#### DOE/EIA-0207/3

# Residential Energy Consumption Survey: Conservation

February 1980

U.S. Department of Energy
Energy Information Administration
Assistant Administrater for Program Development



#### Other NEICS Reports

Preliminary Conservation Tables from the National Interim Energy Consumption Survey, August 1979, DOE/EIA-0193/P

Characteristics of the Housing Stocks and Households: Preliminary Findings from the National Interim Energy Consumption Survey, October 1979, DOE/EIA-0199/P

The above reports are available from the following address:

U.S. Department of Energy Technical Information Center Attn: EIA Coordinator P.O. Box 62 Oak Ridge, TN 37830

Residential Energy Consumption Survey: Characteristics of the Housing Stock and Households, DOE/EIA-0207/2, GPO Stock No. 061-003-00093-2; \$4.25

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# Residential Energy Consumption Survey: **Conservation**

February 1980

U.S. Department of Energy
Energy Information Administration
Assistant Administrator for Program Development
Office of the Consumption Data System



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#### PREFACE

This is the fourth report of the Office of the Consumption Data System, Office of Program Development, Energy Information Administration, presenting final data from the National Interim Energy Consumption Survey (NIECS). The focus of this report is the conservation activities performed by households between January 1977 and December 1978, and the status of households with respect to insulation, storm windows, and other energy conserving characteristics. These tables are from the final data file that contains imputations for missing data and includes data from the mailed questionnaires.

Included in the report is a summary of findings, a description of how the survey was conducted, a copy of the questionnaire, generalized sampling errors, and a glossary of terms. This report supersedes the preliminary report (DOE/EIA-0193/P) dated August 1, 1979, for most purposes except where the user is interested in the extent of missing data.

The following EIA staff members have contributed to this project: Kenneth Vagts--Director, Office of the Consumption Data System; Lynda Carlson--manager for the residential sector; Wendel Thompson--NIECS survey manager; Lynn P. Handler--analysis; Bruce Egan and Leigh Carleton--table design and generation; Mike Maloney--systems design and data processing; Tom Woteki and Stuart Cohen--statistics; Diane M. Good, Cheryl D. Kozak, and Dotty Tate--secretarial and clerical work. The survey fieldwork was conducted by Response Analysis Corporation under the direction of Reuben Cohen and Dawn Day. The statistical design support was provided by Joseph Steinberg of Survey Design, Inc.

#### Final Conservation Findings

This report consists of four sets of conservation-related tables. The first set presents statistics on the presence of storm windows and doors and insulation in the housing inventory for the winter of 1978-79. The remaining three sets of tables are concerned with conservation additions made during three time periods: April 1977 through December 1978 (the period of eligibility for a 1978 energy tax credit), and the two calendar years of 1977 and 1978.

Each set consists of 16 tables. Conservation inventories and additions crossed by: census region (plus rural/urban), type of heating fuel, weather zones, type of building structure, year house built, type and presence of air conditioning, family income, and selected demographic characteristics. Each table is presented in two ways. The "A" series tables are given in weighted counts of housing units rounded to the nearest thousand. Series "B" tables are given in weighted column percentages. (Since each housing unit appears in more than one row, each subtotal in each column sums to 100 percent). Column percentages can only be used in making relative comparisons. Table 1B shows that 64 percent of the units in the Northeast have insulation materials covering all windows as compared to 62 percent in the North Central region. However, Table 1A shows that there are over three million more units in the North Central region with complete storm windows than in the Northeast. To make absolute comparisons, therefore, it is necessary to use the "A" series of tables.

The sample base for this report is 3,637. This figure includes all occupied residential buildings containing between one and four housing units in the National Interim Energy Consumption Survey (NIECS). Although buildings with five or more housing units were included in the survey, residents of these buildings were not asked about conservation additions or about the presence or absence of insulation. Therefore, they have been omitted from this report, but statistics on these units will be presented in other reports.

A series of weights was applied to the sample units to allow estimates to be made of the entire population. After weighting, the estimated population was equal to 76.6 million housing units. After excluding households in buildings with five or more units, the estimated population equalled 67.5 million housing units. The 100 percent figure given in the upper left hand corner in the "B" series tables represents this weighted number.

The results given in the preliminary version of this report are slightly different from those presented here. The sample base has been increased by 189 households because data were obtained from a final follow-up effort using mail questionnaires. In addition, data items that were missing in the preliminary report have been imputed (see "How the Survey Was Conducted").

The first set of tables shows household inventories of conservation items. Displayed here are statistics on storm windows and doors; presence, type, and quantity of attic insulation; wall insulation; and whether or not rooms were closed off (left unheated) during the winter of 1977-78.

Forty-one percent  $(+2.6)^2$  of the NIECS households had storm windows on all of their windows, 37 percent (+2.4) had storm doors, and 69 percent (+2.2) had some attic insulation. Approximately one-third of the households had closed off one or more rooms during the winter. Overall, 41 percent (+2.6) of the housing units had some or complete storm windows, storm doors, and attic insulation and 86 percent (+1.8) had at least one of these three types of insulating materials. The proportion of housing units having all three types of insulating materials varies substantially by region (Tables 1A and 1B). Units in the North Central region were three times more likely to contain storm windows, storm doors, and attic insulation than were units in the South. The proportion of housing units in the West having all these types of insulating materials was less than one-guarter of that found in the North Central region.

In housing units that utilized fuel oil or kerosene as their primary heating fuel, insulating materials were found more frequently than in units using other fuels (Tables 2A and 2B). Fifty-one percent (+5.8) of the fuel oil households had all 3 types of insulating materials and 93 percent (+3) had at least 1 type. All three types of insulating items were found more frequently in detached single-family houses than in other types of housing units (Tables 4A and 4B). For

3Unless otherwise specified, for the purposes of this report, the terms "insulating items" and "insulating materials" refer to storm windows, storm doors, and attic insulation.

<sup>1</sup>Preliminary Conservation Tables From the National Interim Energy Consumption Survey, DOE/EIA-0193/P.

<sup>&</sup>lt;sup>2</sup>Sampling errors are given for a 95 percent confidence level. For a discussion of sampling errors and a table for their computation, see page 189.

<sup>4</sup>For more detail on fuel oil households in the NIECS survey see Single Family Households: Fuel Oil Inventories and Expenditures, DOE/EIA-0207/1.

detached houses, the overall prevalance of insulating materials increased with the number of rooms in the house. Units that were either totally or partially air conditioned also tended to have more of these items than units without any air conditioning (Tables 6A and 6B).

Table 7B shows that, generally speaking, the presence of insulation went up as family income increased. Fifty-five percent (+6) of the households earning \$25,000 or more had storm windows, storm doors, and attic insulation while only 20 percent (+6.2) of the poor households (see Glossary) had all 3 types of these insulating materials. White respondents were twice as likely as black respondents to have all 3 types of insulating items, 43 percent (+2.8) versus 21 percent (+7.6), Table 8B. Households headed by married couples had significantly better insulated homes (46 percent (+3) had all 3 types) than unmarried household heads. Among those who were unmarried, there were no significant differences in the summary statistics between male and female heads of households.

The second set of tables gives statistics on conservation additions for the period of eligibility for an energy tax credit on Federal income taxes. In order to qualify for an energy tax credit, two criteria must be met. First, to be eligible, an addition had to have been made between April 20, 1977 and December 31, 1978. Second, additions were only considered to be eligible if they were made to houses built (or substantially completed) before April 20, 1977. The 16 tables in the second section give three classifications of eligibility. For this report, "eligible" additions were defined as those made during the appropriate time frame and to houses built in 1976 or earlier. "Ineligible" additions were made during the right time, but to houses built in 1977 or later.

Some sort of conservation-related equipment or insulating material was added to half, 50 percent (±2.8) of the eligible housing units. Most additions were relatively inexpensive. The most frequent additions were: caulking (25 percent), plastic covering (16 percent), and weatherstripping 15 percent). Of the eligible housing units, 41 percent (±2.6) of the households made an addition of this type. Expensive additions of insulating materials or any kind of equipment additions were undertaken by smaller numbers of respondents. At least one of the following types of insulation: storm doors, storm windows, and attic insulation was added by 17 percent (±2) of the eligible housing units. Eighteen percent (±2) of the households added expensive insulating material and/or expensive equipment. Half of the

households that added an expensive item also added an item from the category termed "inexpensive insulation."

The third and fourth sets of tables present statistics on conservation-related additions made during 1977 and 1978. In each of the two calendar years presented here, approximately one-third of the households added some sort of insulating material or equipment. Over two-thirds of the households making additions in each year added inexpensive items only. A large proportion of the additions made were in the category termed "inexpensive insulation". Twenty-nine percent (+2.4) of the households made an addition of this type in 1977 and 26 percent (+2.4) added "inexpensive insulation" in 1978. Within this category, the most popular additions included caulking, plastic coverings, and weather-stripping.

In each of the two years, approximately four percent (±1.2) of the households added either storm windows, storm doors, or attic insulation. In 1978, 10 percent (±1.6) of the households added at least one of these types of insulation and in 1977, the figure was 11 percent (±1.7). While there was some overlap, most of the households that added these types of insulating materials in 1978 were different households from those which added such items in 1977 (see the eligibility tables). In each of the two years, 11 percent (±1.7) added an expensive item of either equipment or insulation. While inexpensive modifications have predominated, approximately 10 percent of the households made at least one relatively expensive addition in each year.

# TABLE 1A EXISTING ENERGY-RELATED CHARACTERISTICS BY CENSUS REGIONS (WINTER 1978-79) (THOUSAND HOUSING UNITS)

	i i	j 1					CENSUS I	REGIONS					
	TOTAL HOUSING UNITS	i n	ORTHEAS	r	NORTH CENTRAL			SOUTH			WEST		
		  TOTAL	  URBAN 	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	  RURAL
OTAL HOUSING UNITS 1/	67,457	14,251	11,309	2,942	19,821	14,132	5,689	22,319	13,783	8,536	11,067	8,536	2,531
STORM WINDOWS	:	!	•		!				1	1	} •		) 1
ALL WINDOWS COVERED	27.463	. 9.130:	7.292	1 . 937	12.380	8 . 612	3.768	4.404	2.416	1.989	1.550	669	3 88
SOME WINDOWS COVERED	13.687	1 3.784	1 2 759	1.026	5.395	4-063	1 1.332	3-155	1 1.917	1 1.238	1 1.352	643	
NO WINDOWS COVERED	26,307	1.336	1,258	79	2,046							7,224	
TORM DOORS		1	1	'			!		•			1	1
ALL DOORS COVERED	25.003	1 6.810	5.254	1.556	112.086	8.566	1 3.520	! ! ል <sub>ወ</sub> ደናበ	1 2.480	)   2.380	1.247	740	50
SOME DOORS COVERED													
NO DOORS COVERED					2,988							6,748	
TTIC INSULATION	<b>1</b>	1	*		•			]	g g		•	1	ļ
HAVE INSULATION	46,216	9,297	6,945	2 + 352	15:036	10,572	4,465	14.367	   9,096 	5,771	7,016	1   4,683 	2.33
BATTS ONLY	21,724	5,391	3,755	1,636	6,980	4,986	1,994	6,553	3,746	2,308	2,800	i 1,506	1.29
LOOSE FILL ONLY	14,183	1,955	1.534	421	4,977	3.200	1 ,777	4,734	2.831	1,903	2,517	2.031	48
BATTS AND LOOSE				•	969	680	289	686	453	233	312	131	18
OTHER	750	1 61	31	31	181	93	88	293	205	88	215	115	10
TYPE UNKNOWN		1.528	1.342	187	1.930	1.613	317	2,601	1.861	740	1,172	901	27
QUANTITY	9	1	1	1			,	i	i	1		i	i
LESS THAN 3 INCHES	1,731	385	342	43	426	399	27	520	360	150	449	247	20:
3 TO 6 INCHES			2.863	1 231	7.324	4.925	2,399	7,369	4.056	3,313	3,151	1.819	1 1.31
MORE THAN 5 INCHES		1 1,365			2.857								
QUANTITY UNKNOWN	15,879	3,451	2,784	668	4,429	3,511	918	5,514	3,766	1,747	2,485	1,966	j 51
NO INSULATION	13,023	1 2,751	2,241	510	2,800	1,931	869	4,962	2,871	1 2,090	2,511	2,378	1 13
DONT KNOW		2,203			1,985			2,491				1,475	
AVE WALL INSULATION		1	1		<b>1</b>	•	] 	1	<b>!</b>	1		! !	1
YES	34.004	7,161	5,197	1.963	111,179	7.186	3,993	110.942	6.182	4.760	4,723	2,869	1 1.85
10					4,539								
DONT KNOW					4.104			, .				2,460	•
OOM(S) CLOSED OFF WINTER 1978-79	1		1	}	<b>]</b>	1	1	1	1	1	9	1	1
Y5500000000000000000000000000000000000	4	1 3,085	2,402	684	6,427	4,222	2,205	8,397	4,591	1 3,806	2,947	2.048	89
	39,186	4	4	•									
DID NOT LIVE HERE LAST WINTER		1 1.827			1.949				1,816		1,202	•	

## TABLE 1A EXISTING ENERGY-RELATED CHARACTERISTICS BY CENSUS REGIONS (WINTER 1978-79)-CONTINUED (THOUSAND HOUSING UNITS)

	! ! !	   					CENSUS	REGIONS					
	TOTAL HOUSING UNITS	1   N! 	DRTHEAST		NORTH CENTRAL		RAL	I SOUTH			WEST		
	 	I ITOTAL L	URBAN	RURAL	  TOTAL 	URBAN	   Rur al 	TOTAL	URBAN	I IRURAL	TOTAL	I I URBAN L	RURAL
UNITS WITH SOME OR ALL STORM WINDOWS, AND SOME OR ALL STORM DOORS, AND ATTIC OR ROOF INSULATION	27,469	1 1 1 7 • 793	<b>5</b> ,599	2 <sub>9</sub> 194	         13,107	9,327	]       3+780	4.958	2,756	] [ ] ] 2,20?	1,610	748	862
UNITS WITH ONE OR MORE OF THESE TYPES OF INSULATION	  -   57•725	  -  13•630 	1 0 + 70 9	     2 • 921	      19,087	      13•567 	 	17•407	10.676	       6,730	7,601	     5,166	     2,435
UNITS WITH NONE OF THESE TYPES OF INSULATION	     9,733 	620	 	]     20 	]     734 	     564	     170 	     4,912 	     3,107	     1,805	3,466	     3,370	     96

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY. OFFICE OF THE CONSUMPTION DATA SYSTEM. OFFICE OF PROGRAM DEVELOPMENT, FRERGY INFORMATION AUMINISTRATION.

# TABLE 1B EXISTING ENERGY-RELATED CHARACTERISTICS BY CENSUS REGIONS (WINTER 1978-79) (PERCENTAGE OF HOUSING UNITS)

		   				CE	NSUS I	REGION:	 S		***************************************		
	TOTAL HOUSING Units	N.C	DRTHEAS	ST :	NOR	TH CENT	TRAL		SOUTH	i		WEST	
		TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL
TOTAL HOUSING UNITS 1/	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
STORM WINDOWS	.:						I		) 	•	; 	} 1	; ]
ALL WINDOWS COVERED	41	54	64	52	62	61	66	20	18	23	1 14	<b>i</b> 8	35
SOME WINDOWS COVERED	20	27	24	35	27	29	23	14	14	15	12	8	28
NO WINDOWS COVERED	39	9	11	3	10	10	10	56	69	62	74	85	37
STORM DOORS		<b>f</b>	} ,					,		3	1	5	<b>₹</b>
ALL DOORS COVERED	i i 37	1 48	46	53	61	61	62	22	18	23	1 11	9	1 20
SOME DOORS COVERED	24	30		39	24	24	24	25	26	24		1 12	26
NO DOORS COVERED	39	22	•		9				•	49			3
ATTE THEIRS ATTERS		•						į	•	<b>1</b>			1
ATTIC INSULATION HAVE INSULATION	! ! 69 !	l 65	I I 61 I	80	76	75	!   78	1 67	1 I 66 -	1 168	63	I I 55 ·	1 92
TABE TAPATE TAPATE TARGET OF THE TAPATE TAPA	67	6 9 3	pr	, 8U	10	10	1 15	1 67	60	1 55	1 53	1 33	1 72
BATTS ONLY	I I 32	38	33	56	35	35	35	I I 29	1 1 27	l 1 35	1 25	!   18	! ! 51
LOOSE FILL ONLY	1 21	Jo		35   14			31	21	21	•	23	24	•
BATTS AND LOOSE	1 < 1 1 3	1 17 1 3		3	,			1 21	1 3 1 3	1 22	1 23	•	
OTHER COST AND LOUDE AGE COST AS A SECTION OF THE COST AS A SECTION OF	1 1	1 3	; ) }!	. 1	1	1 1	2	1 1	1 1	1 1	1 2	1 2	1 4
TYPE UNKNOWN	11 1	1 11	١	6	*	11		•	1 13	1 J	1 11	1 11	•
QUANTITY	4 PT	į EL	; &< ;		t ro			, 12	1 13	1 7	1 11	1 + 1.	1 44
LESS THAN 3 INCHES.	; } 3	1 3	;   3	1	2	; 1 3	; !	2	1 3	1 2	1 4	1 3	; 1 8
3 TO 6 INCHES	1	1 29			1		42	1 33	29	1 39	4	*	9 52
MORE THAN 6 INCHES.	•	1 10	1 8		,	•	•	1 7	,	4			,
QUANTITY UNKNOWN		24	25	,		25	16	25	4		•		
NO INSULATION	•	1 19	•	8	•			22	•		23		,
DONT KNOW	4	15				•		11	13		14		
As a specific section of the section of the section of			1					!		!	1	1	1
HAVE WALL INSULATION	!	!	1	1	!		!	!	!	!			!
YE.S	50	50	46	4		51	70	49	45	55	43		
	27	25		21	1	•	19	30	29	31	1 34	38	25
DONT KNOW	22	25	28	12	21	24	1 11	21	[ 25 	1 13	1 23	29	1 5
ROOM(S) CLOSED OFF WINTER 1978-79			•	ry many	E	T T	•		1	İ	1	<u> </u>	
YES====================================	31	22	21	23	32	30	39	38	33	45	27	24	36
NC	58	66	64	70	58	60	52	51	54	48	63	65	55
DID NOT LIVE HERE LAST WINTER	11	13	14	7	10	10	9	1 11	1 1 3	7	1 11	1 11	10
	I	1	1	1	L	L	L	L	1	L	L	L	L

## TABLE 1B EXISTING ENERGY-RELATED CHARACTERISTICS BY CENSUS REGIONS (WINTER 1978-79)-CONTINUED (PERCENTAGE OF HOUSING UNITS)

						CI	ENSUS	REGION:	s		<del></del>		~ <b></b> -
	TOTAL   Housing  Units	<b>N</b>	ORTHEA:	s T	Nog:	TH CEN	TRAL	     	SOUTH		     	WEST	
	   	TOTAL	URBAN	  RURAL	I ! TOTAL	1   Urban 	  RURAL 	I   TOTAL 	IURBAN	  RURAL 	I   TOTAL	URBAN	T   RURAL   L
UNITS WITH SOME OR ALL STORM WINDOWS, AND SOME OR ALL STORM DOORS, AND ATTIC OR ROOF INSULATION	<b>4</b>	55	 	 	 	66	66	  -  - 	5.7)	25		9	34
UNITS WITH ONE OR MORE OF THESE TYPES OF INSULATION	     85	)     76	95 1	!       99	     96	96	       97	     78	       77	       79 	     69	       61	     96
UNITS WITH NONE OF THESE TYPES OF INSULATION	14	! ! 4 !	! 	!   ! 1	   4   4	     4 	!     3	     22 	 	     21 	   31 	     39 	† 

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, DEFICE OF THE CONSUMPTION DATA SYSTEM, DEFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

TABLE 2A
EXISTING ENERGY-RELATED CHARACTERISTICS BY PRIMARY HEATING FUEL (WINTER 1978-79)
(THOUSAND HOUSING UNITS)

	TOTAL	1	TYPE	OF PRIMAR	Y HEATING FU	EL	
	HOUSING UNITS	NATURAL GAS	FUEL OIL.     KEROSENE	LPG	ELECTRIC	Maoa	OTHER.
FOTAL HOUSING UNITS 1/	67,457	37,418	14.392	3,102	9,568	1,885	592
STORM WINDOWS		1	1 I				 
ALL WINDOWS COVERED	27,463	1 14,444	7 • 637	820	4,238	292	j 33
SOME WINDOWS COVERED	13,687	7,324	4-109	424	1,396	331	103
NO WINDOWS COVERED		15,650	3,146	1,858	3.935	1,262	456
STORM DOORS		gue. Gua	1 1				i i
ALL DOORS COVERED	25,003	1 14,157	6,916	3 34	2 • 513	418	107
SOME DOORS COVERED	16,362	8.589	4 • 354	493	1 2,375	398	153
NO DOORS COVERED	26.092	14,672	3,622	1,715	4,681	1+069	332
TTIC INSULATION			1				; 1
HAVE INSULATION	46 • 216	24,255	10,211	2,387	8,132	1.081	150
BATTS ONLY	21,724	11,231	5.323	1.250	3.059	779	83
LOOSE FILL ONLY		7,196	2.980	639	3.104	197	1 68
BATTS AND LOOSE		1,376	453	35	449	15	-
OTHER		313	193	18	205	21	
TYPE UNKNOWN		4.139	1 1.262	445	1 1.314	69	i -
QUANTITY	, , , , , , , , , , , , , , , , , , ,	1	1 172.172	113	1	4.7	ŧ Į
LESS THAN 3 INCHES	1,781	1,160	201	39	i 278 i	103	i -
3 TO 6 INCHES.		1 11.025	5 + 601	1,205	1 3,400 1	621	1 6
MORE THAN & INCHES		2,997	1,421	245	1 1.851 1	91	3
QUANTITY UNKNOWN		9.073	2,989	393	2,603	266	50
NO INSULATION	13.023	7.830	2,999	510	588	564	1 331
DONT KNOW	8,219	5,333	1,692	104	843	140	110
AAVE WALL INSULATION	•	•	1		1		
YES	34,004	15,778	7,431	1,922	6,892	363	į 11 <sup>4</sup>
NO	13,549	11,075	4,220	311	1.211	894	33
DONT KNOW	14,904	9,565	3,241	3 79	1 1 465	128	136
ROOM(S) CLOSED OFF WINTER 1978-79		marter of the same	1		State State		
YES		10,895	4,337	1.136	3,358	935	14
NO		22,882	8,993	1,535	4,611	800	36
DID NOT LIVE HERE LAST WINTER		3,540	1,512	430	1,599	150	8.

