

# Market Outlook

March 2002

## The Need for New Housing Revisited *How Adequate is the Existing Stock?*

The 1949 Housing Act established “a decent home and suitable living environment for every American family” as a national goal. In practice, however, the extent to which the existing stock of housing provides (or fails to provide) a suitable living environment is often treated as a matter of secondary importance.

Most analyses of housing problems in the U.S. emphasize lack of affordability rather than housing quality. In *The State of the Nation's Housing: 2001*, for example, the Harvard Joint Center for Housing Studies concludes that “Severe cost burdens are the nation’s most serious housing problem.”

The Joint Center goes on to break down the numbers in standard fashion. “At the close of the 1990s, over 14 million American households—about one in eight—were severely cost-burdened, spending more than 50 percent of their incomes on housing. The share with at least moderate cost burdens was much higher, with three in ten households paying 30 percent or more of their incomes for housing. In addition, two million households lived in homes with serious structural problems.”

By this accounting, housing quality problems appear to be considerably less widespread than housing cost problems. But that depends on how physical housing problems are defined, and when they become severe enough to prevent a home from adequately providing a suitable living environment. Making these distinctions is neither a simple nor easy task. Some years ago, John Weicher, currently Assistant Secretary for Housing and

Federal Housing Commissioner at HUD, investigated the issue and determined that there is no way to define inadequate housing in a meaningful way based on only one or two characteristics. This means that inadequate housing can’t be detected with, for instance, the data collected in a Decennial Census.

### **Defining Inadequate Housing**

The number of 2 million inadequate units with severe structural problems quoted by the Harvard Joint Center (and many others) comes from the 1999 American Housing Survey (AHS). The AHS is conducted by the U.S. Census Bureau and HUD in odd-numbered years and is a major source of data on housing in the U.S. It has provided data that has formed the basis for several previous articles in NAHB’s Multifamily *Market Outlook*.

In the AHS, the Census Bureau defines two measures of housing inadequacy—*moderately inadequate* and *severely inadequate*. These measures are based on data collected through telephone interviews with residents from all types of housing units. As such, they have no relation to quality standards used in government housing programs, which are monitored through physical inspection of assisted housing units.<sup>1</sup> Both definitions use a number of housing characteristics and are quite complex, as shown in Table 1. The figure of 2 million quoted by the Harvard Joint Center is based on the Census Bureau’s “severe” definition of inadequate housing.

The Census Bureau provides the public

with data on all of the housing-quality items in the AHS. Private sector data users are free to construct their own definitions of inadequate housing, but this has seldom been done. Most analysts have employed the Census-provided definitions without considering possible alternatives.

Table 1 departs from this tradition and presents a new definition of inadequate housing. Although the new, NAHB-proposed definition is fairly complicated, it is based on somewhat fewer characteristics than the Census definitions. The NAHB definition emphasizes housing problems that have a demonstrated depressing effect on property rents and values. The underlying principle is that a suitable definition of inadequate housing should pass a market test—holding other factors constant, households should be willing to pay less for a unit that is inadequate, and owners should be willing to sell or rent them for less.

NAHB has developed models that predict gross rents for apartments and prices for single-family homes controlling for a large number of factors. The components of the NAHB definition of inadequate housing were chosen based on their performance in these models—that is, housing-quality characteristics were inserted into the models one at a time and those with the strongest negative impacts on rent or value were used to construct the NAHB definition of inadequate housing.

Each of the characteristics in the NAHB definition is present in at least 1.8 percent

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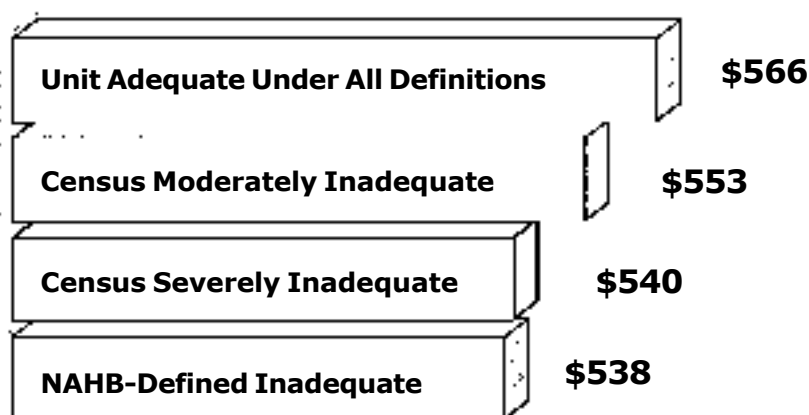
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of the occupied housing stock. The most common problem is holes or cracks in walls or ceilings (present in 5.5 percent of the units) followed by broken windows (3.9 percent) and missing roofing materials (3.7 percent). A couple of characteristics are excluded from the definition of inadequacy for a particular structure type (single family or multifamily), primarily because there are very few such cases in the data, and—perhaps for that reason—they perform poorly in the statistical model for that structure type. In some cases, this may be due to reporting differences. Residents in lower floors of a multi-story apartment building, for instance, may be less aware than a single-family home owner of the condition of the building's roof. Thus, two roofing conditions (sagging or missing materials) are used to classify single-family homes as inadequate, where only one is used in the case of multifamily.

