

## EPC Issue Letter

### Homes with 3,000+ Square Feet Fastest Growing Segment of Residential Housing Requires 53% More Energy than the Average Home

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Policymakers from the national to the local level have begun to focus on the steadily increasing size of American homes. In some cases they have adopted fees and taxes on larger houses; one recent proposal in the U.S. Congress would cap mortgage interest deductions for the portion of a home that exceeds 3,000 square feet. Regardless of the merit of these proposals, EPC research shows that these large houses are the fastest growing segment of the housing market and is one of the primary causes of increasing energy use in the residential sector.

- 17.9% of all homes are larger than 3,000 square feet. The percentage of homes larger than 3,000 square feet built in the US has been increasingly rapidly from 17% of the total between 1980 and 1989 to 28.1% between 1990 and 2001. (Table 1)
- The nation's housing stock has grown as a result of the continued construction of larger homes. The percentage of homes with more than 3,000 square feet increased from 5.3% in 1987 to 7.4% in 1990 to 17.9% in 2001. (Table 2)
- Homes with more than 3,000 square feet represent the fastest growing segment of the nation's housing stock. Between 1990 and 2001, homes of more than 3,000 square feet increased by 159.5%, those between 2,000 and 2,999 square feet by 35.5% while smaller homes with less than 2,000 square feet decreased by 6.6%. (Table 3)
- 35.5% of households with incomes of more than 120% of median resided in homes with more than 3,000 square feet as compared to 9.8% of those with incomes of less than 80% of median. Lower income households with larger homes are primarily retirees. (Table 4)
- Homes with more than 3,000 square feet use 53% more energy than the average home (142.5 million Btu vs 92.5 million Btu) and the average energy bill is \$2,200 as compared to \$1,493. Households residing in these homes represent 17.9% of the households and consume 27.7% of residential energy. (Table 5)

The Energy Programs Consortium (EPC) is a state-sponsored energy policy research organization sponsored by the four national association representing state energy and regulatory officials.

**Table 1: Average House Size by Yr. of Construction, Households in Millions (1980-01)**

Square Feet	All Years		1990-2001		1980-1989	
	Households	Percent	Households	Percent	Households	Percent
up to 1,999	65.0	60.7%	7.7	50.3%	11.5	63.2%
2,000 - 2,999	22.8	21.3%	3.3	21.6%	3.6	19.8%
3,000 plus	19.2	17.9%	4.3	28.1%	3.1	17.0%
Total	107.0	100.0%	15.3	100.0%	18.2	100.0%

	2001		1990		1987	
Square Feet	Households	Percent	Households	Percent	Households	Percent
up to 1,999	65.0	60.7%	69.6	41.7%	69.2	40.7%
2,000 - 2,999	22.8	21.3%	16.8	17.9%	16.1	17.8%
3,000 plus	19.2	17.9%	7.4	7.9%	5.3	5.8%
Total	107.0	100.0%	93.8	100.0%	90.6	100.0%

	2001		1990		Change 1990 to 2001	
Square Feet	Households	Percent	Households	Percent		
up to 1,999	65.0	60.7%	69.6	41.7%	-4.6	-6.6%
2,000 - 2,999	22.8	21.3%	16.8	17.9%	6.0	35.7%
3,000 plus	19.2	17.9%	7.4	7.9%	11.8	159.5%
Total	107.0	100.0%	93.8	100.0%	13.2	14.1%

	All Households		< 80% Median		80% - 120%		>120%	
Square Feet	Households	Percent	Households	Percent	Households	Percent	Households	Percent
up to 1,999	65.0	60.7%	24.8	69.5%	12.0	58.3%	14.4	35.8%
2,000 - 2,999	22.8	21.3%	7.4	20.6%	4.9	23.7%	11.5	28.7%
3,000 plus	19.2	17.9%	3.5	9.8%	3.7	18.0%	14.3	35.5%
Total	107.0	100.0%	35.7	100.0%	20.6	100.0%	40.2	100.0%

	All Households		Consumption (million Btu)	Average Energy Bill	% of Total Consumption
Square Feet	Households	Percent			
up to 1,999	65.0	60.7%	70.9	\$1,209	46.7%
2,000 - 2,999	22.8	21.3%	110.5	\$1,707	25.6%
3,000 plus	19.2	17.9%	142.5	\$2,200	27.7%
Total	107.0	100.0%	92.9	\$1,493	100.0%

Source: Residential Energy Consumption Survey, US Energy Information Administration, 2001.

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