TABLE 2A
EXISTING ENERGY-RELATED CHARACTERISTICS BY PRIMARY HEATING FUEL (WINTER 1978-79)-CONTINUED
(THOUSAND HOUSING UNITS)

	! } ! Total	<b>!</b> !	TYPE	E OF PRIMAR	Y HEATING FU	EL	
	HOUSING !	NATURAL   GAS	  FUEL OTL;   KEROSENE	LP3	ELTOTRIC	наов	OTHER.
UNITS WITH SOME OR ALL STORM WINDOWS, AND SOME OR ALL STORM DOORS, AND ATTIC OR ROOF INSULATION	27,469	       15,128	7,636	793	         3,474	356	82
UNITS WITH ONE OR MORE OF THESE TYPES OF INSULATION	57 <sub>1</sub> 725	30.767	13,827	2•648	8,823	1,350	310
UNITS WITH NONE OF THESE TYPES OF INSULATION	9,733	6,651	1,065	,     454 	745	536	281

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH \*-\* REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY. OFFICE OF THE CONSUMPTION DATA SYSTEM. OFFICE OF PROGRAM DEVELOPMENT. ENERGY INFORMATION ADMINISTRATION.

# TABLE 2B EXISTING ENERGY-RELATED CHARACTERISTICS BY PRIMARY HEATING FUEL (WINTER 1978-79) (PERCENTAGE OF HOUSING UNITS)

	TOTAL	1	T <b>Y</b> PE	OF PRIMAR	Y HEATING FU	E <b>L</b> 	
	HOUSING Units	NATURAL GAS	  FUEL OIL+     KEROSENE	LPG	ELECTRIC	NOOD	OTHER NONE
TOTAL HOUSING UNITS 1/	100%	100%	100%	190%	109%	100%	100
STORM WINDOWS		1	1		]		[ ]
ALL WINDOWS COVERED	41	39	ì 51	26	44	15	6
SOME WINDOWS COVERED	2.0	20	1 28	14	i 15 i	18	17
NO WINDOWS COVERED	39	42	21	60	41	67	77
STORM DOORS							
ALL DOORS COVERED	37	1 38	46	29	i 26 i	22	19
SOME DODRS COVERED	24	23	29	16	25	21	26
NO BOORS COVERED	33	39	24	55	49	57	56
ATTIC INSULATION		1	1		! ! !		} [
HAVE INSULATION	69	65	69	77	85	57	25
BATTS ONLY	32	30	36	40	32	41	1 1 4
LOOSE FILL ONLY	21	1 19	20	21	32	10	1 11
BATTS AND LOOSE		4	i 3	1	5 1	1	i -
OTHER	1	1	i	ī	2 (	1	i -
TYPE UNKNOWN	11	11	8	14	14	4	<u> </u>
QUANTITY		!			! !	_	!
LESS THAN 3 INCHES		3	1	1	3 1	_5	! -
3 TO 6 INCHES		29	38	39	36	33	11
MORE THAN 6 INCHES		8	1 10	8	1 19 1	5	1 6
QUANTITY UNKNOWN		2 4	20	29	27	14	8
ONT KNOW	19 12	1 21	! 20 ! 11	20	1 6 1	35 7	56 19
HAVE WALL INSULATION		1	1	9			9
YES INSULATION	50	1 45	50	62	72	46	1 1 20
NO	27	1 30	28	26	1 13 1	47	57
SONT KNOW	22	26	22	12	15	7	23
ROOM(S) CLOSED OFF WINTER 1978-79		1	1	1	} ;		
YES	•	29	1 29	37	35	50	1 25
NO	5.8	61	50	50	48	42	51
DID NOT LIVE HERE LAST WINTER		1 10	1 10	1 14	17	8	1 14

	TOTAL	[ ]	TYP	E OF PRIMAR	Y HEATING FU	JEL	
	HOUSING UNITS	NATURAL SAS	  FUFL OIL,   KEROSENE	LPG	ELECTRIC	H000	OTHER, NONE
UNITS WITH SOME OR ALL STORM WINDOWS, AND SOME OR ALL STORM DOORS, AND ATTIC OR ROOF INSULATION	41	 	1 1 1 1 1 51	 	36	19	14
UNITS WITH ONE OR MORE OF THESE TYPES OF INSULATION	26	82	93	85	92	72	52
UNITS WITH NONE OF THESE TYPES OF INSULATION	14	† 	i ! !	 	 	28	48

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIN ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ERREY INFORMATION ADMINISTRATION.

# TABLE 3A EXISTING ENERGY-RELATED CHARACTERISTICS BY DEGREE DAYS (WINTER 1978-79) (THOUSAND HOUSING UNITS)

	TOTAL		HEATING A	AND COOLING DEGRE	E DAYS	
	HOUSING UNITS	<2008 CDD   AND   >7000 HDD	<2000 CDD   AND   5500-7000 HDD	<pre>&lt;2000 CDD</pre>	<2000 CDD AND <4000 HDD	>2000 CDD   AND   <4000 HDD
TOTAL HOUSING UNITS 1/	67,457	5 <b>,7</b> 66	19+605	17.397	14.520	10,169
STORM WINDOWS		[ 	1	<b>!</b>		1
ALL WINDOWS COVERED	27,463	4.285	11,432	8.792	2,377	์ 1 658
SOME WINDOWS COVERED	13,687	1,211	4.947	4.999	1,799	731
NO WINDOWS COVERED	26,307	350	3,226	3,606	10,344	8.780
STORM DOORS		Para Communication Communicati	1			
ALL DOORS COVERED	25,003	2,658	11.178	7 • 669	2,519	960
SOME DOORS COVERED	16,352	1,520	4.891	5,291	2,866	1,695
NO DOORS COVERED	26,032	1,488	3,517	4,437	9 1 3 6	7,514
ATTIC INSULATION		} !	1			1
HAVE INSULATION	45 • 215	4,642	15,056	11.282	9,079	6,157
BATTS ONLY	21 + 724	1,749	8,062	5.976	3, 365	2,575
LOOSE FILL ONLY	14.183	1,958	3.758	2,994	3.505	1,959
BATTS AND LOOSF	2,323	255	1 390	572	296	316
OTHER	750	27	215	154	275	78
TYPE UNKNOWN	7,231	643	1 2.130	i 1.587 i	1.641	1,229
QUANTITY			İ	i		]
LESS THAN 3 INCHES	1 + 731	j 96	570	1 457 1	556	102
3 TO 6 INCHES	21,313	1,779	7,186	5,854	4,094	3,005
MORE THAN 6 INCHES	5,637	1,323	2,565	1,390 1	828	532
QUANTITY UNKNOWN	15.877	1 1.444	1 4,735	3,582	3,501	2,517
NO INSULATION	13,023	584	2,423	3,724	3,823	2,470
DONT KNOW	9,218	540	2.127	2,391	1.618	1,542
NAVE WALL INSULATION				1		
YES	34 + 3 0 4	3,759	11 • 261	8,544	5,537	3,903
NO	18,547	1,040	3,979	5,031	4,725	3,775
DONT KNOW	14,304	966	4,365	3,822	3,259	2,491
OOM(S) CLOSED OFF WINTER 1978-79			!			
ES-20-0000000000000000000000000000000000	20:853	1,410	5,023	5,631	5,708	3+091
10	39,186	3,093	12.779	10,052	7+423	5,769
OID NOT LIVE HERE LAST WINTER	7,414	1,263	1 1,738	1 1,713	1,320	1,319

## TABLE 3A EXISTING ENERGY-RELATED CHARACTERISTICS BY DEGREE DAYS (WINTER 1978-79)-CONTINUED (THOUSAND HOUSING UNITS)

	TOTAL		HEATING /	AND COOLING DEGRE	E DAYS	
	HOUSING UNITS	<2000 CDD AND >7000 HDD		<2000 CDD AND 4000-5499 HDD	<2000 CD0 AND <4000 HOD	>2000 CDD AND <4000 HDD
UNITS WITH SOME OR ALL STORM WINDOWS, AND SOME OR ALL STORM DOORS, AND ATTIC OR ROOF INSULATION	?1 <b>+</b> 947	3•31¢	 	8,503	2,743	683
UNITS WITH ONE OR MORE OF THESE TYPES OF INSULATION	57°725	5,710	 	16,126	10,297	6 <del>-</del> 871
UNITS WITH NONE OF THESE TYPES OF INSULATION	, 733 1	56	 	1,271	4,229	3•298

1/ EXCLUDES RUTEDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS YABLE.

SOUPCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY. OFFICE OF THE CONSUMPTION DATA SYSTEM.
OFFICE OF PROGRAM DEVELOPMENT. FNERGY INFORMATION ADMINISTRATION.

TABLE 3B
EXISTING ENERGY-RELATED CHARACTERISTICS BY DEGREE DAYS (WINTER 1978-79)
(PERCENTAGE OF HOUSING UNITS)

	TOTAL		HEATING	AND COOLING DEGRE	E DAYS	ر المراجعين المراجعين المراجعين المراجعين المراجعين المراجعين المراجعين المراجعين المراجعين المراجعين
	HOUSING UNITS	<2000 CDD - AND - >7000 HDD	<2000 CDD   AND   5500-7000 HDD	<pre>&lt;2000 CDD AND 4000-5499 HDD</pre>	<2000 CDD AND <4000 HDD	>2000 CDD   AND   <4000 HDD
TOTAL HOUSING UNITS 1/	100%	1007	100%	100%	100%	100%
STORN WINDOWS		1				
ALL WINDOWS COVERED	41	73	1 58	51	16	1 6
SOME WINDOWS COVERED	20	1 21	25	29	12	7
NO WINDOWS COVERED	3 9	6	16	1 21	71	1 86
STORM DOORS			Colors S			
ALL DOORS COVERED	57	1 46	57	1 44	1.7	1 9
SOME DOORS COVERED	24	1 28	1 25	1 30	20	17
NO DOORS COVERFD	24 39	1 26	18	26	20 63	74
•		i		1		i
TTIC INSULATION		1	İ	1		9
TYPE	69	81	77	65	63	61
BATTS ONLY	32	30	1 41	34	23	25
LOOSE FILL ONLY	21	34	19	i 17	24	1 19
BATTS AND LOOSE	5	4	1 5	3	?	1 3
CTHEROCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCO	1	-	1	1 1	2	1
TYPE UNKNOWN	1 7	11	11	9	11	12
QUANTITY		ALIEN AND AND AND AND AND AND AND AND AND AN	S	<b>†</b>		•
LESS THAN 3 INCHES	₹	1 2	3	1 3	r <sub>k</sub>	1
3 TO 6 INCHES	5?	31	37	34	2.8	30
MORE THAN 6 INCHES	10	23	13	9	6	5
QUANTITY UNKNOWN	24	1 25	24	21	25	25
NO INSULATION	1 7	10	1 12	21	26	24
DONT KNOW	12	9	j 11	14	11	15
AVE WALL INSULATION		9		Provide the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second seco		1
YES ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARREST ARRES	5.0	1 65	57	1 49	45	1 38
NO 222222222222222222222222222222222222	27	1 18	1 20	1 29	33	37
DONT KNOW	22	1 17	1 22	,	22	1 24
្ត្រី ក្រុកក្រុមក្រុមក្រុមក្រុមក្រុមក្រុមក្រុម	47	g i. f	1 44 1	1 22 1	22	1 4
OOM(S) CLOSED OFF WINTER 1978-79				1		ì
'ES	31	24	1 26	32	39	30
10	5 ?	54	1 65	58	52	57
ID NOT LIVE HERE LAST WINTER!	11	j 22	9	10	9	i 13

## TABLE 3B EXISTING ENERGY-RELATED CHARACTERISTICS BY DEGREE DAYS (WINTER 1978-79)-CONTINUED (PERCENTAGE OF HOUSING UNITS)

	TOTAL		HEATING A	AND COOLING DEGRE	EE DAYS	
 	HOUSING UNITS	<2000 CDD   AND   >7000 HDD	<2000 CDD   AND   5500-7000 HDD	<2000 C00 AND 4000-5499 HDO	<2000 CDD AND <4000 GDD	>2000 COO AND <4000 HOO
UNITS WITH SOME OR ALL   STORM WINDOWS, AND SOME   OR ALL STORM DOORS, AND   ATTIC OR ROOF INSULATION	4 1	! 	 	!         49	10	 
UNITS WITH ONE OR MORE OF THESE TYPES OF INSULATION	95	1 39	; 	73	71	68 
UNITS WITH NONE OF THESE   TYPES OF INSULATION	14	I I I	! ! 5	! ! ! 7	29	1   32

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO POUNDING. A DASH "-" REPRESINTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, DEFICE OF THE CONSUMPTION DATA SYSTEM: OFFICE OF PROGRAM DEVELOPMENT, THERBY INFORMATION ADMINISTRATION.

TABLE 4A
EXISTING ENERGY-RELATED CHARACTERISTICS BY TYPE OF HOUSING STRUCTURE (WINTER 1978-79)
(THOUSAND HOUSING UNITS)

	TOTAL		SINGLE	FAMILY DET	ACHED		SINGLE	BUILDING	MOBILE	
	HOUSING Units	TOTAL	1-4 ROOMS	5 Rooms	6 RO <b>OM</b> S	7 OR MORE ROOMS		WITH 2-4 UNITS	HOME   	OTHER   
OTAL HOUSING UNITS 1/	67,457	48,547	8,768	12,696	11,850	15,233	3,128	10,749	4,805	23
TORM WINDOWS				1		} 1	<b>!</b>	<b>,</b>	j	
ALL HINDONS COVERED	27,463	19,719	2,622	5.071	4.984	7,040	1.721	4,220	1.708	
SOME WINDOWS COVERED		10,776	1,655	2,456	2,821	•	342	•	618	
NO WINDOWS COVERED	26,307	18,053	4,491	5,169	4.045		1.066	•	2,478	
TORM DOORS	1			; ;		1	i I			
ALL DOORS COVERED	25,003	19,379	3,486	5,238	4,989	5,666	1,535	3,043	988	
SOME DOORS COVERED	16,362	13,168	1,522	3,244	3.196	5.206	504	1,374	1,125	
NO DOORS COVERED	26,092	15,999	3,760	4 • 214	3,665	4,360	992	•	2,691	
TTIC INSULATION	!					ì	} \$	1	[	
HAVE INSULATION	46,215	37,410	5,129	9,632	9,440	13,210	1,648	3,775	3,242	1
BATTS ONLY	21,724	18,114	2,846	4,515	4,459	6,296	616	1,327	1,540	1
LOOSE FILL ONLY	14,133	12,007	1,295	3,080	3,087	4,545	674	•		
BATTS AND LOOSE	2,328	2,265	199	677	591	798	15	31	17	-
OTHER	750	674	123	136	214	200	i -	i -	76	•
TYPE UNKNOWN	7,231	4:350	665	1,224	1,099	1 1 371	343 1	1,203   	1,334	
LESS THAN 3 INCHES	1,791	1,466	251	311	417	487	89	1112	99	
3 TO 6 INCHES	21,919	18,804	2,522	4,943	5,001	6,439	730	1 1:118	1,220	
MORE THAN & INCHES	6,637	5 • 614	639	1,561	1,323	2.086	283	521	219	-
QUANTITY UNKNOWN	, ,	11,526	1,718	2,917	2,694	4,198	546	2,023	1,704	
NO INSULATION	13.023			1,999	2,035	1,441	. 820	3 = 0 9 4	996	
DONT KNOW	8 • 213	3,063	1.041	1,065	375	582	661	3,880	566	,
AVE WALL INSULATION					i	1		•	† 	
YES	34,004	26,106	3,513	6,753	6•689	9,151	1,374	3,060	3,390	
NO	18,549	13,950		3+419	3,380	•	866	•	•	1
DONT KNOW	14,784	8,491	1,669	2,524 1	1,781	2,517	888	4,755	736	
OOM(S) CLOSED OFF WINTER 1978-79				! 		1104	1	1		
YESanoonneenanneenanneenannee	20,858	17,371	2,812	4,268	4,542	5,749	71.8	1,539	1,206	
NO	39.185	27,591	5,133	7,425	6,776	8,257	2,143	5,576	2,614	1
DID NOT LIVE HERE LAST WINTER	7:414	3 • 585	823	1,003	531	1,227	257	2,515	985	



TABLE 4A
EXISTING ENERGY-RELATED CHARACTERISTICS BY TYPE OF HOUSING STRUCTURE (WINTER 1978-79)-CONTINUED
(THOUSAND HOUSING UNITS)

	TOTAL		SINGLE	FAMILY DET	ACHED		SINGLE	BUILDING	MOBILE	
	HOUSING UNITS	TOTAL	1-4 ROOMS	5 ROOMS	6 R0 <b>0M</b> S	7 OR MORF ROOMS	FAMILY	WITH 2-4 UNITS	HOME	OTHER   
UNITS WITH SOME OR ALL STORM WINDOWS, AND SOME OR ALL STORM DOORS, AND ATTIC OR ROOF INSULATION	27+463	23+462	2,705	5,799	6,387	8,572	1,225	1,413	1+272	36
UNITS WITH ONE OR MORE OF THESE TYPES OF INSULATION	5 <b>7,72</b> 5	43+023	5 <b>y 7</b> 5 5	11,069	10,604	 	     2,613	 	3 <sub>+</sub> 980	203
UNITS WITH NONE OF THESE TYPES OF INSULATION		5+52 <b>4</b>	2,014	[     1,628	1.246	   636 	   515 	2,850 L	824	29 

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, DEFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

TABLE 4B
EXISTING ENERGY-RELATED CHARACTERISTICS BY TYPE OF HOUSING STRUCTURE (WINTER 1978-79)
(PERCENTAGE OF HOUSING UNITS)