Figure 1 shows the estimated rents for a standard apartment located in a Midwestern suburb and built before 1990. The numbers are gross rents paid by apartment residents—that is, they include utility expenses, regardless of who pays the utility company directly. According to the statistical model, an apart-

**Figure 1. Estimated Gross Rent for a Standard Apartment (Built in a Midwestern Suburb Before 1990)**



Source: NAHB hedonic regression model, based on data from the 1999 American Housing Survey, U.S. Census Bureau and the Department of Housing and Urban Development.

ment that is moderately inadequate by the Census Bureau's definition would rent for \$13 less a month, an apartment that is severely inadequate would rent for \$26 less, and an apartment that is inadequate under NAHB's definition would rent for \$28 less. Conventional tests for statistical significance reject both of the Census definitions, while the rent-impact of NAHB's definition passes these tests easily.

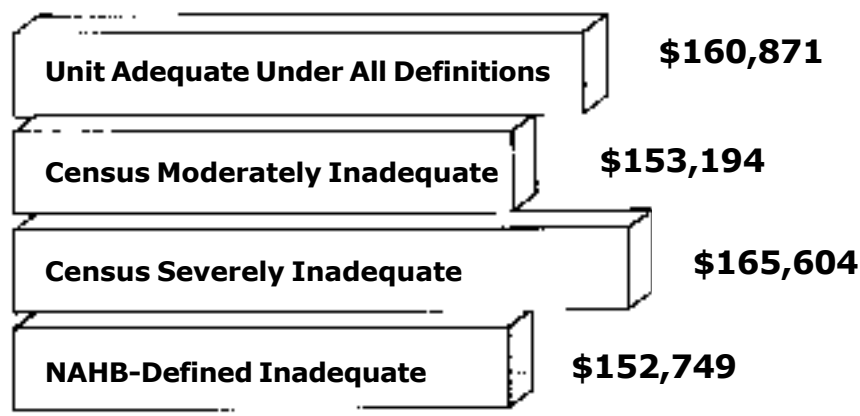
Figure 2 shows the estimated values for a standard single family home located in a Mid-

western suburb and built some time in the 1950s or 1960s. The results for a unit that is inadequate under the NAHB definition or the Census Bureau's moderately inadequate definition are about the same. The value of the home is roughly \$8,000 lower and the effect is statistically significant. The model, however, actually predicts a higher price for a home that is severely inadequate according to the Census definition, although the effect is not statistically significant.

**Table 1. Competing Definitions of Substandard Housing**

1. Census Severely Inadequate	2. Census Moderately Inadequate	3. NAHB Definition
Lack of complete plumbing	Severely inadequate under Definition #1	Holes or cracks in walls or ceiling
Uncomfortably cold during the winter	Total breakdown 31 miles in past 3 months	1 sq ft of peeling paint or plaster
Any 3 of the following	Major heaters: unvented gas or kerosene	Building missing roof materials
1) Leaks from outdoors	Any 3 of the following	Building has broken windows
2) Leaks from indoors	1) Leaks from outdoors	Building missing wall materials
3) Holes in the floor	2) Leaks from indoors	If single family
4) Holes or cracks in walls or ceiling	3) Holes in the floor	Sagging roof
5) 1 sq ft of peeling paint or plaster	4) Holes or cracks in walls or ceiling	If multifamily
6) Rats	5) 1 sq ft of peeling paint or plaster	Lack of complete plumbing
All 4 of the following in common areas	6) Rats	Lack of built-in heating equipment
1) Lack of working light fixtures	Any 3 of the following in common areas	(except in warmest climate)
2) Loose or missing steps	1) Lack of working light fixtures	
3) Loose or missing railings	2) Loose or missing steps	
4) Climb at least 4 stories with no elevator	3) Loose or missing railings	
No electricity	4) Climb at least 4 stories with no elevator	
All 3 of the following electrical problems	Lack of complete kitchen facilities	
1) Exposed wiring		
2) At least one room without a wall outlet		
3) 3 blown fuses in past 90 days		

**Figure 2. Estimated Value  
for a Standard Single Family House  
(Built in a Midwestern Suburb 1950-1969)**



Source: NAHB hedonic regression model, based on data from the 1999 American Housing Survey, U.S. Census Bureau and the Department of Housing and Urban Development.

In short, NAHB's proposed definition of inadequate outperforms the Census definitions in that it has a stronger, more consistent, and more statistically significant depressing effect on rents and values. It's important to remember, however, that the NAHB definition was specifically constructed so it would perform well in this regard.

