rate mortgages, these are a godsend to us. They make housing simply too expensive, and un-plannable to boot." Mingo made no bones about his objective, "The fact is, we have too much housing in this country. . . . I think it's outrageous that the typical college graduate today expects automatically to be able to live in a three-bedroom house with one and a half bathrooms. He thinks it's the American dream—who says he's right?"

**Table 5** shows the average price of a new home for buyers using conventional mortgages (not VA or FHA), according to a sample taken by Chicago Title. Each homeowner also must pay a certain additional amount for repairs and maintenance. This has been calculated (average per property, owner-occupants) as shown in **Table 6**.

Table 5.  
**Average price of new home**  
(dollars)

	1979	1980	1981	1982	1983	1984
Average price	58,100	68,700	78,200	82,500	90,100	89,400
Average monthly mortgage payment	449	599	694	732	794	868

Table 6.  
**Average cost for repairs and maintenance**  
(dollars)

	1970	1979	1980	1981	1982	1983	1984
Yearly payment	265	638	698	661	630	681	773

These prices have meant that buying a house has become almost impossible for a family with only one member working. Consider first the requirements for buying a new home. In 1984, according to a survey by Chicago Title Insurance covering new homes at a median price of \$89,400 and using conventional financing, the average monthly mortgage payment was \$868. According to U.S. League of Savings and

Loan studies, mortgage payments average 75% of the total house expenditures, which means that this level of mortgage payments represents a yearly expenditure of \$13,888. If the percentage of income spent on housing is restricted to 25%, this means that a family income of \$55,550 is required for such a purchase, an income received by no more than 13% of American families in 1983.

Not all house purchases are of new houses. However, when the entry of first-time home-buyers into the housing market is considered, the picture is no brighter. As of 1983, when the median price was 25% lower, unmarried persons made up 35% of the first-time house buyers. Of those families with 2 adults buying their first homes, both were earning income in 65% of the cases. Thus, only 23% of those buying a house for the first time were two-adult households where both were not required to work. The median size of the first house bought was only 1,300 square feet, for which they paid a median purchase price of \$54,000. In general, most (68%) paid less than 20% for a downpayment, and with a median mortgage payment of \$457 per month, almost half had housing expenses exceeding 25% of their income. The median income of households buying their first home was just under \$30,000, a level achieved by only 33% of American families.

Although data on first-time home-buyers do not extend back past 1979, a sense of the change in affordability can be gained by comparing the income requirements for purchase of all houses. Using the 25%-of-income rule, in 1983 just under 29% of all families had sufficient income to purchase the median house sold. In 1977, this figure was 39%. As the *Worldwatch* pamphlet notes happily, "The timing and the pace of household formation are primarily determined by people's incomes."

### Import dependency

Although housing appears to be one commodity which it is almost impossible to import, the United States has come to import a significant portion of its building material. This is due to the extremely low prices of imports resulting from the overvalued dollar, rather than to a lack of capacity, at current levels of use.

Table 7.  
**Rise in quantity of imported softwood lumber**  
(billion board ft)

	1950	1960	1970	1975	1979	1980	1981	1982	1983	1984
Produced	31.5	26.7	27.5	26.7	30.4	25.3	23.0	21.0	25.5	31.3
Net imported	2.8	2.3	4.1	3.6	3.5	7.1	7.3	7.4	10.3	11.7
Consumed	34.3	29.0	31.6	30.3	33.9	32.4	30.3	28.4	35.8	42.0
Imports as % of consumption	8	8	13	12	10	22	24	26	29	27

Table 8.