	TOTAL		SINGLE	FAMILY DE	FACHED		SINGLE	   BUILDING	MOBILE	   
	UNITS	TOTAL	1-4   ROOMS	5 ROOMS	6 Rooms	7 OR MORE ROOMS		WITH 2-4   UNITS	HOME	OTHER   
FOTAL HOUSING UNITS 1/	100%	100%	100%	100×	100%	100%	100X	100%	100%	1007
STORM WINDOWS			] {	•		•		9	1	1
ALL WINDOWS COVERED.	41	41	30	40	42	46	55	39	36	42
SOME WINDOWS COVERED	20	22	1 19	19	24	25	1 11	18	1 13	1 25
NO WINDOWS COVERED	39	37	51	41	34	29	34	43	52	32
STORM DOORS		<b>j</b>	9	¥	1	!	•	<b>4</b>	•	1
ALL DOORS COVERED	37	; ; 40	40	41	42	37	49	1 28	21	26
SOME DOORS COVERED	24	27	17	1 26	27	34	1 19	13	23	40
NO DOORS COVERED	39	33	43	33	31	29	32	59	56	34
ATTIC INSULATION		1	!	1	1	•	1	g 8 8	1	1
HAVE INSULATION	69	77	58	76	! ! 80	87	53	i 1 35	67	i I 62
TYPE	<u> </u>		1 00	,	, 50	1	, ,,	, 55	1	, ,,,
BATTS ONLY	32	37	32.	1 36	38	41	, I 20	12	32	55
LOOSE FILL ONLY	21	25	1 15	24	26	30	22	11	6	6
BATTS AND LOOSE	3	5	1 2	5	5	5	-	1 -		1 -
OTHER	1	i	,	i	1 2	i i	: : -	-	2	! _
TYPE UNKNOWN	11		1 8	1 10	9	9	1 11	11	28	! _
QUANTITY	* *		•	1	;	, , , , , , , , , , , , , , , , , , ,	11	1 11	<b>2</b> 2 13	
LESS THAN 3 INCHES	3	3	3	2	4	1 3	3	1	2	1 5
3 TO 6 INCHES	32	3.3	29	38	42	42	23	10	25	20
MORE THAN 6 INCHES	10	12	7	12	11	14	9	5	1 5	-
QUANTITY UNKNOWN	24	24	20	23	23	28	17	19	35	35
NO INSULATION	19	17	30	1 16	17	9	26	29	21	1 17
DONT KNOW	12	6	12	8	3	4	21	36	12	21
TAVE HALL INSULATION		† †	1	1	•		1	1	] }	1
YES	50	54	40	53	I 56	60	44	28	71	32
NO	27	29	41	27	29	23	28	27	1 14	53
DONT KNOW	22	17	1 19	20	15	17	28	44	15	14
?  ROOM(S) CLOSED OFF WINTER 1978-79		1	1	1		# 1	<b>.</b>	1	1	1
YES	31	35	32	34	38	1 38	23	1 14	1 25	1 11
NO 222222222222222222222222222222222222	58	, 1 57	59	58	57	54	69	1 62	1 54	62
DID NOT LIVE HERE LAST WINTER		1 7	1 9	1 30	1 4	1 8	1 9	1 23	1 20	27

Ŋ

### TABLE 4B EXISTING ENERGY-RELATED CHARACTERISTICS BY TYPE OF HOUSING STRUCTURE (WINTER 1978-79)-CONTINUED (PERCENTAGE OF HOUSING UNITS)

	TOTAL	   	SINGLE	FAMILY DE	rached		SINGLE	!    BUILDING	MOBILE	
	HOUSING ONLY ONLY ONLY ONLY ONLY ONLY ONLY ONLY	TOTAL	1 1-4   ROOMS	   5   ROOMS	6   ROOMS	7 OR MORE ROOMS	•	WITH 2-4   UNITS	HOME I	OTHER
UNITS WITH SOME OR ALL STORM WINDOWS, AND SOME OR ALL STORM DOORS, AND ATTIC OR ROOF INSULATION	 	         48	! ! ! ! ! 31	           45	 	         56	39	 	26	42
UNITS WITH ONE OR MORE OF THESE TYPES OF INSULATION	[ 	89	 	87	     89	     96	84	 	83	91
UNITS WITH NONE OF THESE TYPES OF INSULATION	!     14 	 	 	 	11	! ! ! 4	! 	 	17	 

1/ FXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, DEFICE OF THE CONSUMPTION DATA SYSTEM, UFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

# TABLE 5A EXISTING ENERGY-RELATED CHARACTERISTICS BY YEAR HOUSE BUILT (WINTER 1978-79) (THOUSAND HOUSING UNITS)

; ;	TOTAL	 		YEA	R HOUSE BU	ILT		
	HOUSING	1975 OR LATER	1970   TO   1974	1965   TO   1969	1960 TO 1964	1950     1950     1959	1940 TO 1949	1939 OR EARLIER
FOTAL HOUSING UNITS 1/	67,457	4,869	7,498	6,493	6,530	 	7,389	22,198
STORM WINDOWS	'		l	1		!!!		1
ALL WINDOWS COVERED	27+463	2.853	3,372	2,253	2,284	4,954	2,723	9,024
SOME WINDOWS COVERED	13,587	374	890	971	1.302	2,617	1,525	5,009
NO WINDOWS COVERED	26 • 307	1,641	3,237	3,269	2,944	4,919	3,141	7,165
		1	Special Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of th	ļ		! !		
STORM DOORS			!			! !		1
ALL DOORS COVERED	25,003	1,050	1.954	1,475	2.129	5.766	5,159	9,460
SOME DOORS COVERED	16,362	999	1+943	1,726	1,738	3,230	1,723	4,95
NO DOORS COVERED	26,092	2,805	3,601	3,292	20614	3,484	2,507	7,785
ATTIC INSULATION		! !		1		; ; [ ]		-
HAVE INSULATION	46,216	4,209	5,525	4.641	5,358	10.032	4,823	11,628
BATTS UNLY	21,724	1,494	2,425	2,085	2,339	5 • 4 9 8	2.438	5,445
LOOSE FILL ONLY	14,193	1,713	1,594	1.409	1,546	2,909	1,315	1 3,698
BATTS AND LOOSE	2,328	186	181	146	343	591	336	545
OTHER	750	74	62	75	138	118	65	1 21
TYPE UNKNOWN	7,231	742	1,262	926	991	915	470	1.72
QUANTITY		!	• • • •	!	707	!	4.60	1 45
LESS THAN 3 INCHES	1,791	126	104	117	307	506	168	1 453
3 TO 6 INCHES	21,913	1,264	2,375	2,216	2 • 239	5,295	2 • 567	5,36
MORE THAN & INCHES	6 + 637	1,402	1.120	548	720	1.374	354	1.119
QUANTITY UNKNOWN	15,879	1 9417	1.925	1,760	2,091	2 • 857	1 + 635	4,194
NO INSULATION	13,023	250	777	906	674	1,630	1,464	7,322
DONT KNOW	8,218	410	1,196	946	499	819	1,102	3,248
HAVE WALL INSULATION		1		1		1 1		1
YES.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	34,004	4,070	5,195	3,808	3:636	6,431	3,265	7,598
NO 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	13,549	279	882	1.037	1,341	3.708	2,179	9,123
MONT KNOW	14,304	520	1,422	1,548	1,553	2,341	1,943	5,47
!  ROOM(S) CLOSED OFF WINTER 1978-791		X		MAP or pass				1
YFS	20 4858	, 1 1,016 1	2,325	1,442	2,318	, 1 4,030 1	2,453	7,21
NO	39,186	1 2,486	4,080	4.002	3,759	7,745	4.254	12,849
DID NOT LIVE HERE LAST WINTER	7,414	1,366	1,092	1.050	453	654	562	2,137

#### TABLE 5A EXISTING ENERGY-RELATED CHARACTERISTICS BY YEAR HOUSE BUILT (WINTER 1978-79)-CONTINUED (THOUSAND HOUSING UNITS)

	TOTAL	, }		YE	R HOUSE BUT	ILT		
	HOUSING   UNITS !	1975     0R     LATER	1970 1970 1974	1965 10 1969	1960 TO 1964	1950   10   1959 	   1940   TO   1949	1939   OR   EARLIER
UNITS WITH SOME OR ALL STORM WINDOWS, AND SOME OR ALL STORM DOORS, AND ATTIC OR ROOF INSULATION	27,469	1	2,777	1 • <del>9</del> 75	2,801	   6.559	3,297	 
UNITS WITH ONE OR MORE OF THESE TYPES OF INSULATION	57• <i>12</i> 5	! 4,482	5 <b>,</b> 3 5 0	5+582	5 <sub>7</sub> 863	     11,099	6,092	18,25°
UNITS WITH NONE OF THESE TYPES OF INSULATION	]     ∂,733	] 	1,148	911	667	1,381	Í     1•297	 

I/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 VATIONAL INTERIM ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

# TABLE 5B EXISTING ENERGY-RELATED CHARACTERISTICS BY YEAR HOUSE BUILT (WINTER 1978-79) (PERCENTAGE OF HOUSING UNITS)

	TOTAL			YE!	R HOUSE BU!	TLT .		
	HOUSING UNITS	1975 OR LATER	1970 TO 1974	1965 TO 1969	1960 TO 1964	1950 TO 1959	1940 TO 1949	1 1939 OR EARLIER
TOTAL HOUSING UNITS 1/	100%	100%	100%	100%	100%	100%	100%	100%
STORM WINDOWS			7					} *
ALL WINDOWS COVERED	41	59	45	35	35	40	37	41
SOME WINDOWS COVERED		8	12	15	20	21	21	27
NO WINDOWS COVERED	39	34	4.3	50	95	39	43	32
STORM DOORS		į T	deservices de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la comp	•				1
ALL DOORS COVERED	37	22	26	23	33	46	43	1 43
SOME DOOR'S COVERED	24	21	26	27	27	25	23	22
NO BOORS COVERED		5R	48	51	40	28	34	35
TTIC INSULATION	! !	í 1		1				
HAVE INSULATION	69	86	74	71	82	90	65	52
TYPE		~ .	[	***				!
BATTS ONLY	32	31	32	32	36	44	33	25
LOOSE FILL ONLY	21	35	21	22	24	23	18	17
BATTS AND LOOSE	3	4	2	2	5	5	5	] 2
OTHER	1	2 15	1	1	2	1	1 1	1
TYPE UNKNOWN	11	15	17	14	15	7	9	8
LESS THAN 3 INCHES	<b>1</b>	, ,		2	5		1	
3 TO 6 INCHES		3 1	.1			4	2	2
MOPE THAN 6 INCHES		26   29	32	8	34	\$ \$2	36	26
QUANTITY UNKNOWN		27     <b>2</b> 9	15   25	27	11	11	5	5
NO INSULATION	1 2 4	5		14	32 10	23	22 1 20	1 19
DONT KNOW	12	8	10   16	15	8	13	15	1 15
HAVE WALL INSULATION			Ī			# T T T T T T T T T T T T T T T T T T T	· management of	1
AESTON THEORY IN	50	1 94 1	69		56	f 52	! ! 44	1 34
NO	27	6	12	59 16	21	1 30	1 29	1 41
DONY KNOWALLAND	23	11	19	25	24	[ 1.9 [ 3.0	25	25
ROOM(S) CLOSED OFF WINTER 1978-79	<b> </b>		1			• •		•
YES as a s a s a s a s a s a s a s a s a s	,	21	31	22	36	1 33	1 33	1 32
NA	58	51	54 I	62	58	52	1 58	1 58
DID NOT LIVE HERE LAST WINTER.		7 29 1	15	16	J 7	; 32	1 9	1 10

## TABLE 58 EXISTING ENERGY-RELATED CHARACTERISTICS BY YEAR HOUSE BUILT (WINTER 1978-79)-CONTINUED (PERCENTAGE OF HOUSING UNITS)

	!     Total	} ! !		YE	AR HOUSE BUT	[LT		
	HOUSING   UNITS	1975 OR LATER	1970 FO 1 1974	1965 10 1969	1360 10 1364	1950 T0 1953	1940 TO 1949	1939   1939   OR   EARLIER 
UNITS WITH SOME OR ALL STORM WINDOWS, AND SOME OR ALL STORM DOORS, AND ATTIC OR ROOF INSULATION	 	<b>)</b> 	3.7	1 1 30	4.5	43	 	58
UNITS WITH ONE OR MORE OF THESE TYPES OF INSULATION	in	*	 	     96	  -   98	<b>1</b> 1 <b>3</b> 3	; ;   32	82
UNITS WITH NONE OF THESE TYPES OF INSULATION	14	1 1 7 8	! 	!     14	 	 	 	 

I/ 'XCLUDES HUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR POUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY. OFFICE OF THE CONSUMPTION DATA SYSTEM.
OFFICE OF PROGRAM DEVELOPMENT, FRERGY INFORMATION ADMINISTRATION.

TABLE 6A
EXISTING ENERGY-RELATED CHARACTERISTICS BY TYPE OF AIR CONDITIONING (WINTER 1978-79)
(THOUSAND HOUSING UNITS)

! !	TOTAL   Housing		OF ROOMS WIT	TH AIR	  CENTRAL AIR    CONDITIONING		  CENTRAL A/C   AND
	UNITS	NONE	SOME	ALL	ONLY	ONLY	ROOM UNITS
TOTAL HOUSING UNITS 1/	67,457	29,936	17,775	19,747	15,012	22,274	235
STORM WINDOWS	1						1
ALL WINDOWS COVERED	27:463	11.300	8 • 246	7,909	1 6,484 1	9,589	i 81
SOME WINDOWS COVERED	13,697	6.218	4,249	3,220	2,317	5,067	85
NO WINDOWS COVERED	25.307	12,409	5,280	8.618	6,211	7,618	69
STORM DOORS		1	' ! !		; !		1
ALL DOORS COVERED	25.003	10,363	3,184	5,457	4.974	9,587	1 80
SOME DOORS COVERED	16,362	6,358	4,615	5,387	4 . 176	5,745	82
NO DUORS COVERED	26,092	13,214	4,975	7,903	5,863	6,942	74
ATTIC INSULATION	1				} •		1
HAVE INSULATION	46,216	18:058	12,215	15,943	12,854	15,069	235
BATTS ONLY	21,724	9.714	5,077	6,933	5 - 140	7,732	1 138
LOOSE FILL ONLY	14,183	5,022	3,497	5+664	4,897	4,167	98
BATTS AND LOOSE	2+328	971	539	918	804	553	i -
OTHER	750	332	179	240	1 149	269	i -
TYPE UNKNOWN	7+231	3,119	1,923	2,188	1 1.864	2,247	<u> </u>
LESS THAN 3 INCHES	1,781	777	532	472	324	642	38
3 TO 5 INCHES	21,919	8 + 663	5,726	7,530	6 • 031	7,113	112
MORE THAN 6 INCHES	6,537	2.738	1,375	2,525	1 2,260	1,574	65
QUANTITY UNKNOWN	15,879	5,880	4,583	5.416	4 . 239	5,740	19
NO INSULATION	13,023	7,904	3+559	1,561	1 756 1	4,364	-
DONT KNOW	8,218	3,974	2,001	2,243	1 1,402	2,842	_
HAVE WALL INSULATION			; 		1		]
YES	34 • 0 04	13,788	8 • 288	11,928	9,705	10,378	1 33
NO	19,549	9,237	5,490	3+322	2,588	6,689	35
DONT KNOW	14,904	6,910	3,996	3,997	2,718	5,208	68
ROOM(S) CLOSED OFF WINTER 1978-79	1				1		1
YES====================================	20,358	8,607	6 , 555	5,696	3,970	8:151	120
NP	39+186	17,406	10,069	11,/12	9.294	12,385	100
DID NOT LIVE HERE LAST WINTER	7 - 414	3,923	1.151	2,333	1 1.748	1,727	1 15

	TOTAL   Housing		OF ROOMS WIT	H AIR	  CENTRAL AIR  CONDITIONING   ONLY	I I INDIVIDUAL ROOM UNITS ONLY	  CENTRAL A/C   AND
	UNITS	NONE	S04E	1LL			ROOM UNITS   
UNITS WITH SOME OR ALL STORM WINDOWS, AND SOME OR ALL STORM DOORS, AND ATTIC OR ROOF INSULATION	27,450	10+657	৪•610	વ • 201	6.870	9,815	1 127
UNITS WITH ONE OR MORE OF THESE TYPES OF INSULATION	57.725 !	23.475	16•069	17,781	13.786	1 <sup>9</sup> •828	235
UNITS WITH NONE OF THESE TYPES OF INSULATION	7,733	6 <b>•</b> 060	1,706	1,966	1.226	2,446	-

I/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DAYA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH M-W REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY. OFFICE OF THE CONSUMPTION DATA SYSTEM. OFFICE OF PROGRAM DEVELOPMENT. ENERGY INFORMATION ADMINISTRATION.

TABLE 68
EXISTING ENERGY-RELATED CHARACTERISTICS BY TYPE OF AIR CONDITIONING (MINTER 1978-79)
(PERCENTAGE OF MOUSING UNITS)

	TOTAL HOUSING UNITS		OF ROOMS WITCOMDITIONING	  CEMTRAL AIR    CONDITIONING		
		NONE	SOME	ALL	500 ST	ONL,Y
TOTAL HOUSING UNITS 1/	100%	100%	100%	100%	100%	100%
STORM WINDOWS		-				
ALL WINDOWS COVERED	41	38	46	40	43	43
SOME WINDOWS COVERED	20	21	24	16	16	23
NO WINDOWS COVERED	39	41	30	44	41	34
STORM DOORS		4			B	
ALL DOORS COVERED	37	35	45	33	33	43
SOME DOORS COVERED	24	21	25	27	28	26
NO DODRS COVERED.	37	44	23	40	39	31
ATTIC INSULATION		•	100m		5 9	
HAVE INSULATION	69	60	69	81	86	68
BATTS ONLY	32	29	34	35	1 35 1	35
LOOSE FILL DNLY	21	17	20	29	1 35	19
BATTS AND LOOSE	3	3	1 3	1 5	1 5 1	3
OTHERODOGOGOGOGOGG	1	, , , , , , , , , , , , , , , , , , ,	1 1	1	1 1 1	1
TYPE UNKNOWN	11	1 10	, . 1 11	1 11	1 12	10
DUANTITY	1.1	10	) LI	1 11	1 12 1	
LESS THAN 3 INCHES	٦ '٦	3	3	2	2 1	3
3 TO 5 INCHES	32	29	32	38	1 40 1	32
MORE THAN 6 INCHES	1.0	9	8	13	15	ŗ
QUANTITY UNKNOWN	24	20	26	27	28	26
NO INSULATION	17	25	20	8	5	20
DONT KNOWs see see see see see see see	12	13	11	11	3	1.3
HAVE WALL INSULATION		TO 100 100 100 100 100 100 100 100 100 10	¥1.	pa. verse	•	<u> </u>
YES	50	45	47	60	65	47
NO	27	31	31	1,9	17	30
DONT KNOW	22	23	22	20	18	23
ROOM(S) CLOSED OFF WINTER 1978-79		955		the street		í <b>!</b>
YES		, 29	37	29	27	37
NC	58	! 58	57	59	1 62	56
DID NOT LIVE HERE LAST WINTER		1.3	5	1 12	1 12	8

TABLE 68 EXISTING ENERGY-RELATED CHARACTERISTICS BY TYPE OF AIR CONDITIONING (MINTER 1978-79)-CONTINUED (PERCENTAGE OF HOUSING UNITS)

i !	TOTAL I Housing !		OF ROOMS WI	CENTRAL AIR	•	
	UNITS	NONE	SOME	ALL	! ! .1	ONLY
UNITS WITH SOME OR ALL STORM WINDOWS, AND SOME OR ALL STORM DOORS, AND ATTIC OR ROOF INSULATION	41	30	1 1 1 1 1	1	         46	÷ + +
UNITS WITH ONE OR MORE OF THESE TYPES OF INSULATION	85	80	90	70	92	F8
UNITS WITH NONE OF THESE TYPES OF INSULATION	1 a	20	10	1 10	8	11

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH #-# REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT. ENERGY INFORMATION ADMINISTRATION.