#### How Many Units Are Inadequate?

Most of the discussion above would be an academic exercise of no great importance if the Census and NAHB measures produced similar counts of inadequate housing units. But they don't. According to the Census definitions, 7.4 million households live in housing that is at least moderately inadequate, and 2 million of these are in severely inadequate units. According to the NAHB definition, however, 14.4 million households are living in inadequate housing.

Of the 14.4 million, a little under 7.4 million are home owners and a little under 7.1 million are renters (Figure 3). Of the 7.1 million renters in inadequate units, 2.6 million are renting single-family homes, and another 1.8 million are in small (2-4 unit) multifamily buildings. About half a million of the home owners in inadequate housing are living in multifamily units.

Not surprisingly, units that are inadequate

according to the NAHB definition tend to be concentrated in the older housing stock. Forty-five percent of the inadequate units were built before 1950, 70 percent before 1970, and over 90 percent before 1985. Nearly a quarter of the occupied housing units built before 1950 are inadequate (Table 2). Older units have, obviously, undergone more wear and tear. In addition, building codes have become stricter, and the quality of newly-built units has increased over time.

#### Implications for Housing Policy

The policy implications of 14.4 million inadequate units are substantial. Consider NAHB's recent proposal for a new multifamily production program, for example. The proposal targets households with incomes between 60 percent and 100 percent of area median income—a group increasingly called America's working poor.

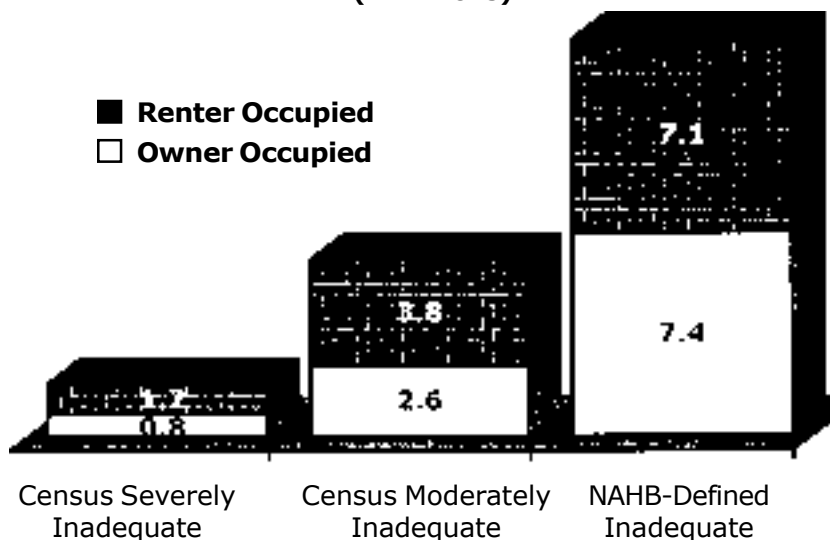
NAHB's justification for the program quotes a report recently released by the Center for Housing Policy, "Paycheck to Paycheck: Working Families and the Cost of Housing in America." The report emphasizes housing affordability problems for low- to moderate-income working families.

Based largely on these affordability considerations, NAHB has estimated that at least 60,000 to 70,000 new multifamily units annually are needed for America to begin meeting the housing needs of working families earning 60 to 100 percent of area median income.

But the evidence presented here suggests that these families may also need considerable relief from inadequate living conditions. Of the 14.4 million households living in inadequate units, 3.3 million are earning 60-100 percent of area median income. This is as large

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**Figure 3. Number of Inadequate Housing Units  
(in Millions)**



Source: NAHB tabulations, based on data from the 1999 American Housing Survey, U.S. Census Bureau and the Department of Housing and Urban Development.

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as the number of inadequate units occupied by households earning less than 30 percent of area median incomes.

The incidence of inadequate housing is highest among the poorest. About 19 percent of those earning less than 30 percent of area median, and 18 percent of those earning 30-50 percent, are living in housing that is inadequate according to the NAHB definition.

The incidence of inadequate housing falls some, but not much, for the income brackets immediately above 50 percent. (This is true for the Census definitions as well as the NAHB definition of inadequacy, but the NAHB definition shows a substantially higher incidence of inadequate living conditions across the income spectrum.) For those earning 50-60 percent, 60-80 percent, or 80-100 percent of area median income, the incidence of inadequate housing according to the NAHB criterion is in the 15-16 percent range.

Moreover, there is only a small overlap between households with affordability problems and those with housing quality problems (Figure 4). Thus, the NAHB definition of inadequate housing shows a substantially greater number of households with housing problems than is captured by most previous estimates.