**Rise in quantity of imported cement**

(million short tons)

	1950	1960	1970	1975	1979	1980	1981	1982	1983	1984
Produced	43.2	60.5	73.6	65.4	75.6	71.0	68.2	61.4	66.8	73.1
Imported	0.3	0.8	2.6	3.7	9.2	5.1	3.7	2.7	4.1	7.9
Consumed	43.5	61.3	76.2	69.1	84.8	76.1	71.9	64.1	70.9	81.0
Imports as										
% of consumption	1	1	3	5	11	7	5	4	6	10
Used in new single-family units			8.5	8.4	13.0	9.5	8.2	7.0	9.3	11.0

In terms of softwood, 70% of the U. S. consumption of softwood lumber is used in construction, and approximately 35% in residential construction. Sixty percent of softwood plywood is used in construction, and 50% of this is used for residential building. Table 7 shows the rise of softwood lumber imports.

Estimates using the NAHB figures show the amount of softwood lumber used in single-family units has remained approximately steady since 1974, involving 8.7 million board feet in 1974 and 8.2 million in 1983.

In 1983, the average single-family detached house used a total of 11.4 tons of cement, 9.3 as poured concrete, the rest as concrete blocks, masonry, and in stucco (in some areas of the country). Much U. S.-used cement is now imported (see Table 8). A full basement for the average home using poured concrete (the most concrete-intensive mode of construction) uses approximately 45 cubic yards of concrete, which requires 10 tons of cement and 60 tons of sand or gravel. By contrast, a slab foundation, which provides less space and is only 4 inches thick, uses only 3.5 tons of cement and 21.3 tons of sand or gravel.

The analysis of construction requirements gives us a sense of what the requirements would be for building the housing required for a healthy, self-reproducing population. According to the figures presented in the tables, the United States should have a total of 17.9 million single-family homes. To provide adequate housing for simply those married couples in the child-bearing years, and those single-parent households with children under 18, which exist now, a total of 42.6 million units with floor space over 2,000 feet would be needed, compared to a current stock of such units of 18.6 million. A rate of 3 to 4 million houses completed per year would be required to make up this deficit, as well as replacing older houses. Few of the private homes completed in recent years, regardless of size, will continue as usable dwellings for the full 45 years projected by the realtors, so this rate of building would have to continue for a significant period. The materials requirements for such a program are shown in Table 9.

The comparison of requirements to needs in the table indicates the current incapability of the U. S. economy to meet the most basic requirements of its population. While cement production outstrips the housing need, this does not

Table 9.

**Materials requirements for a program to provide adequate housing for present child-bearing population**

Material	Old use/ house	As of	New use/ house	Need*	1984
Cement (tons)	11.4	1983	16.8	58.8 mn	73.1 mn
Softwood lumber (board ft)	9,300	1978	11,624	40.7 bn	31.3 bn
Plywood for sheathing <sup>o</sup> (sq ft)	4,175	1978	5,218	18.3 bn	21.9 bn
Bricks <sup>§</sup>	14,175	1978	17,700	31.0 bn	6.6 bn
Copper pipe (lb)	90	1980s	106	375 mn	628 mn <sup>¶</sup>

\* These figures are somewhat low, since they reflect construction practices of the late 1970s, but they are indicative of the actual requirements of properly housing a growing population.

<sup>o</sup> All sheathing to be plywood except for exterior walls of those houses made from wood.

<sup>§</sup> One-half of new houses to be built with brick exterior.

<sup>¶</sup> 1983 figure.

take into account all of the other uses for cement, particularly in infrastructure, which would become more intense. Although the deficit for lumber is similar to the current rate of imports, the sources of such imports would, in a healthy world economy, be building housing for their own populations. In the case of bricks, the lack of infrastructure would become the major bottleneck. At present, bricks are not shipped from the brick-making areas because of prohibitively high costs of such activity, which becomes economically reasonable in the presence of a competent system of railroads, inland waterways, and interconnection points. The requirement for cement, which in itself embodies a significant load on the bulk transport capabilities of the country, also implies the necessity of moving 333 million tons of sand, gravel, and crushed rock to mix with this cement. Here again, the requirements for overcoming the deficit which we have allowed to be imposed on the U. S. consumer economy, go to the heart of the productive capacity of the economy as a whole.