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TABLE 7A
EXISTING ENERGY-RELATED CHARACTERISTICS BY 1977 FAMILY INCOME (WINTER 1978-79)
(THOUSAND HOUSEHOLDS)

	TOTAL HOUSEHOLDS	1977 FAMILY INCOME						
		LESS THAN   \$5+000	\$5,000 TO \$9,999	\$10,000 TO \$14,999	\$15,000 TO \$19,999	\$20,000 TO \$24,999	\$25,000 OR MORE	TOTAL POOR
OTAL 1/	67,457	9•106	12,357	12,573	10,491	9,063	13,868	8,41
STORM WINDOWS		1 I					[	
ALL WINDOWS COVERED	27,463	2,698	4,210	4,873	5-047	3,932	6.704	2,44
SOME WINDOWS COVERED		1,702	2,419	2,346	1,900	2,250	3,070	1,47
NO WINDOWS COVERED	26,307	4,705	5,728	5,354	3,544	2,381	4,094	4,50
STORM DOORS					1			
ALL DOORS COVERED	25.003	2,734	4,653	4.576	4.335	3,537	5.168	2,43
SOME DOORS COVERED		1,624	2,578	2,694	2,598	2,400	4,369	1,37
NO DOORS COVERED	26,092	4,748	5,026	5,303	3,559	3,125	4,332	4,60
ATTIC INSULATION		] ]			-			
HAVE INSULATION	46,215	3,716	7.079	8,488	7,775	7,225	11,933	3,50
BATTS ONLY	21,724	1,541	3,246	4,354	3,538	3,323	5,723	1,50
LOOSE FILL ONLY	14,183	930	1,915	2,172	2,448	2,456	4.262	79
BATTS AND LOOSE	2,323	214	347	238	554	463	512	19
OTHER	750	129	45	133	124	74	246	7
TYPE UNKNOWN	7,231	902	1,527	1,590	1,112	909	1,190	93
LESS THAN 3 INCHES	1,731	69 1	258	298	, l 260	435	463	6
3 TO 6 INCHES	21,919	1.480	3,315	4,346	3.798	3,555	5,425	1,56
MORE THAN & INCHES	6.637	122	743	879	1,199	1,194	2,500	16
QUANTITY UNKNOWN	15,879	2,044	2,763	2,964	2,519	2,040	3,547	1.70
NO INSULATION	13,023	3,386	3,628	2,334	1,612	854	1.207	3,20
DONT KNOW	8,218	2,004	1,649	1,752	1,104	783	726	1,70
IAVE WALL INSULATION					<b>1</b>			
YES	34.004	2.591	5,126	6,407	5,915	5,178	8,787	2,59
NO	18,549	4.024	4,238	3,143	2,578	2,109	2,457	3,70
DONT KNOWA	14,304	2,490	2,993	3,023	1,998	1,776	2,623	2,11
(4.00M(S) CLOSED OFF WINTER 1978-79		<u> </u>		the Real			} }	
YES		2,509	4,114	3,914	3,270	2,929	4,123	2,20
NO	39,186	5,403	6,308	7,085	6,379	5,178	8,333	5,18
OID NOT LIVE HERE LAST WINTER	7,414	1,194	1,435	1,574	843	956	1,411	1,03

## TABLE 7A EXISTING ENERGY RELATED CHARACTERISTICS BY 1977 FAMILY INCOME (WINTER 1978-79)-CONTINUED (THOUSAND HOUSEHOLDS)

	TOTAL HOUSEHOLDS	1977 FAMILY INCOME						
		LESS THAN     \$5.000	\$5,000 TO \$9,999	\$10,000   TO   \$14,997	\$15,000 TO \$19,993	\$20,000 FO \$24,999	\$25.000   08   MORE	TOTAL POOR
UNITS WITH SOME OR ALL STORM WINDOWS, AND SOME OR ALL STORM DOORS, AND ATTIC OR ROOF INSULATION	27:469	2+ <b>0</b> 59	\$4128	\$ <b>4 9 7</b> <sup>7</sup> <sup>4</sup>	\$ <b>9</b>   16 7	59725	10653	I y 585
UNITS WITH ONE OR MORE OF THESE TYPES OF INSULATION	570125	4,297	10,179	10;607	9√511	8,226	12,710 E	5,76
UNITS WITH NOME OF THESE TYPES OF INSULATION	9,733	2,809	2,183	1,966	980	8 5 6	<b>75</b> 8 [	2 9 6 5 3

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH WHO REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1979 NATIONAL INTERIM ENTROY CONSUMPTION SURVEY, DEFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

### TABLE 7B EXISTING ENERGY-RELATED CHARACTERISTICS BY 1977 FAMILY INCOME (WINTER 1978-79) (PERCENTAGE OF HOUSEHOLDS)

				1977 FAMIL	Y INCORE			j
·	TOTAL Households	LESS THAN \$5,000	\$5,000 TO \$9,999	\$10,000 TO \$14,999	\$15,000 TO \$19,999	\$20,000 TO \$24,999	\$25,000 OR MORE -	TOYAL POOR
TOTAL 1/	100%	100%	100%	100%	100%	100%	100%	100%
STORM WINDOWS				; 1			#	
ALL WINDOWS COVERED	41	30	34	39	48	43	4.8	29
SOME WINDOWS COVERED	20	1 19	20	19	18	25	22	17
NO WINDOWS COVERED	39	52	46	43	34	32	30	54
STORM DOORS		Şur					salvine statement	
ALL DOORS COVEPED	3.7	3.0	38	36	41	39	37	23
SOME DOORS COVERED	24	18	22	21	25	25	31	16
NO DOORS COVERED	39	52	41	42	34	34	31	55
ATTIC INSULATION		6 d		3	1			
HAVE INSULATION	5.9	41	57	68	74,	80	36	42
BATTS ONLY	32	17	26	35	34	37	41	18
LOOSE FILL ONLY	21	1 0	15	1.7	23	27	31	. 9
BATTS AND LOOSF	3	2	3	2 1	5	5	4	2
OTHER	1	1 1	-	1 1	1	1	2	1
TYPE UNKNOWN	11	10	1?	13	11	10	9	11
* QUANTITY	ļ	1	j	•			<u>ş</u>	l
LESS THAN 3 INCHES	3	1	2	2	2	5	1 3	1
3 TO 6 INCHES	32	16	27	35	36	39	1 39	19
MORE THAN 6 INCHES	10	1	6	7 1	11	1.5	18	2
QUANTITY UNKNOWN	24	22	22	24	24	23	25	20
NO INSULATION	19	37	29	19	15	9	9	38
DONT KNOW	12	22	13	14 . [	11	11	5	20
HAVE WALL INSULATION			ş D	). Po			•	
YES	50	28	41	51	56	57	63	31
NO	27	1 44	34	25	25	23	1 18	44
DONT KNOW	23	27	24	24	19	20	19	25
ROOM(S) CLOSED OFF WINTER 1978-79			Ī	RC Single		;	¥ \$	} }
YES асе в ранича в на весе о е е е е е е е е е е е е е е е е е	۲1	2.8	5.3	31	31	52	30	25
NO	53	59	55	55	61	57	60	62
DID NOT LIVE HERE LAST WINTER	11	1 1 3	12	13	1 8	11	1 10	12

#### TABLE 78 EXISTING ENERGY-RELATED CHARACTERISTICS BY 1977 FAMILY INCOME (WINTER 1978-79)-CONTINUED (PERCENTAGE OF HOUSEHOLDS)

				1977 FAMIL	Y INCOME		i	<u>.</u>
	TOTAL HOUSEHOLDS	1,535 THAN   \$9,000	\$5,000 TO \$9,999	\$10,000   \$0   \$0   \$14,993	\$15,000   TO \$19,999	\$20,000 TO \$24,999	\$25,000   UR   MORE	TOTAL POOR I
NITS WITH SOME OR ALL STORM WINDOWS, AND SOME OR ALL STORM DOORS, AND ATTIC OR ROOF INSULATION	 	22	.5 0	36	45	52	55	20
NITS WITH ONE OR MORE OF THESE TYPES OF INSULATION	     	 	н2	] 	31	91	73	     68
UNITS WITH NONE OF THESE TYPES OF INSULATION	 	31	18	1 16	9	9	7	!     32

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH M-M REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF YERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVFLOPMENT, ENERGY INFORMATION ADMINISTRATION.

# TABLE 8A EXISTING ENERGY-RELATED CHARACTERISTICS BY SELECTED DEMOGRAPHIC CHARACTERISTICS (WINTER 1978-79) (THOUSAND HOUSEHOLDS)

		AG!	OF HE	ND .	RA	CE !		TION OF IN YEARS		MARITAL	STATUS O	F HEAD
	TOTAL HOUSEHOLDS	35	36	60		 	8	9	13		NOT MA	RRIED
		OR LESS	T0 59		WHITE, OTHER	BLACK	OR LESS	T0 12	AND OVER	MARRIED    -	FEMALE   HEAD	MALE HEAD
TOTAL 1/	67,457	20,912	27,552	18 994	61.060	6,398	11,510	31,755	24,193	47,696	13,965	5,79
STORM WINDOWS	1	} 	f I			1				7	]	
ALL WINDOWS COVERED	27.463	7,992	111.604	7.968	25.966	1 1 4 9 7	3.756	13.753	1 9*955	20,614	4,790	2,05
SOME WINDOWS COVERED							,		•	9,950		
NO WINDOWS COVERED		,	,						•	17,131	•	2,65
STORM DOORS	1	[ f	I 1	[ [	[ }	} }	i		1	•	;	
ALL DOORS COVERED	25,003	6.220	110.373	1 8.410	23.315	1 1.6881	4.312	12.745	7.947	18,239	4,762	2,00
SOME DOORS COVERED				4,166						12,216		-
NO DOORS COVERED						,	,	•	*	17.240	•	
ATTIC INSULATION	1	•	8	!					ŧ.	1		
HAVE INSULATION	46,216	112.813	21.109	12.294	43.681	, 1 2 • 5 3 5 1	5.132	22.007	18.077	35,879	7.075	3,29
TYPE	1	1	1	1	10,000	1	1	1	1	1	1	- ,
BATTS ONLY	21,724	5.927	9.905	5,893	20.840	1 884	3.007	11-034	7.683	17,042	3,164	1,51
LOOSE FILL ONLY	•			3,657						11,566		
BATTS AND LOOSE	•		1,242		2,295	•		•	1.040	•	•	15
OTHER		253		•		•	•					
TYPE UNKNOWN	7,231			1.844	,			3.277		•		
QUANTITY	1	1	1		, ,,,,,	1	1	1	1	i	,	
LESS THAN 3 INCHES	1.791	710	668	403	1,719	61	150	749	882	1,354	251	17
3 TO 6 INCHES		•		6.429	•				•	17,828	•	1,7
MORE THAN 6 INCHES	7	•		1 1,417		•		2.894			•	
QUANTITY UNKNOWN										10,869	4,000	1 ,01
NO INSULATION	4					2,798						•
CONT KNOH	3,218					1,864					3-128	93
HAVE WALL INSULATION	1		<b>i</b> .			1		•	1	4	1	
YESoupensononeneesaaseaaseaas	34 - 004	1 9 4 6 3 N	! !15.421	1 A. 351	132,292	1 1.712	1 4.776	116.209	113-928	26,822	4,749	2.43
NO			•	•			•	•	•	12,102		,
DONT KNOW	•					1.865						
ROOM(S) CLOSED OFF WINTER 1978-79	1	\$ 9		9		1	T P	and and and and and and and and and and	1		§ .	
YES a see see see see see see see see see s	20,859	1 5.366	1 ይ. 632	1 6.860	119.261	1 1,507	1 3.541	9,550	1 7.765	14,911	4 • 007	1.9
V)										27,993		
DID NOT LIVE HERE LAST WINTER		7	119735		6.840			1 3.281				,
SIN MALERAL HEVE EMBL MINICASS	1 1976	1 44704	1 16333	1 212	ነ መቀጠቀፀ	1 , , 4		1 38527	4 3 A CT 7 3	1 THI / L	1 1937()	,

## TABLE 8A EXISTING ENERGY-RELATED CHARACTERISTICS BY SELECTED DEMOGRAPHIC CHARACTERISTICS (WINTER 1978-79)-CONTINUED (THOUSAND HOUSEHOLDS)

	[ [ ]	AGI	E OF HEA	lD.	i   RAC	) 1		TION OF IN YEARS		  MARITAL 	STATUS O	F HEAD
	   TOTAL  Households	4 e	36	6 O	<b></b>		8	9	13	ATTEC	   NOT MA 	RRIED
		OR LESS	70 59		WHITE.		OR LESS		AND OVER	MARRIED     	FEMALÉ HEAO	MALE HEAD
UNITS WITH SOME OR ALL STORM WINDOWS, AND SOME OR ALL STORM DOORS, AND ATTIC OR ROOF INSULATION	27,9459	     6•638	12,823	7, 758	 	1,325	59604	115,712	1 110,152	21,310	3.750	1,699
UNITS WITH ONE OR MORE OF THESE TYPES OF INSULATION	57,725	17,139	24.400	16,186	53,761	3,964	8,583	27,780	21•362	;     42,324	1     10,890	4 o 5 1 1
UNITS WITH NONE OF THESE TYPES OF INSULATION	†   ∃9733	3,773	5,152	2,809	   7•299 	2,434	2,927	3,974	2,332	1   5,371	     3.075	1,286

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH M-M REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, DEFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

# TABLE 8B EXISTING ENERGY-RELATED CHARACTERISTICS BY SELECTED DEMOGRAPHIC CHARACTERISTICS (WINTER 1978-79) (PERCENTAGE OF HOUSEHOLDS)

		AGE	OF HEA	D	   RAG	CE !		ION OF		MARITAL	STATUS	F HEAD
	   TOTAL  Households	35	36	50			8	9	13		NOT M	ARRIED
	] [ 1	OR LESS	T0 59		WHITE, OTHER	BLACK	OR LESS	TO 12	AND OVER	MARRIED	FEMALE HEAD	MALE HEAD
TOTAL 1/	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
STORM WINDOWS	1				1			į			<b> </b> 	 
ALL WINDOWS COVERED	41	38	42	41	1 43	23	33	43	41	43	3.4	36
SOME WINDOWS COVERED	1 1	19			, -			21			19	19
NO WINDOWS COVERED	, ,	43			•	*		36	•	,	47	46
STORM DOORS	; ;				! !		,		!	[ ]	) !	! !
ALL DOORS COVERED	37	30 I	38	44	38	26	37	40	33	38	34	35
SOME DOORS COVERED	, - ,	23		22	,	•	17	25	27		23	17
NO DOORS COVERED		47		34	,		45	35		36	4.3	49
ATTIC INSULATION			1		1	1			•	1		2
HAVE INSULATION	69	61	77	65	72	40	53	69	75	75	· ~1	56
TYPE	1 97 1	F 4 1	, ,	3,	1 /2	1	,,	0 /	, ,	j , , ,	, ^ 1	, J:3
BATTS ONLY	32	28	36	31	34	1 14	26	35	32	1 36	23	26
LOOSE FILL ONLY		18	25		,	•	14		•		11	18
BATTS AND LOOSE	1 7 1	2			•	•			•		2	3
OTHER	1 1	1				•	1	1	•	i	1 1	1 1
TYPE UNKNOWN	1 11	12	•		•	1 14		10	•		1 14	9
QUANTITY	1 11 1		10	1 10	1 10	1 17	7	10	1 12	1 10	1 (7	1
LESS THAN 3 INCHES	1 3	3	2	2	I I 3	I I 1	1	2	) ! 4	1 3	1 2	1 3
3 TO 6 INCHES	1	25			,	•	-		•		1 17	30
MORE THAN 6 INCHES		10			,	•	•		•	•	1 3	6
QUANTITY UNKNOWN		22			•	•	•				29	17
NO INSULATION	, -	20	14	26		•	,		•	1 16	27	27
DONT KNOW	1 12	19		9	•	•	•		•	•	22	17
MANUFACTURE THICKS STROM	1				!	!	!		1	!	!	1
HAVE WALL INSULATION		* -			1	1 07				1		1 62
YES-2000000000000000000000000000000000000	50	46	56	47	•	,	41	51	54	56	34	42
NO ususasaa saaaa aaaaa aaaaa aaaaa aa		25		36	*		39	27	22	25	32	33
DONT KNOW	5.5	29	20	17	21	29	20	22	24	18	1 34	25
ROOM(S) CLOSED OFF WINTER 1978-79	i		İ	i	i	ĺ	,		Î	i	, 9	i
YES	31	26	31	36	32	25	31	•	•		29	33
NO	58	51	62	61	57	66	55	•	53	59	50	50
DID NOT LIVE HERE LAST WINTER	11	24	7	3	1 11	9	1 5	10	15	10	12	1 17

3

## TABLE 88 EXISTING ENERGY-RELATED CHARACTERISTICS BY SELECTED DEMOGRAPHIC CHARACTERISTICS (WINTER 1978-79)-CONTINUED (PERCENTAGE OF HOUSEHOLDS)

	   	AGE	OF HEA	A D	l RAI	CE		TION OF IN YEARS		  MARITAL 	STATUS	OF HEAD
	   TOTAL  Households	35	l   36	   60	!	1	 8	a	13	1	   MOTEM 	ARRIED
	; [	75.22 75.22	TO 59	•	IWHITE, TOTHFR I		OR LESS	10 12	ANO   OVER	MARRIED       	  FEMALE   HEAD	I   MALE   HEAD 
UNITS WITH SOME OR ALL STORM WINDOWS, AND SOME OR ALL STORM DOORS, AND ATTIC OR ROOF INSULATION	1	12	4/	40	2 C	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3.1	0.3	4.2	46	28	29
UNITS WITH ONE OR MORE OF THESE TYPES OF INSULATION	 	 	       84	4 4 4 4 95	     88	     62	       75	       87	       88	[     89	1 1 1 78	; [ ] ] 78
UNITS WITH NONE OF THESE TYPES OF INSULATION	† † 14 	   19 	 	     15	1 12	† † † 33 1	 	 	i     12 	f   11 	 	   22 

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUT TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1979 NATIONAL INTERIM SPERCY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM.
OFFICE OF PROGRAM ORVELOPMENTS ENCHANTION AUMINIBITATION.

## TABLE 9A CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY CENSUS REGIONS (THOUSAND HOUSING UNITS)

	1 9						CENSUS	REGION					
	TOTAL     HOUSING     UNITS	NO	RTH EAS	F	NORT	TH CENTE	RAL		SOUTH			WEST	
	 	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	  RURAL 	TOTAL	URBAN	I   RURAL 
TOTAL HOUSING UNITS 1/	67,457	14,251	11.309	2.942	19,821	14,132	5,689	22,319	13,783	8,536	11.067	8,536	2,531
TOTAL ELIGIBLE HOUSING UNITS	64,357	13,663	10,776	2,887	19,232	13,751	5,482	21,453	13,388	8,064	10,603	8,324	2,284
INSULATION ADDED (INEXPENSIVE) YES, ELIGIBLE	10+175 2+390	2,234 351	1,695 267	841	4,030 812	2+88 <b>7</b> 494	• .	2,754 972	1,724 505	*	1.117 244	93	318 1 151
AROUND HOT WATER HEATER CAUKKING	17,048 10,656 1,176 374	4,774 2,469 267 79	3,757 1,744 159	1,017 725 108	6+631 3+411 430 367	4,956 2,173 285 239	1,775 1,238 1,45 1,28	4,049 3,669 368 265	2+428 1+884 253 97	1.620 1.785 115 168	1.594 1.107 110 163	1,186 736 67 31	408 371 43 132
NO	39•061  	7.557	6+272 	1.295	9 + 884	7,128	2 • 757	13,454	8,720	4,734	8+155	6,471	1 1,684
INSULATION ADDED (EXPENSIVE)  YFS, ELIGIBLE	4,934 1,771 2,711 575	1:151 622 623 25	349 499 25	287 273 184	1,902 671 1,139 240	689 151	536 235 450 89	1,264 316 575	677 116 227 1 39	587 200 348 132	618 162 314 139	543 83 242 12	74 79 73
EQUIPMENT ADDED (INEXPENSIVE)  YES, ELIGIBLE	460 4.584 1.258 3.153 583	25 880 332 5 <i>9</i> 7 57	658 236 552 25	222   26   96   45   32	180 1•726 455 1•052 204	1.305 384 821 129	32   420   71   231   75	118 1.647 355 1.088	1,021 246 784	15 625 109 304 170	138 332 126 416	121 204 112 323 1 12	17 127 15 74 133
YES, ELIGIBLE	4.374 1 96 1.737 1.458	1,354 19 327 41	242 25	315   -   86   16	1,566 32 659 207	450 123	494 - 199 84	1,688 35 519 128	35 330 -	791 - 188 128	366   -   232	193 - 196 12	173   -   36   71

## TABLE 9A CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY CENSUS REGIONS-CONTINUED (THOUSAND HOUSING UNITS)

! !	 						CENSUS	REGION					
! !	TOTAL   HOUSING! UNITS	MO.	RTH EAS		NOR	TH CENT	RAL !		SOUTH			WEST	
		TOTAL	I URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	  URBAN	RURAL 1	TOTAL	JURBAN L	I Irural
ANY EQUIPMENT OR INSULATION ADDED   BY ELIGIBLE HOUSING UNITS YES					11 4400 7 4832								
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	5,551	1,484	1,045	440	2,046	1,410	637	1,174	     591	     582	831	       663	     168
ELIGIBLE UNITS THAT ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	4,647[	1 • 2 95	     918	287	1,470	1,074	395	1,517	921	     596	455	282	1 173
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1:357	4.80	366	1 115	627	379	248	586	     283	304	145	;       107	]   36
ELIGIBLE UNITS THAT ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	21,759	4,902	     3,913	988	7,257	5,216	2,041	7,372	       4,543	2,830	2•228	1,703	524
ELIGIBLE UNITS THAT ADDED STORM HINDOWS, OR STORM DOORS, OR ATTIC OR ROOF INSULATION	11,369	2,175	2,089	686	3,995	2,827	1,168	3,399	!     2,015	1,384	1,200	869	]   351