**Table 2. Inadequate Housing Concentrated Among Older Units**  
NAHB Definition of Inadequate; Number of Housing Units in Millions

Year Built	Occupied Housing Stock	Inadequate Share of Stock	Number of Inadequate Units	Share of Inadequate Units
Before 1950	25.9	24.3%	6.3	45.3%
1950 to 1959	25.8	13.0%	3.6	24.7%
1960 to 1969	24.5	12.1%	3.0	20.6%
1970 to 1979	7.3	8.9%	0.6	4.5%
1980 to 1989	5.6	7.3%	0.4	2.8%
1990 to 1999	6.0	5.4%	0.3	2.2%
Total	95.0	15.1%	14.4	100.0%

Source: NAHB tabulations, based on data from the 1999 American Housing Survey, U.S. Census Bureau and the Department of Housing and Urban Development.

### Summary and Conclusion

The number of inadequate housing units in the U.S. is a figure that has been frequently quoted but seldom explained in detail. In practice, what constitutes inadequate housing needs to be defined in a complicated way, and the effort required to make the details understandable to the typical audience often does not seem worthwhile.

However, it's not purely an academic exercise, because different definitions paint drastically different pictures of the U.S. housing stock. A reasonable alternative to the traditional definition, and one based on the same data, produces an estimate of 14.4 million inadequate units—much higher than the often-quoted figure of 2 million.

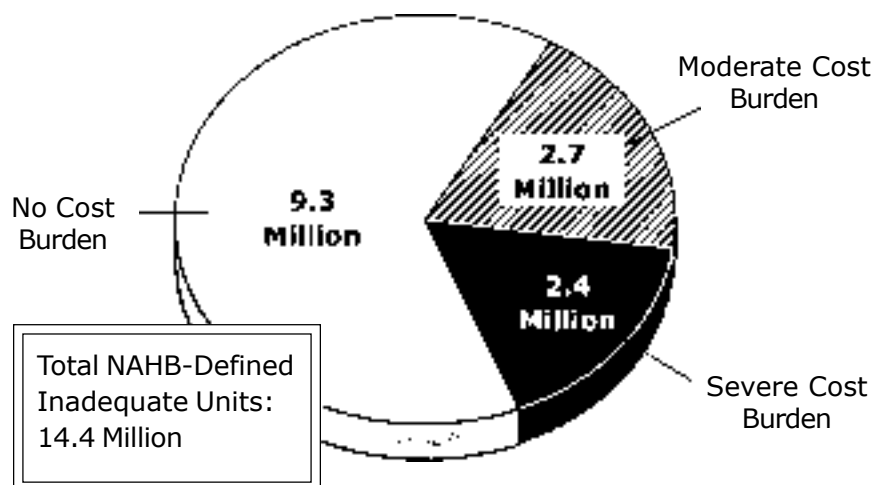
This suggests that the need to improve the overall quality of the housing stock may be greater than is usually recognized. There are two ways to address this problem—renovating the existing stock, and replacing older units with new ones.

Given the well-documented housing cost problems for families earning area median income or less, a policy to retire older inadequate housing units will be effective only if it replaces them with units that are affordable. Clearly, multifamily development that places more housing units on fewer acres of land needs to be a part of this strategy—especially in areas where land costs are high.

This implies that there is a need for more federal, state, and local resources to improve both housing affordability and housing quality. There's also a need to address local issues—such as zoning restrictions and opposition from community organizations—that make it difficult to develop high density and multifamily projects.

In order to address housing quality as well as affordability problems, a multifamily production program that meets the needs of America's working families earning 60-100 percent of area median income may need to supply even more than the 60,000 to 70,000 new apartments per year that NAHB has been estimating.

**Figure 4. New Definition of Inadequate Housing Identifies Many Housing Problems Not Captured by Cost Burden Statistics**



Source: NAHB tabulations, based on data from the 1999 American Housing Survey, U.S. Census Bureau and the Department of Housing and Urban Development.

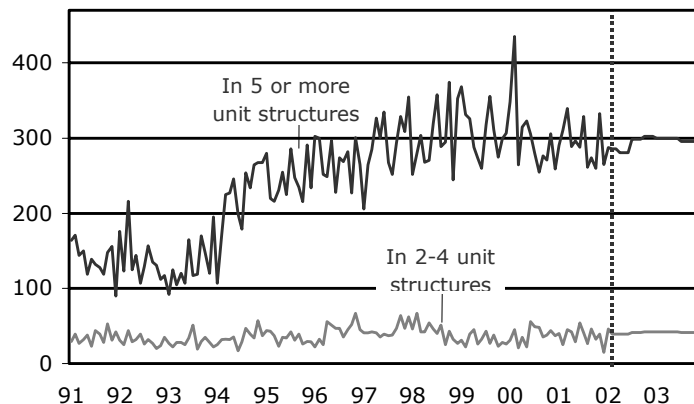
<sup>1</sup>NAHB's proposed alternative definition concerns the economic viability of housing. Like the definitions provided in the AHS, it is unrelated to any system of physical inspection used to assess the quality of housing units receiving government assistance.