17 EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY. OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

## TABLE 9B CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY CENSUS REGIONS (PERCENTAGE OF HOUSING UNITS)

							CENSUS	REGION					
	TOTAL HOUSING	N	ORTH EAS	5T	NOR	TH CENT	RAL		SOUTH			WEST	
	į į	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	I IURBAN	RURAL
TOTAL HOUSING UNITS 1/	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
TOTAL ELIGIBLE HOUSING UNITS	96	96	95	98	97	97	96	96	97	94	96	98	90
INSULATION ADDED (INEXPENSIVE)				<b> </b> 	40	***				1	irre strong	1	
YES, ELIGIBLE	41	46	1 44	54	48	48	49	39	36	43	25	24	
WEATHERSTRIPPING	15	16	15	20	20	20	50	12	13			•	•
AROUND HOT WATER PIPES	4	2	1 2	3	1 4	] 3	6	4	] 4	5	2	1	1 6
AROUND HOT WATER HEATER	1	1	1 1	1	1 1	1	1	1	1 2	1	1	1 1	1 2
CAULKING	?5	34	33	35	33	34	71	18	18	1 19	14	1 14	1 16
PLASTIC COVERING	16	17	15	25	17	1 15	2.2	16	1 4	21	1 10	9	15
OTHER	i 2	2	1	4	2	2	3	2	2	1	1	1	2
YES, INELIGIBLE	1 1	1	- 1	2	2	i 2	i 2	1 1	į l	2	1	1 -	5
NO	58	53	55	44	50	50	48	60	63	55	74	76	67
INSULATION ADDED (EXPENSIVE)	} 		•		1	1	1	1	1	1	1 1	! }	1
YES, ELIGIBLE	1 11	14	1 12	19	13	13	16	8	5	10	9	9	8
ROOF OR ATTIC	7	8	1 9	10	10	9	1 11	6	5	7	6	6	3
BASEMENT OR CRAWL SPACE	1 3	4	1 3	9	1 3	j 3	4	1	1 1	1 2	1	1	3
OUTSIDE WALLS	i 4	Í 5	4	i 6	i 6	5	. 8	j 3	j 2	1 4	3	1 3	1 3
YES, INELIGIBLE	•	-	i -	i -	1	i 1	<u> </u>	i 1	i -	1 2	1	i -	1 5
40	88	35	87	81	•	•	•	•	•	•			37
EQUIPMENT ADDED (INEXPENSIVE)	1		*	9	1	<b>Q</b>	1		1	1	ļ I		1
YES, ELIGIBLE	1 13	12	1 12	1 11	1 16	1 17	1 12	1 14	1 15	1 12	i 8	1 8	i 8
CLOSEABLE SHUTTERS	1	_	-	•			1		•	•	1	j 1	1
STORM DOORS	1 7	6	9 6	!	-	•	7	•	7		•	•	1 5
AUTOMATIC OR CLOCK THERMOSTAT.	1	2	,				i	,	2	1	•	•	ii
NEW WATER HEATING EQUIPMENT	•	,	•	•	1 5	•	4		i 6	i 4		•	4
YES INELIGIBLE		-			•	*	i	7	i -	•	1	1	i 5
MD *** ** ** ** ** * * * * * * * * * * *	,	88	98				,	•	*	•		•	
EQUIPMENT ADDED (EXPENSIVE)	!		Po-4-	1	*	1	1	1	1	1	į.	1	1
YES, ELIGIPLE,	1 10	12	1 11	!   14	1 11	1 10	1 11	1 9	9	11	1 5	5	1 8
STORM WINDOWS/INSULATING GLASS	•	1 10				•	,	•	•	,	•	,	7
ELECTRIC HEAT PUMP	1	;	•	,			1 -	1	-	•	1 -	-	-
NEW FURNACE	•	2	ı	1 3	•	,	,	,	,	•	,	1	1
YES INFLIGIBLE	•	1		1 1	•	•	•	•	-	1 1	*	1 -	1 3
NO casessessessessessessessessessessessesses	•	88	1		,	,	87	1 90	1 91		1 34	95	1 89
1917	19	1 44	1 05	1 00	1 02	1 07	1 01	3 70	1 /1	3 1707	1 27	1 /3	1 (//

## TABLE 98 CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY CENSUS REGIONS—CONTINUED (PERCENTAGE OF HOUSING UNITS)

	 	   	<b></b>				CENSUS	REGION	~				
	TOTAL  HOUSING   UNITS	i N	noth (A	sr		TH CONT					   	มะรา	
	   	!  *afal L	!  URBAN 	I IPURAL L	Į.	ł	i	j	i	  RURAL 	  TOTAL 	I JURBAN I	RURAL
ANY EQUIPMENT OR INSULATION ADDED BY ELIGIBLE HOUSING UNITS YES		57 59	1 1 1 1 1 4 0			,		•					•
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT		1	!		1		1			;	53 	65       8	)       7
ELIGIBLE UNITS THAT ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	7	     8	8	1 10	; ! ! 7	8	] 	7	1 1 1 7	]     7		! ! ! 3	7
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	} }	] 3	1 } # 3	1 4	1 3	] ] ] 3	9	 	2	4	<b>!</b> <b>!</b>	1	1
ELIGIBLE UNITS THAT ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	! ! ! 32	1 1 1 34	! ! ! 35	1       34	! ! ! 57	1 1 1 1 57	]     36	       33	35	1 1 1 3 3 5	     20	     20	1 1 1 21
FLYGIBLE UNITS THAT ADDED STORM WINDOWS, OR STORM DOORS, OR ATTIC OR ROOF INSULATION		 	! ! ! ! ! !	23	1 1 20	 	! ! ! 21	     15	: : : ::::::::::::::::::::::::::::::::	15	1 1 1	; } {	1 2.5

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO LOTALS DUE TO ROUNDING. A DASH #-# REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM THERBY CONSUMPTION SURVEY. OFFICE OF THE CONSUMPTION DATA SYSTEM. OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

#### TABLE 10A CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY CENSUS REGIONS (THOUSAND HOUSING UNITS)

							CENSUS	REGION					
	TOTAL    HOUSING    UNITS	NO	RTH EAST	r 	NOR	TH CENT	RAL		HTUCS			WEST	4 50° 00° 00° 00° 00° 00° 00° 00° 00° 00°
	! !	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL
TOTAL HOUSING UNITS 1/	67,457	14,251	11,309	2,942	19,821	14,132	5,689	22,319	13,783	8,536	11,067	8,536	2,531
INSULATION ADDED (INEXPENSIVE)	•			1					1		,		
YES++++++++++++++++++++++++++++++++++++	17,632	4+348	3,223	1,125	6,561	4   5 95	1,967	5,137	3,022	2,116	1,585	1,082	503
WEATHERSTRIPPING	, ,	1,170	925	266	1,928	1,349	579	1,308	835	473	480	300	180
AROUND HOT WATER PIPES	1,286	177	158	19	423	242	181	545	335	209	141	52	89
AROUND HOT WATER HEATER	458	80	60	19	82	40	42	226	159	. 68	70	33	37
CAULKING	11,078		2,277	573	4,563	3,259	1,304	2,653	1,571	1.082	1,012		
PLASTIC COVERING	5,456	1,561	1,054	507	1,743	1:117	625	1.654	907	747	<b>49</b> 8	277	222
OTHER	855		148	61	301	2 <b>25</b>	76	302	214	88	4.3	43	_
NO	49,826	9,903	3,087	1.816	13,260	9,537	3,723	17,181	10,761	6,420	9•482	7,454	2,028
INSULATION ADDED (EXPENSIVE)	; ; ( ;						! !		] }				
YES====================================	4 , 226	922	656	266	1,592	1.102	490	1:029	505	524	682	549	133
ROOF OR ATTIC	2,843	5.74	428	146	1,039	716	323	766	421	345	464	352	112
BASEMENT OR CRAWL SPACE	1,271	436	263	173	432	328	105	254	72	182	149	83	66
OUTSIDE WALLS	1,478	2941	189	105	682	430	252	254	80	183	237	193	46
NO *********************	63+232	13,329	10,654	2,675	18 • 229	13,030	5,199	21,289	13,278	3,011	10,384	7,987	2,398
EQUIPMENT ADDED (INEXPENSIVE)									1	! !			
YESacoooooooooooooooooo	5,274	997	804	1931	1,771	1,309	1 4531	1,861	1 1.182	679	543	430	215
CLOSEABLE SHUTTERS	3001			,									
STORM DOORS	2 • 680					•	, ,				278	138	140
AUTOMATIC OR CLOCK THERMOSTAT.	388	229	182	47			•		125	106	143	123	25
NEW WATER HEATING EQUIPMENT	2,132	341	321	20	702	482	219	824	608	216	265	166	99
N9	62,184	13,254	10,505	2,748	18,050	12,823	5,227	20,458	12,601	7.857	10,422	8,106	2,316
EQUIPMENT ADDED (EXPENSIVE)		•							; 2		!		
YFS	3,504	948	714	234	1+269	872	397	708	436	472	379	268	111
STORM WINDOWS/INSULATING GLASS	,						•						
ELECTRIC HEAT PUMP	57				-	•			•				•
NEW FURNACE	1,0481					•			•				
NC			•	, ,		•					10.689		
	ll		L				1 1	L	1	LJ	L	!	L

#### TABLE 10A CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY CENSUS REGIONS-CONTINUED (THOUSAND HOUSING UNITS)

	1						CENSUS	REGION					
	TOTAL     HOUSING     UNITS	NOF	RTH EAS	r ,	NOR	TH CENTI	RAL !	· <b>-</b>	STUTH			WEST	
	! ! ! ! <u>1                              </u>	TOTAL	URBAN	RURAL	TOTAL	URBAN	  RURAL   	TOTAL	URBAN		TOTAL	I IURBAN L	  RURAL 
ADDED ANY INSULATION OR EQUIPMENT YES		5,303 8,948	4.049 7.261	1,254 1,687	8,050 11,771	5,657 8,475	2,394 3,296	6,737 15,582	4,037 9,746	 	2 # 4 8 3 8 # 5 7 7	1 1 1 1,790 1 6,746	1 1 1 497 1 1:833
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	3,212	677	441	236	1 +261	876	386]	140	379	561	534	447	37
ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	2+490	703	499	204	938	646	293	619	310	 	231	     166	45
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1 1.014	245	215	30	331	     226	!	290	     126	       163	148	     103	1 46
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	   15,862	3,678	2 <b>,</b> 894	784	5,520	i 3,909	 	5,089	] 	             1,867	1,575	     1.075	1 499
ADDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION		1,441	 	   394	2 • 361	 	 	1+822	 	       	804	     532	271

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

### TABLE 10B CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY CENSUS REGIONS (PERCENTAGE OF HOUSING UNITS)

		1   					CENSUS	REGION					
	TOTAL Housing Units	N:	ORTH FAS	ST	NOR:	TH CENT	RAL		SOUTH			WEST	
		TOTAL	URBAN	  RURAL	TOTAL	URBAN	  RURAL 	TOTAL	URBAN 	I   RURAL	TOTAL	URBAN L	  RURAL 
TOTAL HOUSING UNITS 1/	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
INSULATION ADDED (INEXPENSIVE)	! {	: 	 	; [	•	l I	1		! <b>!</b>	1		! 	• 
YES	26	31	28	38	33	33	35	23	22	25	14	13	20
WEATHERSTRIPPING	7	8	8	9	10	10	10	6	5	6	4	4	7
AROUND HOT WATER PIPES	2	1	1	1	2	2	3	2	2	2	1	1	4
AROUND HOT WATER HEATER	1	1	1 1	1	-	-		•	1	1 1	•	-	1
CAULKING	15	20	20	19	23	23	23	12	11	1 13	9	1 8	
PLASTIC COVERING	8	j 11	) 9	17	9	8	11	7	7	9	5	3	•
OTHER	1	1	1 1	2	2	2	,	•	•	*	•	1	
NO	74	69	1 72	62	67	67	65	77	78	75	36	87	80
INSULATION ADDED (EXPENSIVE)	} 	l I	! !	! <b>?</b>			! !	] 	! 	1	<del>!</del>	1	1
YES	6	6	6	9	8	8	9	5	4	6	5	6	5
ROOF OR ATTIC	1 4	4	4	5	5	5	6	3	3	4	4	] 4	4
BASEMENT OR CRAWL SPACE	2	3	2	6	2	2	2	1 1	1	2	1	1	3
OUTSIDE WALLS	2	2	2	4	3	1 3	4	1	1	1 2			
NO	34	94	94	91	92	92	91	95	96	94	34	94	95
EQUIPMENT ADDED (INEXPENSIVE)	1	1	l I	1	1	1	§	<b>!</b>	1	1	7 1	1	l I
YES	1 8	7	7	7	<b>i</b> 9	9	1 8	. 8	9	1 8	<b>j</b> 6	5	8
CLOSEABLE SHUTTERS	i -	j -	i -	j -	i -	i -	<b>j</b> –	1 -	j 1	-	1	1	1
STORM DOORS	j 4	4	<u>i</u> 3	4	j 5	5	1 5	4	1 3	5		2	6
AUTOMATIC OR CLOCK THERMOSTAT.	i 1	1 2	2	i 2	i 1	i ı	1	1 1	1	1	1 1	1 1	1
NEW WATER HEATING EQUIPMENT	i 3	2	j 3	i 1	4	1 3	4	4	4	1 3	2	2	4
NO	92	93	93	93	91	91	92	92	91	92	94	95	32
EQUIPMENT ADDED (EXPENSIVE)	1	1	1	1	i	1	1	<u> </u>	1	1	Į I		1
YES a see ea a see see see see see see see	1 5	7	6	1 8	1 6	1 6	7	1 4	1 3	6	1 3	1 3	4
STORM WINDOWS/INSULATING GLASS		1 5		,	1	,	5		•		1 2	•	1 3
ELECTRIC HEAT PUMP	•	-		1 -	1 -	-	1 -	-		•	-	•	1 -
NEW FURNACE TRANSPORTED TO THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE	,	1 1	•	1 2	1 2	1 2	1 2	1	•	-	1	1 2	1 3
VO	1 75	93	, -	92	•	•	93		97		1 7	1 97	36
1	1	1	, ′'	1	1	1	1	i	1		i	•	

#### TABLE 108 CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY CENSUS REGIONS-CONTINUED (PERCENTAGE OF HOUSING UNITS)

	1	1					CENSUS	REGION					
	TOTAL  HOUSING   UNITS	N	OPTH FA	ST	NOR	TH CENT	RAL	   	south		   	WEST	
	 	 	IURBAN Iurban	1  RURAL 	I TOTAL	I Iurban I	I IRURAL I	   fotal	I   URBAN 	1  RURAL	i  TOTAL	I  URBAN	  RURAL
	!	!	!	]	1	i	i	<u> </u>	!	!	!	ļ	1
ADDED ANY INSULATION OR EQUIPMENT	1	i I	; }	i j	i I	i	1	i S	j I	i I	i I	į į	i
1.2	3.5	37	36	4.5	41	40	1 42	50	1 29	32	22	21	. 29
\O_====================================	6.7	6.5	6.4	51	5.9	60	1 58	1 70	71	58	1 78	79	
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	1 1 5	; ; ;	i i	1 1 8	6	6	/	3	1 5	1 4	 	i     5	3
ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	4	5	) 	i ! 7	!   5	! ! ! 5	! 	i i 1 3	! ! ! 2	4	2	2	3
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1 2	2	2	1	;	!     2	2	; ; ; 1	! ! ! 1	2	! ! ! 1	1	2
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	24	26	26	27	28	28	i 	! ! 23	! 	22	! ! ! 14	13	     20
ADDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	1 10	10	i ! ! 9	1 13	12	1 12	12	! ! ! 8	7	10	     7	1 6	1 11

NOTE: DATA MAY NOT SUM TO TOTALS BUT TO ROUNDING. A DASH #-# REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

#### TABLE 11A CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY CENSUS REGIONS (THOUSAND HOUSING UNITS)

							CENSUS	REGION					
	TOTAL     HOUSING     UNITS	NO	RTH EAST	T	NOR	TH CENT	RAL		SOUTH			WEST	
		TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL
TOTAL HOUSING UNITS 1/	67,457	14,251	11,309	2,942	19,821	14,132	5,689	22,319	13,783	8,536	11,067	8,536	2,531
INSULATION ADDED (INEXPENSIVE)						•	[ [			 		i i	f 
YES====================================	19,5791	4.738	3,432	1.306	6,618	4,646	1,972	5,919	3,346	2,574	2 • 304	1,657	547
WEATHERSTRIPPING			887	435	2 461	1,796	665	1,725	1,092	533	1,003	739	270
AROUND HOT WATER PIPES	1,502	233	168	65	527	375	152	565	245	320	176	65	112
AROUND HOT WATER HEATER	594	60	44	16	176	146	30	211	77	134	147	101	46
CAULKING	9,852	2,901	2,209	693	3,590	2,618	972	2,277	1,383	894	1,093	773	310
PLASTIC COVERING	8,683	1,940	1,271	669	2 +810	1,817	993	2,904	1,458	1,447	1,028	707	322
OTHER	504	83	36	47	198	105	93	131	91	40	93	24	58
NO	47,878	9,513	7,877	1,636	13,203	9,486	3,717	16,400	10,437	5,962	8 • 762	6,879	1,883
INSULATION ADDED (EXPENSIVE)	!!!			! 		1	! !		! 	1		! [	1 1
YES	4,545	1,232	897	334	1,624	1,039	584	1,149	566	582	542	320	222
ROOF OR ATTIC	3,021	729	541	188	1,124	751	373	810	410	400	358	266	92
BASEMENT OR CRAWL SPACE	959	288	188	100	377	212	165	204	60	144	91	11	79
OUTSIDE WALLS	1,729											•	•
NO	62,912	13,019	10.412	2,607	18,197	13,093	5,105	21,170	13,217	7,954	10,525	8,217	2.308
EQUIPMENT ADDED (INEXPENSIVE)	! ! ! !								<b>!</b>	! !		<b>!</b>	1 1
YES	4,956	1,009	755	254	1,841	1,508	333	1,492	926	566	614	414	200
CLOSEABLE SHUTTERS	237	_	-	- 1	135	103	32	44	29	15	58	42	17
STORM DOORS	2,751	502	342	159	905	668	237	1,046	608	438	298	155	143
AUTOMATIC OR CLOCK THERMOSTAT.	736	145	96	49	392	358	34	171	121	50	29		
NEW WATER HEATING EQUIPMENT	1,624	410	334	76	591	520	71	338	217	120	286	221	65
NO	62,502	13,242	10,554	2,688	17,980	12,624	5,356	20,827	12,857	7,970	10,453	8.122	2,331
EQUIPMENT ADDED (EXPENSIVE)	1 1		<b>!</b>			† †	; <b>!</b>	 	! 	1 1		; ]	1
YES	4,002	923	674	249	1,261	844	417	1,411	812	599	403	173	234
STORM WINDOWS/INSULATING GLASS	3.078	709	526	184	896	544	352	1,125	636	490	348	128	220
ELECTRIC HEAT PUMP	144	31	-	31	64	64	i -	49	35	14	-	<b>i</b> -	i -
NEW FURNACE	1,151	243	178	65	485	332	154	348	177	171	85	45	40
NO	63,455	13,328	10,635	2,693	18,561	13,288	5,272	20,908	12,971	7.937	10,659	8.363	2,296
	1	L	L	L	L	l	1	l	L	L	L	L	<b>⊥</b>

#### TABLE 11A CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY CENSUS REGIONS-CONTINUED (THOUSAND HOUSING UNITS)

1	i I					CENSUS	REGION					
TOTAL HOUSING	NO!	RTH EAS	T	NOR	TH CENT	   RAL		SOUTH	i !		WEST	
! ! 	TOTAL	  URBAN 	RURAL	TOTAL	  URBAN 	RURAL	TOTAL	URBAN	RURAL	TOTAL	  URBAN 	I  RURAL 
	Take Barr							-	Manage of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the stat			!
24 24 178 43 280	5,773 8,478	1 4=243 1 7=066	1,530    1,412	8,163 11,658	5,809 8,323	2+354 3+336	7,451 14,868	9,539	3,206 5,330	2√792 9√2 <b>7</b> 5	1,938   6,598	1 467
3	į į	•	į į		Į Į	i i		Î Î			!	ļ ļ
3,120	? } } 723	! ! ! 544	179	928	!     679	249	1.101	     685	416	36 <sup>g</sup>	!     173	! 
89.5	!   200	 	70	333	165	168	511	1 127	183	40	! ! -	     4(
. 16,513	3,818	;     2,801	1,017	5,611	!     4.091	!     1•520	5,201	2,993	2,208	1.882	! ! ! 1,445	4 37
	1 1,679	1.253	1   427	2 , 342	1,630	712	2,352	1,292	1,061	863	!     491	372
	HOUSING UNITS	HOUSING NO. UNITS TOTAL  7 24,178 5,773 8,43,240 8,478  3,665 1,032  3,665 200  16,513 3,818	HOUSING NORTH EAS UNITS TOTAL URBAN  TOTAL URBAN  1. 24,178 5,773 4,243 43,240 8,478 7,066  3,663 1,032 767  3,663 200 130  16,513 3,818 2,801  7,236 1,679 1,253	HOUSING NORTH EAST UNITS  TOTAL URBAN RURAL  7.073 0.243 1.530 8.478 7.066 1.412  43,240 8,478 7.066 1.412  43,240 723 767 265  5.120 723 544 179  6.885 200 130 70  6.16,513 3,818 2,801 1,017	HOUSING NORTH EAST NOR UNITS  TOTAL URBAN RURAL TOTAL  7. 24,178 5,773 4,243 1,530 8,163 43,240 8,478 7,066 1,412 11.658 11.658 1.705 12.0 723 544 179 928 1.705 12.0 723 544 179 928 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.705 1.70	HOUSING NORTH EAST NORTH CENTS UNITS  TOTAL URBAN RURAL TOTAL URBAN  7.04.178 5.773 4.243 1.530 8.163 5.809  43.240 8.478 7.066 1.412 11.658 8.323  3.663 1.032 767 265 1.291 874  3.663 1.032 767 265 1.291 874  3.120 723 544 179 928 679  3.16.513 3.818 2.801 1.017 5.611 4.091  7.236 1.679 1.253 427 2.342 1.630	HOUSING NORTH EAST NORTH CENTRAL UNITS  TOTAL URBAN RURAL TOTAL URBAN RURAL  24,178 5,773 4,243 1,530 8,163 5,809 2,354 43,240 8,478 7,066 1,412 11,658 8,323 3,336  3,665 1,032 767 265 1,291 874 417  3,120 723 544 179 928 679 249  3,120 723 544 179 928 679 249  16,513 3,818 2,801 1,017 5,611 4,091 1,520  7,236 1,679 1,253 427 2,342 1,630 712	HOUSING NORTH EAST NORTH CENTRAL    TOTAL   URBAN   RURAL   TOTAL   URBAN   RURAL   TOTAL	HOUSING NORTH EAST NORTH CENTRAL SOUTH    TOTAL   URBAN   RURAL   TOTAL   URBAN   RURAL   TOTAL   URBAN	HOUSING NORTH EAST NORTH CENTRAL SOUTH  TOTAL URBAN RURAL TOTAL URHAN RURAL TOTAL URBAN RURAL  20.178 5,773 0.203 1.530 8.163 5.809 2.354 7.451 4.244 3.206 43.240 8.478 7.066 1.412 11.658 8.323 3.336 14.868 9.539 5.330 3.663 1.032 767 265 1.291 874 417 838 439 399 3.663 1.032 767 265 1.291 874 417 838 439 399 3.663 1.032 767 265 1.291 874 417 838 439 399 3.663 1.032 767 265 1.291 874 417 838 439 399 3.663 1.032 767 265 1.291 8.464 417 838 439 3.99 3.665 1.032 767 265 1.291 8.464 417 838 439 3.99 3.665 1.032 767 265 1.091 1.001 6.85 416 3.665 1.001 70 333 165 168 511 127 183 3.665 16.513 3.818 2.801 1.017 5.611 4.091 1.520 5.201 2.993 2.208 3.665 1.667 1.667 1.253 427 2.342 1.630 712 2.352 1.292 1.061	HOUSING	HOUSING   NORTH EAST   NORTH CENTRAL   SOUTH   WEST

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUF TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCES THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY. DEFICE OF THE CONSUMPTION DATA SYSTEM. OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

#### TABLE 11B CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY CENSUS REGIONS (PERCENTAGE OF HOUSING UNITS)

	'						CENSUS	REGION					
	TOTAL HOUSING Units		ORTH EAS	ST	NOR	TH CENT	RAL	   	SOUTH			WEST	
		TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL
TOTAL HOUSING UNITS 1/	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	190%	100%	100%
INSULATION ADDED (INEXPENSIVE)		] [					Į Į	 	! 	† <b>!</b>	! 	<b>!</b>	1
YES	29	33	30	44	33	33	35	27	24	50	21	1 1 9	56
WEATHERSTRIPPING	10	9	8	15	12	13	12	8	8	7	9	9	1 11
AROUND HOT WATER PIPES	5	2	1.	2	3	3	3	3	2	4	2	1	1 4
AROUND HOT WATER HEATER	1	-	-	1	1	1	1	1	1	2	1	1	1 2
CAULKING	15	20	20	24	18	19	17	10	10	10	10	9	12
PLASTIC COVERING	1.3	14	11	23	14	13	1 17	13	11	17	9	1 8	13
OTHER	1	1	-	2	1	1	2	1	, 1	1 -	1 1	1 -	3
NO	71	57	70	56	67	67	65	73	76	70	79	81	74
INSULATION ADDED (EXPENSIVE)		, 1		! !	1		i I	1	f 1	1	₹ <b>1</b>	; [	1
YES	7	9	3	11	8	7	10	5	, 4	7	1 5	4	9
ROOF OR ATTIC	4	5	5	6	6	5	7	4	3	1 5	<b>j</b> 3	] 3	<b>§</b> 4
BASEMENT OR CRAWL SPACE	1	1 2	2	3	į 2 <sup>1</sup>	1	3	1	i -	2	1 1	1 -	1 3
OUTSIDE WALLS	3	i 3	3	3	1 4	3	5	2	1	1 3	1 3	1	4
NO	93	91	92	89	92	93	90	95	96	7.5	95	96	91
EQUIPMENT ADDED (INEXPENSIVE)		; {	•	 	•	1	1	Ī \$	} <b>!</b>	1	! !	1	1
YES	7	• 7	7	9	9	11	6	7	7	7	6	5	8
CLOSFABLE SHUTTERS	-	<u> </u>	-	-	1 1	1		i -	i -	i -	1	i -	1
STORM DOORS	4	1 4	3	5	5	5	4	5	1 4	5	1 3	2	5
AUTOMATIC OR CLOCK THERMOSTAT.	į į	1	1 1	2	2	3	1	1	1 1	1	1 -	Į -	1
NEW WATER HEATING EQUIPMENT	2	3	3	3	3	4	1 1	2	1 2	1			1 3
NO	93	93	93	91	91	89	94	93	93	93	94	95	92
EQUIPMENT ADDED (EXPENSIVE)		1 1	i I	•	] }	<b>i</b>	1	1	! !	1	1	1	1
YFS	6	6	6	, 8	6	6	7	6	5	7	1 4	2	9
STORM WINDOWS/INSULATING GLASS	5	5	5	6	5	j 4	6	5	5	5	3	2	9
ELECTRIC HEAT PUMP	i -	i -	-	1	<b>i</b> -	j -	į -	j -	-	-	-	-	-
NEW FURNACE	2	2	2	2	2	2	3	2	1	2	1 1	1	2
NO	94	74	94	92	94	94	93	94	94	93	1 95	98	91

#### TABLE 118 CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY CENSUS REGIONS-CONTINUED (PERCENTAGE OF HOUSING UNITS)

	1	i I					CENSUS	REGION					
	TOTAL  HOUSING   UNITS	I N	ORTH FA	st	   NOR 	TH CENT	RAL	   	9001H		! !	WEST	
	! ! !	I ITOTAL L	†  URBAN 	RURAL	I   Total 	URRAN	  RURAL	I I TOTAL	I Iurban L	I   RURAL	ITOTAL	I   JRBAN 	  RURAL
ADDED ANY INSULATION OR EQUIPMENT	į Į	<b>!</b> ! !	!	! !	 	† †	***	 	† †	1	<b>!</b>	!	
YF S	,	41 59	1 38 1 52			-	1			, -	,	,	-
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	! } 5	; ; ,	1 7	1	† 	† 	     /	!	! ! 3	1	i     5	† •	i i i 7
ADDED EXPENSIVE EQUIPMENT BUY NOT EXPENSIVE INSULATION	 		5	1 6	! ! ! 5	5	1 4	Ē	í ! !	S	į į 5	     2	 
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1	1	1 1	2	2	! ! ! 1	]     3	  -   1	 	1 2	i ! ! -	-	2
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	24	] 	25	35	28	29	 	23	     22	26	1 17	     1/	17
ADDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	1 11	I I I 12	1	1 15	 	1 12	 	1     11	     9	1 	! ! j 4	! ! 6	1 15

NOTE: DATA MAY NOT SUM TO TOTALS OUT TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCES 100 1978 NATIONAL INTERIMENTAGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT. FREEGY INFORMATION ADMINISTRATION.

## TABLE 12A CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY PRIMARY HEATING FUEL (THOUSAND HOUSING UNITS)

	TOTAL		TYF	PE OF PRIMA	RY HEATING FU	EL	
	HOUSING UNITS	NATURAL Gas	  FUEL OIL,   KEROSENE	LPG	  ELECTRICITY	моор	OTHER, NONE
TOTAL HOUSING UNITS 1/	67,457	37,418	14,892	3,102	9,568	1,885	592
TOTAL ELIGIBLE HOUSING UNITS	64,957	36,462	14,810	2,930	8,377	1,785	592
IMSULATION ADDED (INEXPENSIVE) YES, ELIGIBLE	•	14,431 5,618	7,170 2,650	1 ,340 334	3,458	820 2 <b>7</b> 5	283 33
AROUND HOT WATER PIPES AROUND HOT WATER HEATER CAULKING	797 17,048	1 • 082 386 9 • 357	575 217 4.820	151 34 691	124 127 1,790	130 36 287	- 103
PLASTIC COVERING		4 • 896 777 292 22 • 694	2,965 96 70 7,633	792 63 72	1,251   183   404   5,706	554 ( 32 36 1,030	197   19   -   308
INSULATION ADDED (EXPENSIVE)		1					
YES, ELIGIBLE	4+934	3,927 2,564 942	2,050 1,389 481	415 338 55	708   494   219	206 82 73	67   67   -
OUTSIDE WALLS		1,415 152 33,339	808 1 - 1 12,843	181   71   2,616	190   284   8,576	84 68 1,612	33   -   524
EQUIPMENT ADDED (IMEXPENSIVE)					1 1 T C	4 4 4	Garage State &
YES, ELIGIBLE	460	5,167 338 2,759	1 1,886 1 60 1 1,030	345   -   106	1,138     62     579	141 - 109	-   -
AUTOMATIC OR CLOCK THERMOSTAT.  NEW MATER HEATING EQUIPMENT  YES, INELIGIBLE	3,153	574   1,855   115	449 670 45	37 201 37	191   411   1 359	17 15 32	-
NO • • • • • • • • • • • • • • • • • • •	58 <sub>1</sub> 193	32,136	12,961	2,721	8,071	1 , 712	592
EQUIPMENT ADDED (EXPENSIVE) YES, FLIGIBLE	4,974	3,444 2,552	1 1 2761 1 1 2434 1 19	355 266	779     632     67	95 57 <del>-</del> -	1 50 1 33
NEW FURNACE		1,032 127 33,847	341 41 13,090	105 1 37 1 2,711	205 254 8,536	38 - 1,790	17 - 542
YES, INELIGIBLE	458	127	41	37	254	_	-

## TABLE 12A CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY PRIMARY HEATING FUEL-CONTINUED (THOUSAND HOUSING UNITS)

	TOTAL	! !	ТҮР	E OF PRIMA	ARY HEATING FUE	EL	
	HOUSING UNITS	NATURAL GAS		LPG	  ELECTRICITY  	WOOD	OTHER, NONE
ANY EQUIPMENT OR INSULATION ADDED BY ELIGIBLE HOUSING UNITS							! ! }
YES				1+656 1+274	4,144   4,233	<del>3</del> 41 844	1 300 291
ELIGIBLE UNITS THAT ADDED  EXPENSIVE INSULATION BUT NOT  EXPENSIVE EQUIPMENTELIGIBLE UNITS THAT ADDED	5 <sub>9</sub> 5 3 5	1 1 1 3 • 0 2 0	1,535	32?	440	184	54
EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	4 • 6 4 7	2 • 5 3 7	1.247	262	511	74	17
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1.837	       907		93	268	21	 
ELIGIBLE UNITS THAT ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	21,759	11,850	5•126	979	2,926	562	216
ELIGIBLE UNITS THAT ADDED STORM WINDOWS, OR STORM DOORS, OR ATTIC OR ROOF INSULATION	11.369	6.213	]   3•091	5.3.3	1 1 - 237	227	     67

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO." SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY. OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

## TABLE 12B CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY PRIMARY HEATING FUEL (PERCENTAGE OF HOUSING UNITS)

	TOTAL		TYP	E OF PRIMA	RY HEATING FU	EL	
	HOUSING UNITS	NATURAL GAS		LPG	  ELECTRICITY	doom	OTHER.
TOTAL HOUSING UNITS 1/	100%	100%	100%	100%	100x	100%	100%
TOTAL ELIGIBLE HOUSING UNITS	96	97	99	94	88	95	100
INSULATION ADDED (INEXPENSIVE)	,	1			1 (		
YES, ELIGIBLE	41	39	48	43	] 36 ]	43	48
WEATHERSTRIPPING	15	15	1 13	11	1 13	15	6
AROUND HOT WATER PIPES	4	1 3	4	5	5 1	7	-
AROUND HOT WATER HEATER	1	1	I I	1	1 1	2	-
CAULKING	25	25	32	2.2	i 19 i	15	1.7
PLASTIC COVERING	16	1 13	i 20 i	25	i 13 i	29	33
OTHER	2	2	1 1	2	2 1	2	3
YES. INELIGIBLE.	ī	1	- 1	2	4	2	-
NOssessessessessessesses	58	61	51	54	60	55	52
(MSULATION ADDED (EXPENSIVE)		1				•	
YES, ELIGIBLE	11	1 10	1 14	1.3	i 7 i	11	. 11
ROOF OR ATTIC		7	9	11	5 1	4	i ii
BASEMENT OR CRAHL SPACE		1 3	3 1	2	2 1	4	-
OUTSIDE WALLS	. 4	1 4	1 5	5	2 1	4	6
YES INELIGIBLE	1		1 - 1	2	1 3 1	4	
NO	88	89	86	84	90	85	89
EQUIPMENT ADDED (INEXPENSIVE)	} !	1	8				•
YES, ELIGIBLE,	1.3	1 14	1 13	11	1 12	7	
CLOSEABLE SHUTTERS		1 1	1 - 1	- 4	1 1 1		i -
STORM DOORS		1 7	7	3	1 6	4	-
AUTOMATIC OR CLOCK THERMOSTAT.		1 2	3	, í	1 2 1	1	
NEW WATER HEATING EQUIPMENT		5	1 4 1		1 4 1	1	-
YES INELIGIBLE		1 -	7	1	1 T 1	2	; }
Attention of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s		86	87	88	84	91	100
CAUTOMENT ADDED JEVOENCIUS		1	1				•
EQUIPMENT ADDED (EXPENSIVE)		1 0	1 10	7.1	1 8 1	5	ł g
YES+ ELIGIBLE		9	12	11	1 7 1	3	1 6
STORM WINDOWS/INSULATING GLASS	,	7	10	, 9			1 h
ELECTRIC HEAT PUMP	,		1	~	1 1	-	1 3
NEW FURNACE	•	1 3	2	3	2	2	
Y'S, INELIGIBLE,	Ĭ.		-	1	] 3 †		-
NO	90	9.0	88	8.7	1 89 1	95	35

## TABLE 128 CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY PRIMARY HEATING FUEL-CONTINUED (PERCENTAGE OF HOUSING UNITS)

	TOTAL	1	TYP	E OF PRIMA	ARY HEATING FU	EL	
	HOUSING UNITS		FUEL DIL+     KEROSENE		ELECTRICITY	Aood	OTHER, NONE
ANY EQUIPMENT OR INSULATION ADDED   BY ELIGIBLE HOUSING UNITS							
VES		§ 49 9 48	57	53 41	45	50 45	5 <u>1</u> 49
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	Ŕ	8	1 10	10	5	10	 
LIGIBLE UNITS THAT ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	7	7	3	8	5	4	       3
LIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	3	2	1 !	3	3	1	   
LIGIBLE UNITS THAT ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	32	32	34	32	31	35	 
LIGIBLE UNITS THAT ADDED STORM WINDOWS: OR STORM DOORS: OR ATTIC OR ROOF INSULATION		17	21	1 F	15	12	† : : 1 1 1

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH #-\* REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

TABLE 13A
CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY PRIMARY HEATING FUEL
(THOUSAND HOUSING UNITS)

	TOTAL	; [	TYP	E OF PRIMA	RY HEATING FU	EL	
	HOUSING UNITS	NATURAL GAS	  FUEL OIL;     KEROSENE	LPG	  ELECTRICITY  	M00P	OTHER, NONE
TOTAL HOUSING UNITS 1/	67,457	37,418	14+892	3,102	9,568	1,885	592
INSULATION ADDED (INEXPENSIVE)		1	1 1		1		 
YES	17.632	9,438	4 + 366	870	2,391	433	134
HEATHERSTRIPPING	4,907	2,737	1,209	135	672	153	-
AROUND HOT WATER PIPES	1,286	587	211	1.34	322	33	-
AROUND HOT WATER HEATER	458	179	63	51	150	15	-
CAULKING	11,078	6,141	2,873	426	1 1,385	168	86
PLASTIC COVERING	5,456	2,504	1,575	379	631	301	65
OTHER	855	556	48	52	183	17	-
NO	49,826	27,980	10,526	2 # 2 3 2	7,177	1,452	457
INSULATION ADDED (EXPENSIVE)		•					1
YES	4,226	2,390	879	207	618	99	33
ROOF OR ATTIC	2,843	1,423	613	173	515	85	33
BASEMENT OR CRAWL SPACE		691	308	34	239		i -
OUTSIDE WALLS	1,478	783	321	90	203	47	33
NO	63,232	35,028	14,013	2,896	8,950	1,786	558
EQUIPMENT ADDED (INEXPENSIVE)		1	1 1		1		****
YES	5,274	2,932	1.103	248	893	98	-
CLOSEABLE SHUTTERS	300	219	29	-	52		-
STORM DOORS	2,680	1,631	503	56	440	50	-
AUTOMATIC OR CLOCK THERMOSTAT.	888	399	247	43	183	17	-
NEW WATER HEATING EQUIPMENT	2,132	1,034	437	188	442	31	-
NO 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	62 • 184	34 + 486	13,790	2+854	8,675	1,787	592
EQUIPMENT ADDED (EXPENSIVE)		n n					
YES	3,504	1,950	855	164	463	21	50
STORM WINDOWS/INSULATING GLASS		1,411	723	108	397		33
ELECTRIC HEAT PUMP		-	19	-	48 1	-	<u> </u>
NEW FURNACE	1,048	680	113	73	144	21	17
NO	63.953	1 35,467	14,037	2.938	1 9.105 i	1,864	542

TABLE 13A

CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY PRIMARY HEATING FUEL-CONTINUED

(THOUSAND HOUSING UNITS)

	TOTAL.	! !	TYF	PE OF PRINA	ARY HEATING FU	EL	
	HOUSING UWITS	NATURAL GAS	   FUEL DIL     KEROSENE	LPG	  ELECTRICITY  	#00b	OTHER.
ADDED AMY INSULATION OR EQUIPMENT  YES		1 12,475 24,9942	1 1 1 5 0 1 7 8 1 9 0 7 1 4	1 <b>1 1 6 6</b> 1 <b>1 7 3 6</b>	3,091   5,477	. 517 1+369	151 441
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	3 9212	1 1,816	731	169	397	99	
ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	2 <sub>9</sub> 4 7 0	1 1 + 377	707	127	242	21	17
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1.014	574	148	37	221	<del>-</del>	5.3
ADDED OMLY INEXPENSIVE INSULATION OR EQUIPMENT	15,862	8,709	3,593	833	2,231	396	101
ADDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	6,427	!   3,494	1+530	262	372	135	33

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUF TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERTH ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM; OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

#### TABLE 13B CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY PRIMARY HEATING FUEL (PERCENTAGE OF HOUSING UNITS)

	TOTAL									
† 1 1	HOUSING   UNITS   	   NATURAL   GAS		LPG	ELECTRICITY	W000	OTHER. NONE			
TOTAL HOUSING UNITS 1/	100%	100%	100%	100%	100%	100%	100%			
INSULATION ADDED (INEXPENSIVE)		¥ }	•		1 1		! 			
YES	26	25	29	28	25	23	2.3			
WEATHERSTRIPPING	7	7	8	4	7	8	-			
AROUND HOT WATER PIPES	2	2	1 1	4	3 1	2	-			
AROUND HOT WATER HEATER	1	-	-	2	2	1	- 1			
CAULKING	16	16	19	14	14	9	14			
PLASTIC COVERING	Я	7	1 11	12	1 7 1	16	11			
DTHERoomonosonosonosonosol	1	1	1	2	5	1	i -			
NO	74	75	71	72	1 75 1	77	77			
INSULATION ADDED (EXPENSIVE)		\$ •			1		[ 			
YES	6	1 6	6	7	6	5	5			
ROOF OR ATTIC	a	4	4	6	5	4	6			
BASEMENT OR CRANL SPACE	2	1 2	2	1	2 1	-	· -			
OUTSIDE WALLS	2	2	2	3	2	2	6			
NO	94	94	94	93	94	95	94			
EQUIPMENT ADDED (INEXPENSIVE)		1	•			•	1			
YES a a a a a a a a a a a a a a a a a a a	8	8	7	8	9	5	-			
CLOSEABLE SHUTTERS	-	i		-	i	-	<b>.</b> -			
STORM DOORS	4	1 4	1 3	2	5	3	i -			
AUTOMATIC OR CLOCK THERMOSTAT.	1	1 1	2	1	2	1	1 -			
NEW WATER HEATING EQUIPMENT	3	3	1 3	6	5	2				
NO	9ž	92	93	92	91	95	100			
!		1	1	l						
EQUIPMENT ADDED (EXPENSIVE)		_		_	1	_	!			
YES	5	5	6	5	5 [	1	1 8			
STORM WINDOWS/INSULATING GLASS		4	5	3	1 4	-	1 6			
ELECTRIC HEAT PUMP	-	_	-	-	1 1		! .			
NEW FURNACE	2 95	2 95	] 1   94	2 ! 95	2 1 95	1 99	] 3 1 92			

#### TABLE 13B CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY PRIMARY HEATING FUEL-CONTINUED (PERCENTAGE OF MOUSING UNITS)

	TOTAL	TYPE OF PRIMARY HEATING FUEL									
	HOUSING UNITS	NATURAL GAS	  FUEL OIL,     KFROSENE   	LPS		Moon	   OTHER:   NONE				
DDED ANY INSULATION OR EQUIPMENT	33 67	1 1 1 33 1 67	35   65	38 52	32	27 73	36				
DDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	13		÷ ;	5		19					
DDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	4	! !	; ; ; ;	4	i 1	1	 				
DDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	2	2	1 1	1	3	<del>-11</del>	† † 6				
DDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	24	2.3	24	27	2.5	21	1 17				
DDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	1 0	     9	10	я	1 10	7	     6				

1/ FXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF THRMS USED IN THIS TABLE.