## By the Numbers: A Monthly Look at Starts, Construction, Demand, and Real Rents

### Production

January production figures from the Census Bureau show multifamily starts increasing by about 19 percent, but this may be misleading for two reasons. First, an unusually large amount of the increase was due to starts in 2-4 unit buildings--difficult to explain and of minimal relevance to the segment of the industry concerned primarily with larger buildings. Second, multifamily production tends to be volatile, and it can be a mistake to place too much weight on a single month-to-month change. Five-plus starts increased by about eight percent in January, but that reversed a sharp decline the previous month and brought the seasonally adjusted annual rate to 287,000 units--within one thousand of both the average for the last quarter of 2001 and NAHB's forecast for the first quarter of 2002. Increasing vacancy rates and falling absorption rates have caused NAHB to trim its multifamily forecast, but only slightly. Underlying demographics and a boost provided by higher caps in the Low-Income Housing Tax Credit program should still take the five-plus starts rate up to around 300,000 by the end of 2002.

Multifamily Housing Starts  
History and NAHB Forecast  
(In Thousands, Seasonally Adjusted Annual Rate)

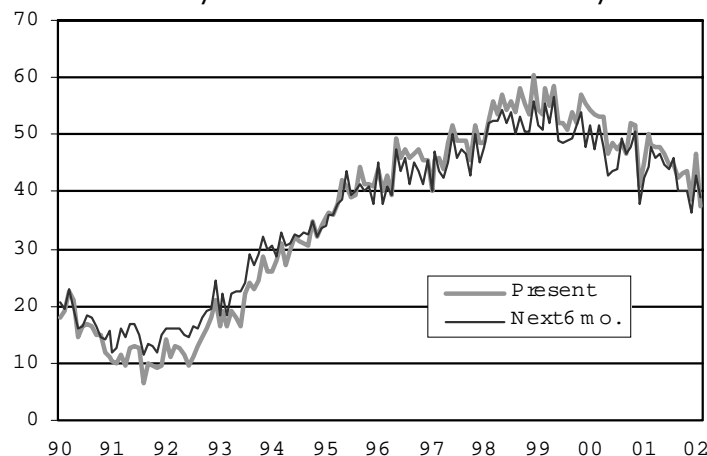


Source: U.S. Census Bureau; NAHB Economics Department.

### Builders' Survey Results: Multifamily Rental Construction Activity

Based on the responses of builders to NAHB's BEC survey, multifamily construction activity weakened in February, as builder confidence reverted to the depressed levels of December. The index for current construction fell nine points to 38. The index for construction expected over the next six months moved less dramatically, but still dropped 4 points to 39. The BEC is a monthly survey of that NAHB has been conducting for nearly two decades. The survey asks builders to rate current multifamily construction activity and the prospects for construction for the next six months as good, fair or poor. Scores for responses to each component are used to calculate a seasonally adjusted index, where any number over 50 indicates that more builders view conditions as good than poor. Both indices have remained consistently below the break-even point of 50 during the past year.

NAHB Builder Survey: Indices of  
Multifamily Rental Construction Activity



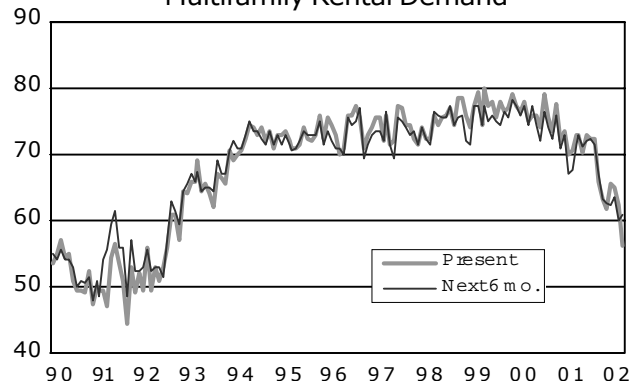
	2001											2002	
	F	M	A	M	J	J	A	S	O	N	D	J	F
<b>At present:</b>													
Good	24%	24%	21%	23%	21%	18%	14%	17%	17%	15%	17%	19%	13%
Fair	52%	49%	55%	50%	52%	54%	62%	50%	54%	58%	43%	55%	49%
Poor	24%	27%	25%	27%	28%	29%	24%	32%	30%	28%	40%	26%	38%
Overall Index	50	48	48	48	47	45	45	42	43	44	39	47	38
<b>Outlook for the next 6 months:</b>													
Good	18%	20%	18%	20%	18%	16%	16%	14%	13%	11%	12%	14%	10%
Fair	53%	55%	56%	54%	54%	56%	60%	52%	56%	59%	50%	58%	58%
Poor	29%	25%	26%	26%	28%	28%	24%	34%	32%	31%	39%	28%	32%
Overall Index	44	48	46	47	45	44	46	40	40	40	37	43	39

All percentages seasonally adjusted; Overall Index = (Good - Poor + 100) / 2. Source: Builders' Economic Council monthly survey, NAHB Economics Department.