SOURCE: THE 1979 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM OFFICEMENT, ENERGY INFORMATION ADMINISTRATION.

#### TABLE 14A CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY PRIMARY HEATING FUEL (THOUSAND HOUSING UNITS)

	TOTAL	İ	TYP	E OF PRIMA	RY HEATING FUE	EL	
4	HOUSING	NATURAL GAS	FUEL OIL,     KEROSENE	LPG	  ELECTRICITY	WOOD	OTHER NONE
OTAL HOUSING UNITS 1/	67,457	37,418	14,892	3,102	9,568	1,885	592
(NSULATION ADDED (INEXPENSIVE)							
YES	19,579	9,897	5,195	985	2,580	705	218
WEATHERSTRIPPING	6,516	3,552	1,606	219	948	158	33
AROUND HOT WATER PIPES	1,502	686	382	17	304	98	1 19
AROUND HOT WATER HEATER	594	266	154	17	137	21	-
CAULKING	9,852	5,180	2 9 8 4 7	422	1,131	239	] 3:
PLASTIC COVERING	8,683	3,880	2,373	631	1,144	473	18:
OTHERosossessessessesses	504	265	101	16	86	15	1
NO	47,878	27,521	9,698	2,117	6,988	1,181	37
NSULATION ADDED (EXPENSIVE)		1	1 1				1
YFS	4,545	2,120	1 1 464	279	456	192	3
ROOF OR ATTIC	3,021	1,453	978	235	237	83	1 3
BASEMENT OR CRAWL SPACE	959	408	227	55	196	73	- 1
OUTSIDE WALLS	1,729	750	591	127	209	52	-
NO	62,912	35,298	13,428	2,823	9,112	1,693	55
QUIPMENT ADDED (INEXPENSIVE)		1	The Bar				1
YES	4,956	2,815	1 1 1 1 4 2 1	205	718	75	-
CLOSEABLE SHUTTERS	237	144	31		62 1	-	-
STORM DOORS	2,751	1,367	624	142	559	58	1 -
AUTOMATIC OR CLOCK THERMOSTAT.	736	334	219	14	153	17	1 -
NEW WATER HEATING EQUIPMENT	1,624	1,066	361	49	148	40	-
NO	62,502	34.602	13,751	2,897	8,850	1,810	59
QUIPMENT ADDED (EXPENSIVE)		1	¥ 77				
YES *************	4.002	1,892	1,106	266	647	91	-
STORM WINDOWS/INSULATING GLASS	3,078	1,436	824	215	546	57	-
ELFCTRIC HEAT PUMP	144	16	j 31 j	_	97	400	-
NEW FURNACE	1,161	505	315	87	220	34	-
NO	53,455	35,526	13,786	2,835	1 8,921 I	1,794	59

#### TABLE 14A CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY PRIMARY HEATING FUEL-CONTINUED (THOUSAND HOUSING UNITS)

	TOTAL	TYPE OF PRIMARY HEATING FUEL								
	HOUSING UNITS	NATURAL   GAS		LPG	  ELECTRICITY  	doch	OTHER, NONE			
ADDED ANY INSULATION OR EQUIPMENT										
YES	24 •178 43 •280	12,403	6.395   8.497	1 •222 1 •880	3,113   6,456	827 1,058	] 218 ] 373			
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	3 +663	1+834	1,163	241	1 199	192	34			
NDDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	3,120	1 + 606	804	223	390	91				
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	883	286	302	38	257		ī 1 1			
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	16 9513	8+677	4 • 127	715	2,266	544	 			
ADDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	7 • 236	3,590	2,021	4.86	927	178	1     34			

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

## TABLE 14B CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY PRIMARY HEATING FUEL (PERCENTAGE OF HOUSING UNITS)

	TOTAL   HOUSING   UNITS									
		   NATURAL   GAS	  FUEL OIL+   KEROSENE	LPG	  ELECTRICITY  	ноор	OTHER,			
TOTAL HOUSING UNITS 1/	100%	100%	100%	100%	100%	100%	100%			
INSULATION ADDED (INEXPENSIVE)		!			nas mara					
YES	29	26	35	32	27	37	37			
WEATHERSTRIPPING	10	9	11	7	10	8	6			
AROUND HOT WATER PIPES	2	2	3	1	3 1	5	3			
AROUND HOT WATER HEATER	1	1	1	1	1 1	1	-			
CAULKING	15	1.4	19	14	1 12	13	5			
PLASTIC COVERING	13	10	16	20	12	25	31			
OTHER	1	1	1	1	1 1	1	5			
NO	71	74	65	6.8	73	63	53			
INSULATION ADDED (EXPENSIVE)		1	1		f ;		Į V			
YES	7	i 6	10	9	j 5	10	6			
ROOF OR ATTIC	4	4	7	1 8	1 2	4	6			
BASEMENT OR CRAWL SPACE		1	2	2	2 1	4	1			
OUTSIDE WALLS	3	2	1 4	1 4	2	- 3	-			
NO 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	93	94	70	91	95	90	94			
EQUIPMENT ADDED (INEXPENSIVE)		1	gt.		[		1			
YES	7	1 8	1 8	7	i 8	4	i -			
CLOSEABLE SHUTTERS		į -	i -	-	1 1	-	i -			
STORM DOORS	41	4	4	5	6	3	j -			
AUTOMATIC OR CLOCK THERMOSTAT.	1	1	1 1	-	2	1	i -			
NEW WATER HEATING EQUIPMENT	2	3	1 2	1 2	1 2	-	i -			
NO		92	92	93	92	96	100			
EQUIPMENT ADDED (EXPENSIVE)		i i	8		1 1		4			
YES	5	5	7	9	7	5	i -			
STORM WINDOWS/INSULATING GLASS		1 4	, ,	7	6	3	i ~			
ELECTRIC HEAT PUMP		i -	i -	i -	1	i -	i -			
NEW FURNACE		1	i 2	1 3	2	2	j			
NO	94	95	93	91	93	95	1 100			

#### TABLE 14B CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY PRIMARY HEATING FUEL-CONTINUED (PERCENTAGE OF HOUSING UNITS)

	I I I TOTAL	] 	TYI	PE OF PRIMA	RY HEATING FU	JEL	
	HOUSING UNITS	   NATURAL   GAS 	  FUEL DIL,   KEROSENE	L PG	  ELECTRICITY    	000 w	OTHER, I NONE
ADDED ANY INSULATION OR EQUIPMENT YES		 	   43   57	     3°)   61	3.5 67	44 56	 
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	Ş	<b>!</b> 5	1	! ! ! 8	] 	10	     6
ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	5	<b>!</b> <b>!</b>	1 5	     7	4	5	- -
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1	1 1	2	 	3	-	  -
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	     24	23	28	25	24	29	     31
ADDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	]   11	1 10	1 14	     16	10	)   	     6

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH \*\*- REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM D-V: COPMENT, ENERGY INFORMATION ADMINISTRATION.

## TABLE 15A CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY DEGREE DAYS (THOUSAND HOUSING UNITS)

i T	TOTAL	1	HEATING A	ND COOLING DEGRI	EE DAYS	time with the data with one pain that ever some start in
	HOUSING Units	1 <2000 CDD	<2000 CDD	C2000 COD     AND	<2000 CDD	>2000 CDE   AND
, , , , , , , , , , , , , , , , , , ,		>7000 HDD		4000-5499 HDD	<4000 HDD	<4000 HDE
TOTAL HOUSING UNITS 1/	67,457	5,766	19,605	17,397	14,520	10,169
TOTAL ELIGIBLE HOUSING UNITS	64,957	5,030	18,978	17,084	14,119	9,745
(NSULATION ADDED (INEXPENSIVE)						
YES, ELIGIBLE	27,522	2 • 314	9,265	7,984	4,805	3,155
WEATHERSTRIPPING	10.195	1,022	3,664	2,991	1,254	1.264
AROUND HOT WATER PIPES	2,380	159	816	534	514	357
AROUND HOT WATER HEATER	797	63	208	215	167	145
CAULKING	17,048	1 1 474	6,290	5,483	2,339	1,462
PLASTIC COVERING	10,656	i 888	3,019	3,588	2,270	891
OTHER	1.176	j 119	1 445	258	241	112
YES, INELIGIBLE	874	1 145	234	i 274 i	148	73
NO	39,061	3,307	10,107	9,138	9,567	6,941
MSULATION ADDED (EXPENSIVE)		1	1	!		1
YES, ELIGIBLE	7,373	875	2,787	1,992	1,181	539
ROOF OR ATTIC	4 , 934	540	1 • 855	1,292	727	521
BASEMENT OR CRAWL SPACE	1,771	250	823	473	191	34
OUTSIDE WALLS	2,711	376	875	896	477	86
YES, INELIGIBLE	575	62	176	212	52	73
NO	59,510	4,829	16,642	15,193	13,287	9,558
QUIPMENT ADDED (INEXPENSIVE)		74 E194				1
YES, ELIGIBLE	8 • 677	621	2,972	2,202	1,621	1,261
CLOSEABLE SHUTTERS	460	-	226	30	130	74
STORM DOORS	4,584	474	1,613	1 • 271	787	439
AUTOMATIC OR CLOCK THERMOSTAT.	1,268	68	490	362	151	1 197
NEW WATER HEATING EQUIPMENT	3,153	1 34	979	797	648	594
YES, INELIGIBLE	588	66	188	180	137	17
NO	58,193	5 • 079	16,444	15,014	12,763	8,892
QUIPMENT ADDED (EXPENSIVE)		and the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of t		E Court		•
YES, ELIGIBLE	6,484	604	2,009	2,128	1.201	543
STORM WINDOWS/INSULATING GLASS!	40974	479	1,585	1,727	876	307
ELECTRIC HEAT PUMP	86	-	-	51	-	1 35
NEW FURNACE	1,737	174	487	1 430	408	239
YES, INELIGIBLE	458	54	136	144	114	1 -
NO a c c c c c c c c c c c c c c c c c c	60 - 515	5.098	17,460	15,125	13,206	9,626

## TABLE 15A CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY DEGREE DAYS-CONTINUED (THOUSAND HOUSING UNITS)

	TOTAL	1	HEATING A	ND COOLING DEGR	EE DAYS	
 	HOUSING UNITS	<2000 C9D   AND   >7000 H3D				AND
ANY EQUIPMENT OR INSULATION ADDED   BY ELIGIBLE HOUSING UNITS		† •	dien man terr i tre			
YES 600 700 000 000 000 000 000 000 000 000	35 7779 31 178	2 y 809 2 y 222	11,227	9.57i   7.513	60177 70942	3 ∘ 9 9 ∜ 5 ∘ 7 5 1
ELIGIBLE UNITS THAT ADDED  EXPENSIVE INSULATION BUT NOT  EXPENSIVE EQUIPMENT	5 <sub>4</sub> 535	673	2,200	! ! ! 1,385 !	8 <b>4</b> 9	423
ELIGIBLE UNITS THAT ADDED  EXPENSIVE EQUIPMENT BUT NOT   EXPENSIVE INSULATION	4,647	402	1 1,423	 	868	     432
ELIGIBLE UNITS THAT ADDED  EXPENSIVE INSULATION AND  EXPENSIVE EQUIPMENT	1 9 857	! ! ! 201	!       586		352	i i !
ELIGIBLE UNITS THAT ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	21,759	1,531	7,020	 	4 = 127	1 3, 023
ELIGIBLE UNITS THAT ADDED STORM WINDOWS, OR STORM DOORS, COR ATTIC OR ROOF INSULATION	11,369	1, 1,243	3,771	5,324	1,800	1.051

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH #-# REPRESENTS OR ROUNDS TO ZFRO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY. OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

## TABLE 15B CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY DEGREE DAYS (PERCENTAGE OF HOUSING UNITS)

1	TOTAL	1	HEATING A	ND COOLING DEGR	EE DAYS	
·	HOUSING UNITS	<2000 CDD   AND   >7000 HDD	C2000 CDD AND 5500-7000 HDD		<2000 CD9 AND <4000 HDD	>2000 CD0 AND <4000 HD0
TOTAL HOUSING UNITS 1/	100%	100%	100%	100%	100%	100%
TOTAL ELIGIBLE HOUSING UNITS	96	87	97	98	97	96
INSULATION ADDED (INEXPENSIVE)		1	ADD APPROXIMATION OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPE	dhis		
YES, ELIGIBLE	41	40	47	46	33	31
WEATHERSTRIPPING	15	18	19	17	9	12
AROUND HOT WATER PIPES	4	3	4	3	4	4
AROUND HOT WATER HEATER	- 1	i 1	i 1		1	1
CAULKING	25	26	32	i 32 i	16	14
PLASTIC COVERING	16	1 15	1 15	i 21 i	16	9
OTHER	2	1 2	2	1 1	2	1
YES, INELIGIBLE	1	1 3	1 1	2 1	1	1
NO	58	57	52	53	66	68
(NSULATION ADDED (EXPENSIVE)		<b>9</b>	***			
YES, ELIGIBLE	11	15	1 4	[ 11 ]	8	5
ROOF OR ATTIC	7	9	9	7	5	5
BASEMENT OR CRAWL SPACE	3	4	4	3 1	1	-
OUTSIDE WALLS	4	7	4	5 1	3	] 1
YES, INELIGIBLE	1	1	1	1 1	***	1
NOssassassassassassassassassassassassassa	88	84	85	87	92	94
QUIPMENT ADDED (INEXPENSIVE)		na- 14400		the China		
YES, ELIGIBLE	13	1 11	1 15	1 13 1	11	12
CLOSEABLE SHUTTERS	1	-	1 1	1 - 1	1	1
STORM TOORS	7	8	<b>§</b> 8	7	5	<b>\$</b>
AUTOMATIC OR CLOCK THERMOSTAT.	2	1	<b>i</b> 3	2 1	I	2
NEW WATER HEATING EQUIPMENT !	5	2	5	5 !	4	6
YES, INELIGIBLE	1	1	1	1 1	l	-
NOncessancescancescances	86	88	84	86	88	87
QUIPMENT ADDED (EXPENSIVE)						<b>3</b>
YES, ELIGIBLE	10	10	10	1 12 1	3	5
STORM WINDOWS/INSULATING GLASS!	7	8	1 8	1 10	6	3
ELECTRIC HEAT PUMP	***	-	-	- 1		-
NEW FURNACE	3	3	2	1 2 1	3	2
YES, INELIGIBLE	1	1	1	1 1	1	_
NO	90	88	89	87	91	95

## TABLE 158 CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY DEGREE DAYS-CONTINUED (PERCENTAGE OF HOUSING UNITS)

,	TOTAL	7 9 1	HEATING A	AD COOFINE DECK	EE DAYS	
	HOUSING ; Units ;	1 AND	<2000 CDD   AND   5500-7000 HDD	ANO I	A NO	AND
ANY EQUIPMENT DR INSULATION ADDED				and the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of t		
YESueeuuuuuun non non non noo noo oo oo oo oo oo oo	50 66	49 39	; 57 1 +0	55 43	4 3 5 €	( 39   57
ELIGIBLE UNITS THAY ADDED  EXPENSIVE INSULATION BUT NOT  EXPENSIVE EQUIPMENT	ę	12	1 11	8	5	4
LIGIBLE UNITS THAT ADDED  EXPENSIVE EQUIPMENT BUT NOT  EXPENSIVE INSULATION	7	7	1 7	9	5	4
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	3	] 	i i i 3	3	?	1
ELIGIBLE UNITS THAY ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	32	 	1     36	 	28	30
ELIGIBLE UNITS THAT ADDED STORM WINDOWS, OR STORM DOCKS, OR ATTIC OR ROOF INSULATION	11	22	20	19	12	10

I/ EXCLUDES BUILDINGS MITH FINE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH #-# REPRESENTS OR ROUNDS TO ZIRO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

### TABLE 16A CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY DEGREE DAYS (THOUSAND HOUSING UNITS)

•	TOTAL   HOUSING   UNITS	· · · · · · · · · · · · · · · · · · ·								
; ; ;		<2000 COD   AND   >7000 HDD	<2000 CDD   AND  5500-7000 HDD	<2000 CDD AND 4000-5499 HDD	<2000 CDD AND <4000 HDD	>2000 CDD AND <4000 HDD				
FOTAL HOUSING UNITS 1/	67,457	5,766	19,605	17,397	14,520	10.169				
INSULATION ADDED (INEXPENSIVE)		1	1	! !						
YES	17,632	1,490	6,217	5,230	2,875	1.820				
WEATHERSTRIPPING	4,907	451	1.830	1,463	592	571				
AROUND HOT WATER PTPES	1,286	76	424	281	280	224				
AROUND HOT WATER HEATER	458	31	125	109 [	48	144				
CAULKING	11,078	976	4,240	3,461	1,571	830				
PLASTIC COVERING	5,456	381	1 + 496	2,052	1,093	434				
OTHER	855	90	273	205	168	118				
NO	49,826	4,276	13,388	12,167	11,645	9,350				
INSULATION ADDED (EXPENSIVE)		er cine				1				
YES	4.226	393	1 1,684	1,070	728	350				
ROOF OR ATTIC	2,843	222	1 1,047	767	494	313				
BASEMENT OR CRAWL SPACE	1,271	167	! 555	372	127	51				
OUTSIDE WALLS	1,478	157	624	385	276	36				
NO	63,232	5,373	17,921	16,327	13,792	9,820				
EQUIPMENT ADDED (INEXPENSIVE)		# B		; }		₹ <b>1</b>				
YES	5 • 27 4	411	1,768	1,320	976	799				
CLOSEABLE SHUTTERS	300	1 -	117	[ 25 ]	84	74				
STORM DOORS	2,680	301	1,090	688	384	216				
AUTOMATIC OR CLOCK THERMOSTAT.	888	68	270	309	154	87				
NEW WATER HEATING EQUIPMENT	2,132	128	573	573	39 <b>3</b>	465				
NO	62,184	5,355	17,837	16,077	13,544	9,370				
EQUIPMENT ADDED (EXPENSIVE)		T	;	;						
YES	3.504	347	1,069	1,248	668	172				
STORM WINDOWS/INSULATING GLASS!	2,672	287	815	1,024	446	99				
ELECTRIC HEAT PUMP	67	-	31	19	17	-				
NEW FURNACE	1,048	60	324	311	261	92				
NO	63,953	5.418	1 18,537	1 16.149	13,852	9,997				

#### TABLE 16A CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY DEGREE DAYS-CONTINUED (THOUSAND HOUSING UNITS)

<u> </u>	TOTAL	HEATING AND COOLING DEGREE DAYS								
1	HOUSING   UNITS	<2000 CDB   <2000 CDB   >7000 HDD	   <2000 CDD   AND  5500-7000 HUD		ANO	   >2000 CDD   AND   <4000 HDD				
i DDED ANY INSULATION OR EQUIPMENT I		Î    -		! !		1				
YF. S-000000000000000000000000000000000000	22 v 578	1,954	7.631	6 p 4 3 0	3.086	: 1 2.4608				
NO 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	94,879	3.812	11,974	10,367	17,555	7,592				
DOED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	3,212	}   35∍	1,350	699	510	294				
DDEO EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	2 <b>, 1</b> 9 0	313	734	877	450	116				
DDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1,014	] ] 34 ·	334	371	218					
DDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	15,862	1,248	5.212	4,482	2,777	     2•142				
DDED STORM WINDOWS, STORM DOORS, I OR ATTIC OR ROOF INSULATION	5+427	I I J 735	2,289	 	1,010	 				

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH #-# REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERMEMENTARY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, SEFFICE OF PROGRAM DEVELOPMENT, FINERGY INFORMATION ADMINISTRATION.