## Builders' Survey Results: Demand For Rental Apartments

Demand for rental apartments fell off in February, according to the panel of builders in NAHB's monthly BEC survey, as the index measuring current market demand dropped seven points to 56. This is the lowest the current demand index has been since 1992 and is consistent with recent trends in vacancy and absorption rates. Signs of market weakness did not translate into a pessimistic outlook for the future, however. The index based on the question about multifamily rental demand expected over the next six months remained stable, actually inching up by one point to 61 in February. But that is still substantially below the levels the index was sustaining during the first half of 2001.

NAHB Builder Survey: Indices of Multifamily Rental Demand



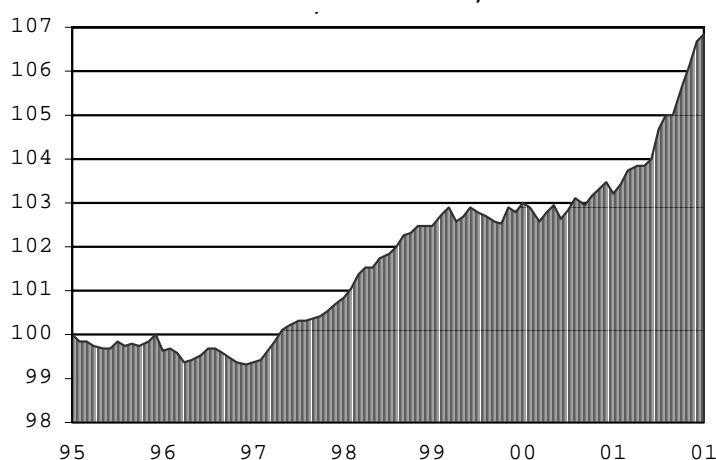
	2001												2002	
	F	M	A	M	J	J	A	S	O	N	D		J	F
<b>At present:</b>														
Good	51%	51%	47%	52%	50%	52%	44%	40%	40%	40%	43%		37%	30%
Fair	44%	44%	46%	43%	45%	42%	44%	46%	44%	51%	44%		51%	52%
Poor	5%	5%	6%	6%	5%	7%	12%	14%	17%	9%	13%		12%	18%
Overall Index	73	73	70	73	73	73	66	63	62	66	65		63	56
<b>Outlook for the next 6 months:</b>														
Good	47%	50%	48%	50%	50%	51%	46%	38%	38%	36%	40%		35%	32%
Fair	49%	46%	47%	45%	45%	40%	43%	51%	48%	53%	47%		50%	57%
Poor	4%	4%	5%	6%	5%	8%	12%	11%	13%	11%	13%		15%	11%
Overall Index	71	73	71	72	73	72	67	63	63	63	64		60	61

All percentages seasonally adjusted; Overall Index = (Good - Poor + 100) / 2. Source: Builders' Economic Council monthly survey, NAHB Economics Department.

## Real Rents

Astute readers of NAHB's Multifamily Market Outlook may notice that the Consumer Price Index (CPI) history changed from last month. Part of the reason is that, as usual at the start of a calendar year, the Bureau of Labor Statistics (BLS) recalculated its seasonal adjustment factors. This caused minor changes in the seasonally adjusted CPI residential rent component back to 1997. More significantly, however, BLS introduced a new weighting scheme for the CPI components, which altered the overall CPI back to 1987. According to BLS this is not supposed to alter historical inflation patterns significantly. In the case of real rents, that appears to be true. The CPI continues to show residential rents rising faster than the general price level over the past four years. The revised data show the real rent index hitting 106.8 one month later (in January of 2002, instead of December 2001), but that's still the highest it's been since 1981, the earliest year for which complete CPI data is available.

Real Rent Index: CPI Rent/CPI All Items



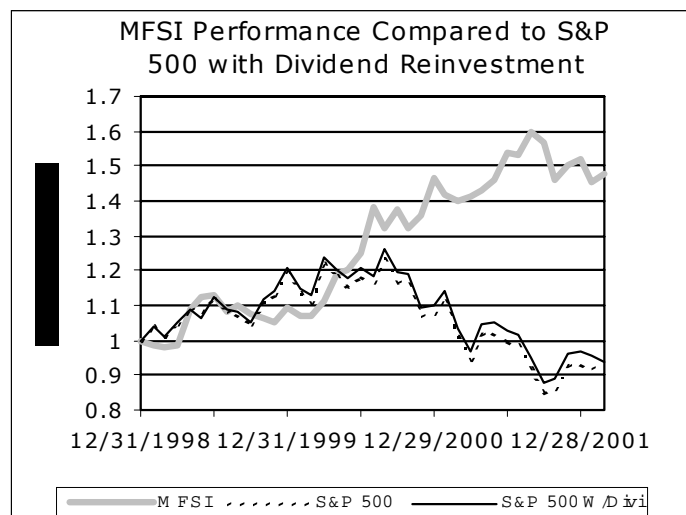
	2001												2002
	J	F	M	A	M	J	J	A	S	O	N	D	J
CPI: Rent of Primary Residence	188.0	188.8	189.5	190.2	191.1	191.8	192.5	193.2	194.0	194.7	195.4	196.2	196.8
Percent Change (Annual Rate)	3.9%	5.2%	4.5%	4.5%	5.8%	4.5%	4.5%	4.5%	5.1%	4.4%	4.4%	5.0%	3.7%
CPI: All Items	175.6	176.0	176.1	176.6	177.4	177.8	177.3	177.4	178.1	177.6	177.5	177.3	177.6
Percent Change (Annual Rate)	7.1%	2.8%	0.7%	3.5%	5.6%	2.7%	-3.3%	0.7%	4.8%	-3.3%	-0.7%	-1.3%	2.0%
Real Rent (January 1995=100)	103.2	103.4	103.7	103.8	103.9	104.0	104.7	105.0	105.0	105.7	106.1	106.7	106.8

Based on seasonally adjusted Consumer Price Indices (CPI); U.S. Department of Labor, Bureau of Labor Statistics. The annual rates indicate what the percentage change would be if the current monthly rate were sustained over a 12-month period. The real rent index is the CPI for rent of primary residence divided by the CPI for all items and scaled so that January 1995 is 100.



### Multifamily Ownership and Management Stock Index

The MFSI rose by 27 points, nearly 2 percent, in February. At this new, higher level, the MFSI almost equals its performance of three months ago, surpasses by 6 percent the level it reached last year at this time, and is only 7.3 percent off its all-time high (August 2001). During February the percentage difference between the MFSI and the S&P 500 with dividends reinvested rose from 52 to 58 percent. The rise in this percentage shows that the MFSI outperformed the S&P 500 with dividends reinvested during the month. This is because the MFSI rose in February while the S&P 500 with dividends declined by 1.9 percent. Since December 1998, the MFSI has outperformed the S&P 500 with dividends by 58 percent. In keeping with the slight rise in the index, the price-to-earnings ratio (P/E) of the MFSI rose slightly, while the dividend yield, defined as the total cash dividend payments divided by the current stock price, fell slightly. The MFSI is an index of 29 publicly traded US headquartered firms principally involved in multifamily ownership and management.



#### Index Values:

	2001												2002	
	F	M	A	M	J	J	A	S	O	N	D		J	F
MFSI	1,399	1,415	1,431	1,458	1,539	1,533	1,596	1,567	1,463	1,499	1,519		1452	1,479
S&P 500 W/ Div.	1,035	970	1,045	1,052	1,027	1,016	953	876	893	961	969		955	937
S&P 500 W/O Div.	1,009	944	1,016	1,022	996	985	922	847	862	927	934		919	912
% Difference <sup>2</sup>	35%	46%	37%	39%	50%	51%	68%	79%	64%	56%	57%		52%	58%

		12-Month % Change	1-Month % Change	3-Month % Change	P/E Ratio	Dividend Yield	Market Capitalization	MFSI Value
<b>Multifamily Stock Index (MFSI)</b>		5.72%	1.87%	-1.37%	16.16	6.97%	\$28,363,830	1,478.77
Company Name	Ticker Symbol	2/28/2002 Price/Share	1-Month % Change	3-Month % Change	12-month Trailing P/E	Dividend Yield	Market Cap. ('000)	Form of Organization
Associated Estates Realty Corp.	AEC	\$9.92	4.86%	10.96%	32.09	10.08%	\$192,746	REIT
Apartment Investment and Mgmt. Co.	AIV	\$45.18	3.62%	1.53%	33.58	6.99%	\$3,303,291	REIT
AMLI Residential Properties Trust	AML	\$24.10	-1.55%	-2.35%	7.27	7.84%	\$430,016	REIT
America First Apartment Investors, L.P.	APROZ	\$11.10	-7.50%	-5.13%	21.38	8.65%	\$55,755	L.P.
Archstone-Smith Trust	ASN	\$25.88	4.02%	-1.15%	15.05	6.34%	\$3,618,220	REIT
AvalonBay Communities, Inc.	AVB	\$46.14	2.65%	-4.57%	11.96	5.55%	\$3,142,134	REIT
BNP Residential Properties, Inc.	BNP	\$11.00	-2.65%	7.00%	33.23	11.27%	\$62,887	REIT
BRE Properties, Inc.	BRE	\$30.00	2.99%	-4.31%	17.01	4.70%	\$1,394,100	REIT
Camden Property Trust	CPT	\$36.00	3.27%	-0.63%	20.58	6.78%	\$1,464,084	REIT
Century Realty Trust	CRLTS	\$11.20	-4.27%	-6.67%	31.57	5.89%	\$19,522	REIT
Equity Residential Properties Trust	EQR	\$26.95	0.63%	-6.91%	18.43	7.83%	\$7,229,418	REIT
Essex Property Trust	ESS	\$47.40	2.29%	-0.59%	17.15	4.43%	\$876,473	REIT
Gables Residential Trust	GBP	\$29.94	4.69%	1.84%	14.78	5.81%	\$724,219	REIT
Home Properties of NY, Inc.	HME	\$32.33	-2.36%	2.93%	10.90	7.15%	\$710,064	REIT
Intergroup Corporation	INTG	\$18.79	-2.44%	-2.84%	24.68	0.00%	\$35,438	Corporation
Investors Real Estate Trust	IRETS	\$9.77	1.45%	7.24%	23.08	4.40%	\$238,017	REIT
Mid-America Apartment Communities, Inc.	MAA	\$25.65	-0.23%	-0.58%	13.39	9.04%	\$446,464	REIT
Merry Land Properties, Inc.	MRYP	\$6.75	-15.63%	-13.46%	1.90	0.00%	\$15,404	Corporation
New England Realty Associates, L.P.	NEWRZ	\$35.05	11.45%	18.05%	0.88	3.17%	\$6,064	L.P.
Presidential Realty Corporation	PDLA/B	\$7.76	-1.31%	-0.41%	10.43	8.25%	\$28,858	REIT
Post Properties, Inc.	PPS	\$32.64	-3.00%	-5.47%	11.23	9.56%	\$1,237,056	REIT
Roberts Realty Investors, Inc.	RPI	\$6.65	-6.86%	-5.00%	3.33	4.96%	\$32,425	REIT
Summit Properties, Inc.	SMT	\$21.92	-1.17%	-7.71%	12.61	8.39%	\$589,100	REIT
Tarragon Realty Investors, Inc.	TARR	\$13.25	0.53%	4.33%	-22.75	2.26%	\$99,070	Corporation
Transcontinental Realty Investors, Inc.	TCI	\$16.60	4.67%	4.08%	3.82	0.00%	\$142,826	Corporation
Cornerstone Realty Income Trust	TCR	\$10.81	1.69%	-4.17%	20.68	10.36%	\$510,524	REIT
Town & Country Trust, The	TCT	\$20.80	-2.48%	-2.67%	22.32	8.27%	\$327,267	REIT
United Dominion Realty Trust	UDR	\$14.10	-1.67%	-2.02%	20.43	7.66%	\$1,404,684	REIT
Wilshire Oil Company	WOC	\$3.51	3.24%	8.00%	9.67	0.00%	\$27,704	Corporation

<sup>1</sup> For initial article discussing the MFSI in detail see NAHB Multifamily Market Outlook, January 2002. <sup>2</sup> Percent difference is defined as (MFSI minus S&P 500 with dividends)/S&P 500 with dividends. <sup>3</sup> P/E ratio uses 12 month trailing earnings data.

## ***NAHB Economic Forecast***

	2001				2002				2003			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
Real GDP (Bil. 96\$)	9,335	9,342	9,310	9,343	9,403	9,477	9,557	9,639	9,725	9,807	9,886	9,965
% Change (AR)	1.3%	0.3%	-1.3%	1.4%	2.6%	3.2%	3.4%	3.5%	3.6%	3.4%	3.3%	3.2%
% Change in Price Index:												
GDP - Chain type (AR)	3.3%	2.1%	2.3%	-0.3%	1.0%	1.5%	1.7%	2.2%	2.4%	2.4%	2.5%	2.4%
Civilian Unempl. Rate	4.2%	4.5%	4.8%	5.6%	5.8%	6.0%	5.9%	5.7%	5.6%	5.5%	5.4%	5.4%
Federal Funds Rate	5.6%	4.3%	3.6%	2.1%	1.8%	1.8%	2.0%	2.5%	3.0%	3.5%	4.0%	4.0%
Prime Rate	8.6%	7.3%	6.6%	5.1%	4.8%	4.8%	5.0%	5.5%	6.0%	6.5%	7.0%	7.0%

AR = Annual Rate

The economic recession that began in March 2001 apparently is over, and it's destined to go down in the books as the mildest on record. Economic growth turned positive late last year, and on February 28, the Commerce Department raised its estimate of Real GDP growth for the final quarter of 2001 from an annual rate of 0.2 to 1.4 percent.

The economy is poised to launch into a sustainable recovery phase. The recovery is likely to be subdued, however, reflecting the subdued nature of the contraction phase and the presence of some persistent drags. The upward revision in GDP primarily reflected stronger final demand for goods and services, as the estimates continued to show a record reduction in business inventory positions.

Leaving aside the massive but offsetting forces of consumer and business spending for domestically produced goods and services, the

1.4 percent fourth-quarter growth was the result of strength in spending by the federal as well as state-and-local government sectors. The trade sector continued to exert a drag on the economy (although less than prior to the revision), subtracting 0.35 percent from overall GDP growth.

It's difficult to tell where such wild sectoral swings are taking the economy, but moderate growth in consumer spending, along with ongoing contributions from the government sector and resumption of positive growth in residential fixed investment, should outweigh further deterioration in business capital spending and our trade balance. NAHB is now projecting GDP growth of 2.6 percent for the first quarter, and 2.0 percent for all of 2002 on a year-over-year basis.

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