#### TABLE 16B CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY DEGREE DAYS (PERCENTAGE OF HOUSING UNITS)

	TOTAL		HEATING A	ND COOLING DEGR	EE DAYS	
	HOUSING UNITS	<2000 CDD   AND   >7000 HDD	<2000 CDD   AND  5500-7000 HDD	<2000 CDD   AND   4000-5499 HDD	<2000 CDD AND <4000 HDO	>2000 CDD   AND   <4000 HDD
OTAL HOUSING UNITS 1/	100%	100x	100%	100%	100%	100%
INSULATION ADDED (INEXPENSIVE)		1	1	! !		•
YES	26	26	32	) 30 j	20	18
WEATHERSTRIPPING	7	8	9	8 1	4	6
AROUND HOT WATER PIPES	2	1	1 2	1 2 1	2	2
AROUND HOT WATER HEATER	1	1	1	1 1	-	1
CAULKING	16	17	22	20	11	8
PLASTIC COVERING	8	7	8	1 12 1	8	4
OTHER	1	<u>i</u> 2	1 1	1 1	1	1
NO	7 4	74	68	70	80	82
INSULATION ADDED (EXPENSIVE)		•	! !	! !		1
YES	5	7	<b>i</b> 9	6 1	5	3
ROOF OR ATTIC	4	j 4	1 5	j 4 j	3	3
BASEMENT OR CRAWL SPACE	2	j 3	j 3	i 2 i	1	1
OUTSIDE WALLS	2	j 3	1 3	j 2 j	2	i -
NO	94	93	91	94	95	97
QUIPMENT ADDED (INEXPENSIVE)			•	1 2		1
YES	8	7	1 9	1 8 1	7	1 8
CLOSEABLE SHUTTERS	-	-	1	1 - 1	1	1
STORM DOORS	4	5	6	1 4 1	3	2
AUTOMATIC OR CLOCK THERMOSTAT.	1	1	j 1	1 2 1	1	1
NEW WATER HEATING EQUIPMENT !	3	j 2	1 3	1 3 1	3	5
NO	92	93	91	92	93	92
QUIPMENT ADDED (EXPENSIVE)		1	E-	T 1		1
YES	5	6	j 5	7	5	2
STORM WINDOWS/INSULATING GLASS!	4	j 5	4	1 6	3	] 1
ELECTRIC HEAT PUMP	***	-	-	i - i	-	1 -
NEW FURNACE	2	1	j 2	2	2	1
NO	95	94	95	1 93 1	95	98

TABLE 168
CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY DEGREE DAYS-CONTINUED
(PERCENTAGE OF HOUSING UNITS)

	TOTAL	1 1 1	HEATING A	ND COOLING DEGR	EE DAYS	
	HOUSING UNITS	<2000 COD   AND   >7000 H9D	(2000 CDA AND 15500-7000 HOD	<pre></pre>	A NO	GNA
ADDED ANY INSULATION OR EQUIPMENT		9 1 2	T			411
YES====================================	3 1 5 7	34 1 66	39 61	57 63	27 15	26 74
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	5)	i ! ! 6	7	72 man	4	5
ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	Δ	 		5 1	5	
ADDED EXPENSIVE INSULATION	2	1	1 2	2 1	2	<b>!</b> ! 1
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	2.4	† † 22	27	26	19	!     21
ADDED STORM WINDOWS, STORM DOORS,   OR ATTIC OR ROOF INSULATION	10	1 13	1 12	 	7	6

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH #-# REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE THE 1978 NATIONAL INTEREM : MERCY CONSUMPTION SURVEY, DEFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

### TABLE 17A CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY DEGREE DAYS (THOUSAND HOUSING UNITS)

!	TOTAL		HEATING A	ND COOLING DEGR	EE DAYS	
	UNITS	<2000 CD0   AND   >7000 HDD	<2000 CDD   AND  5500-7000 HDD	<2000 CDD     AND    4000-5499 HDD	<2000 CDB AND <4000 HDD	>2000 CD0 AND <4000 HDD
TOTAL HOUSING UNITS 1/	67•457	5,766	19,605	17•397	14,520	10,169
INSULATION ADDED (INEXPENSIVE)			<b>9</b>	] 		1
YES	19,579	1 .855	6,307	5.917	3,446	2,055
WEATHERSTRIPPING	5,515	721	2,221	1,898	924	753
AROUND HOT WATER PIPES	1,502	122	492	383	338	167
ABOUND HOT WATER HEATER	594	32	134	181	213	34
CAULKING	9,852	988	3,380	3,343	1, 344	796
PLASTIC COVERING	9,683	850	2,465	2,841	1,783	745
OTHER	504	73	222	79	99	31
NO	47.878	3,911	13,299	11,480	11,075	8,114
INSULATION ADDED (EXPENSIVE)		ST COMPA		1 }		† †
YES	4 • 545	592	1,558	1 1,374	686	336
ROOF OR ATTIC	3,021	386	1,061	853	386	336
BASEMENT OR CRAWL SPACE	959	125	433	1 242	143	17
OUTSIDE WALLS	1.729	239	424	743	273	50
NO	62,912	5,174	18,047	16,023	13,834	9,833
EQUIPMENT ADDED (INEXPENSIVE)		1	1			; (
YES	4,756	358	1 1,764	1,378	943	512
CLOSEABLE SHUTTERS	237	-	121	1 46 1	71	-
STORM DOORS	2,751	282	797	818	597	257
AUTOMATIC OR CLOCK THERMOSTAT.	736	34	324	224	28	126
NEW WATER HEATING EQUIPMENT	1,624	42	1 640	485	310	146
NO	62,502	5,408	17.841	16,019	13,578	9,657
EQUIPMENT ADDED (EXPENSIVE)		•				1
YES	4,002	352	1,238	1,334	708	372
STORM WINDOWS/INSULATING GLASS!	3,078	259	989	1,037	586	208
ELECTRIC HEAT PUMP	144	1 -	31	78	-	1 35
NEW FURNACE	1.161	162	298	354	182	165
NO	63,455	5,414	18,367	1 16,063	13,813	3,798

TABLE 17A

CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY DEGREE DAYS-CONTINUED

(THOUSAND HOUSING UNITS)

!	TOTAL		HEATING A	ND COOLING DEGR	EE DAYS	
1	TOTAL HOUSING UNITS  24.178 93.280  3.663  3.120	<2000 C00 AND >7000 H00	<2000 CDD   AND  5500-7000 HDD	AND	A ND	>2000 CDD AND <4000 HDD
 			1	 		
YES		2•170 3•596	7,893 11,712	7,259   10,138	4,556 10,184	2,520 7,649
1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1	110,12	107155	109194	,,,,,,
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	3.663	† 457	1 1.313	1 - 0.57	557	298
		Ĭ	1	1,400.1	3.3.	270
DUT NOT EXPENSIVE EQUIPMENT  BUT NOT EXPENSIVE INSULATION	3.120	! <b>!</b> 217	993		579	) ; 339
		i				33.
IDDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT!	883	134	245	] 337 }	129	! I 38
		•	i	1		3.9
ADDED ONLY INEXPENSIVE 	16,513	! 1 - 361	5,342	4,888	3,071	1.950
1		1	1	1	24071	1 19370
ADDED STORM WINDOWS, STORM DOORS, ! OR ATTIC OR ROOF INSULATION	7,236	! ! 754	2+361	2•195	1 • 270	l 656
ON ATTIC ON ROOF INSCRITORS	7 # 236	1 7,7	1 5327	}	19270	636 

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY. OFFICE OF THE CONSUMPTION DATA SYSTEM.

OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

### TABLE 17B CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY DEGREE DAYS (PERCENTAGE OF HOUSING UNITS)

, -	TOTAL	1	HEATING A	ND COOLING DEGR	EE DAYS	
, , ,	HOUSING UNITS	<2000 CD0   AND   >7000 HD0	1 <2000 CON   AND   5500-7000 HDD	<2000 CDD   	<2000 CDD AND <4000 HDD	>2900 CD0 AND <4900 HDD
OTAL HOUSING UNITS 1/	100%	100%	100%	100%	100%	100%
NSULATION ADDED (INEXPENSIVE)			<b>1</b>	! ! !		! 
YES	29	32	32	] 34 [	24	50
WEATHERSTRIPPING	10	1 12	1 11	11 1	6	7
ARGUND HOT WATER PIPES	2	1 2	1 3	] 2	2	2
AROUND HOT WATER HEATER!	1	1	1.	1 1	1	
CAULKING	15	1.7	1 17	19 1	9	8
PLASTIC COVERING	1 5	1 15	13	16	12	7
OTHER	1	1	1	- 1	1	-
NO	71	68	68	66	76	80
NSULATION ADDED (EXPENSIVE)		1	1	1		
YES	7	10	1 8	8 1	5	3
ROOF OR ATTIC	4	7	1 5	1 5 1	3	3
HASEMENT OR CRANL SPACE	1	1 2	2	1 1	1	-
OUTSIDE WALLS	3	4	2	1 4 [	5	-
NO	া সু	90	92	92	95	97
QUIPMENT ADDED (INEXPENSIVE)						f f
YES	7	6	9	8 1	5	5
CLOSEABLE SHUTTERS		-	1	<b>-</b>	-	-
STORM DOORS	4	5	4	5	4	1 3
AUTOMATIC OR CLOCK THERMOSTAT+!	1	1	2	] ]	-	) 1
NEW WATER HEATING EQUIPMENT!	3	1	3	1 3 I	3	1
NO	ግኝ	94	91	92	74	95
QUIPMENT ADDED (EXPENSIVE)		P	1	; ; }		<b>f</b>
YES	۲,	1 6	5	8 1	5	4
STORM WINDOWS/INSULATING GLASS!	5	4	1 5	1 6 1	4	2
ELECTRIC HEAT PUMP	~	-	-	- 1	-	-
NEW FURNACE	2	3	2	2 1	1	1 2
NO	つな	1 94	1 34	1 92 1	95	96

#### TABLE 178 CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY DEGREE DAYS-CONTINUED (PERCENTAGE OF HOUSING UNITS)

 	TOTAL										
	HOUSING UNITS	<2000 COO   AND   >7000 HOO	   <2000 CDO   AND  5500-7000 HOD	AND E	CMA	AND					
ADDED ANY INSULATION OR EQUIPMENT		<b>1</b>	1	] !							
YES	3.6	1 38	49	42	5.0	25					
NO-++++++	64	62	60	58	7.0	75					
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	٠,	) 	 	[     6	4	; 					
ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	8	!	5	6	q	5					
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1	] ?	1	2	1	-					
ADDED ONLY INEXPENSIVE ! INSULATION OR EQUIPMENT	24	24	27	! 	21	18					
ADDED STORM WINDOWS, STORM DOORS, I OR ATTIC OR ROOF INSULATION	11	† † 1.5	12	1 13	¥	6					

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH #-# REPRESENTS OR ROUNDS TO ZERO... SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, DEFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

# TABLE 18A CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY TYPE OF HOUSING STRUCTURE (THOUSAND HOUSING UNITS)

	TOTAL		SINGLE I	FAMILY DET	ACHED		SINGLE	BUILDING		
	HOUSING   Units	TOTAL	1-4 ROOMS	5 ROOMS	6 ROOMS	7 OR MORE ROOMS	FAMILY ATTACHED	WITH 2-4   UNITS   	MOBILE   HOME   	OTHER
TOTAL HOUSING UNITS 1/	67,457	48,547	8,768	12,696	11,850	15,233	3,128	10,749	4,805	22
TOTAL ELIGIBLE HOUSING UNITS	64.957	47,159	8,558	12,319	11,675	14,607	3,095	10,104	4,370	22
(NSULATION ADDED (INEXPENSIVE)	! !		•			1	Lane Piper	**	5 5	
YES, ELIGIBLE	27,522	21,183	3,518	5,453	5.357	5,655	1 1,233	2,976	2.021	1.1
WEATHERSTRIPPING	10,195	8 0 7 6	1,146	2,129	1,880	2,921	286	1,307	526	-
AROUND HOT WATER PIPES	2,380	1,610	296	460	391	462	1		623	-
AROUND HOT WATER HEATER	797	676	105	155	135	280	-	i -	121	-
CAULKING	17,048	13,815	1,999	3,656	3,755	4,405	706	1,629	634	5
PLASTIC COVERING	10,656	7,765	1,591	2,144	1.738	2,292	403	1,304	1,137	4
OTHER	1,176	958	158	305	185	310	•	•	90	5
YES, INELIGIBLE	874	728	125	142	77	385	i -	20	126	-
NO	39,061	26+636	5,126	6,902	6,416	8,172	1,896	7,754	2,657	11
INSULATION ADDED (EXPENSIVE)			1			•	-			
YES. ELIGIPLE	7,373	6,324	757	1,682	1.632	2.254	1 232	422	395	-
ROOF OR ATTIC	4,934	4,461	•			1,540	93	208	173	-
BASEMENT OR CRANL SPACE	1,771	1,409	•			•	i 75	52	236	-
OUTSIDE WALLS	2.711	2,306		496	716	697	65	1 227	113	-
YSS. INELIGIBLE	575	526	*	56	34	298	i -	i -	49	-
NO	59,510	41.697	•	10,959		12,681	2 + 896	10,327	4.361	23
EQUIPMENT ADDED (INEXPENSIVE)			1	9		1	•	e E		¥
YES, ELIGIBLE	8,677	6.819	1,002	1 1.847	1,828	2,142	332	1,090	405	•
CLOSEABLE SHUTTERS		396	27	•	142	147	i 20	29	15	<b>–</b>
STORM DOORS	4,584	3,862	551			1,194	1 134	410	178	-
AUTOMATIC OR CLOCK THERMOSTAT.	1,268	950	101		357	272	i -	212	76	3
NEW WATER HEATING EQUIPMENT		2,211	416		597	787	198	548	196	-
YFS. INELIGIBLE		562	102	111	94	255	14	i -	1 13	-
NO	58,193	41,166	7,664	10,738	9,928	12,835	2,783	9,659	4.387	1
QUIPMENT ADDED (EXPENSIVE)			•	F100 F100 F100 F100 F100 F100 F100 F100		•	S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP S-TOP	1	I I	985
YES. ELIGIBLE	6,484	5,088	593	1,231	1,453	1 1,811	290	813	293	-
STORM WINDOWS/INSULATING GLASS		3,923	•	928	1,115	1,373	189	601	261	-
ELECTRIC HEAT PUMP		-	•	i -	51	22	14	· -	i -	-
NEW FURNACE	1,737	1,375	•	367	401	,	•	212	63	-
YES. INELIGIBLE	458	458	70	20	78	291	i -	-	i -	-

# TABLE 18A CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY TYPE OF HOUSING STRUCTURE-CONTINUED (THOUSAND HOUSING UNITS)

TOTAL		SINGLE F	AMILY DET	ACHED		     SINGLE	    BUILDING	   	
HOUSING UNITS	TOTAL	1-4 200MS	5 ROOMS	6 ROOMS	/ OR   MORE   ROOMS		WITH 2-4   UNITS     	MOBILE HOME	OTHER
33_770	26-009	A 255	4.793	4.673	 	1 1 - 472	\$ - 700	2.315	 
	•			•	•				118
5 • S 3 5	4,710	607	1,270	1+154	1,680	178	327	321	-
4,647	3,474	 	819	975	1,257	235	[ ] [ 719	 	-
1,937	1,614	1 1 1 150	412	478	! 	55	!   	!     74	! ! !
21.759	16,290	3,055	4,292	4,067	     4,878	1.004	2.652	1,702	! ! ! ! 110
 	9 <sub>#</sub> 485	1 1 1 1 9 6	     2•507	2 - 517	1       3,269 	1       376	]     1,017	1 ! ! 486	- -
	### HOUSING UNITS  33,779 31,178  5,535	HOUSING UNITS TOTAL  33,779 26,089 31,179 21,070  5,555 4,710  4,647 3,474	TOTAL HOUSING UNITS   1-4   700 HS   1-4   700 HS   1-4   700 HS   1-4   700 HS   1-4   700 HS   1-4   700 HS   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-70   1-	TOTAL HOUSING UNITS	HOUSING UNITS   1-4   5   6	TOTAL HOUSING UNITS	TOTAL HOUSING UNITS   1-4   5   6   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTACHED   7 OR ATTAC	TOTAL HOUSING UNITS  1-4 5 6 7 OR ATTACHED UNITS  TOTAL ROOMS ROOMS ROOMS ROOMS ROOMS  33,779 26,089 4,255 6,793 6,673 8,368 1,47? 3,772 51,179 21,070 4,303 5,526 5,002 6,239 1,623 6,312  5,535 4,710 607 1,270 1,154 1,680 178 327  4,647 3,474 443 819 975 1,257 235 719  1,937 1,614 150 412 478 574 55 95  21,759 16,290 3,055 4,292 4,067 4,878 1,004 2,652	TOTAL HOUSING   1-4   5   6   7 OR   ATTACHED   UNITS   HOBILE   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME   HOME

1/ FXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH M-F REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

# TABLE 18B CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY TYPE OF HOUSING STRUCTURE (PERCENTAGE OF HOUSING UNITS)

	TOTAL		SINGLE	FAMILY D	ETACHED		! ! ! SINGLE	BUILDING		
	UNITS	TOTAL	1-4 ROOMS	5 ROOMS	6 R00MS	7 OR MORE ROOMS	FAMILY ATTACHED	WITH 2-4	HOME	OTHER
TOTAL HOUSING UNITS 1/	100%	100%	100%	100%	100%	100%	1 100%	100%	100%	100%
TOTAL ELIGIBLE HOUSING UNITS	96	97	98	97	99	96	39	94	91	100
INSULATION ADDED (INEXPENSIVE)	1					<b>!</b>	1	}		! 
YES, ELIGIBLE	1 41	e e	40	45	45	1 44	i 39	i 28 i	42	48
WEATHERSTRIPPING	•	17	13	17	16	19	9	12	11	-
AROUND HOT WATER PIPES	•	3	3	4	3	1 3	1 3	i - i	1.5	i -
AROUND HOT WATER HEATER		1 1	1 1	• •	1	2	j -	- 1	3	<b>i</b> -
CAULKING	•	28	23	29	32	29	29	15	13	28
PLASTIC COVERING		15	18	17	15	15	13	12	24	20
OTHER		2	2	2	2	2	1	- 1	2	22
YES, INELIGIBLE		1	1	1	1	3	1 -	- 1	3	
NO	•	55	58	54	54	54	61	72	55	52
INSULATION ADDED (EXPENSIVE)	!		[			!	l E		:	
YES: ELIGIBLE	11	1 13	9	13	; i 14	1 15	7	1 4	8	<b>.</b> -
ROOF OR ATTIC		1 9	1 6	1 13	1 11	1 10	3		4.	
BASEMENT OR CRAWL SPACE		3	1 1	, , , , , , , , , , , , , , , , , , ,	1 2	1 4	2	-	5	_
OUTSIDE WALLS	•	5	1 5	4	1 6	5	1 2	2	2	
	•	•	1 2	4	1 0	1 2		-	í	
YES, INELIGIBLE	•	1		-	-	,	1 7	- 1		-
NO	88	86	90 1	86 1	86	83	1 93	96	91	100
EQUIPMENT ADDED (INEXPENSIVE)	j	j	Ì	j	•	1	i	9		Í
YES, ELIGIBLE		14	1 11	15	15	1 14	11	10	8	1 13
CLOSEABLE SHUTTFRS	•	1	-	1	1	1	1	- 1	-	-
STORM DOORS	•	1 8	1 6	1 10	7	1 8	1 4	1 4 1	4	1 -
AUTOMATIC OR CLOCK THERMOSTAT.	*	2	1	2	3	2	-	2	2	13
NEW WATER HEATING EQUIPMENT		1 5	1 5	] 3	1 5	5	6	5 1	4	1 -
YES, INELIGIBLE	1	j 1	1	1	1	1 2	1 -	1 - 1	-	<b>!</b> -
NO	86	85	87	85	84	84	89	90	91	87
EQUIPMENT ADDED (EXPENSIVE)	1	•	! }	1	1	1	9	1		1
YES, ELIGIBLE	1.0	10	7	10	12	12	9	j 8 i	5	- 1
STORM WINDOWS/INSULATING GLASS	7	8	6	7	9	9	6	6	5	1 -
ELECTRIC HEAT PUMP	i -	1 –	i -	-	i -	i -	i -	i - i	-	i -
NEW FURNACE	,	3	i 1	3	3	3	1 .3	2	1	i -
YES, INELIGIBLE	•	i	, ī	-	1 1	2	i -	-	_	i -
NO	90	89	92	90	87	86	91	92	94	100
	:	:	:	:	:	:	:	:		-

### TABLE 18B CONSERVATION EFFORTS UNDERTAKEN BETHEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY TYPE OF HOUSING STRUCTURE-CONTINUED (PERCENTAGE OF HOUSING UNITS)

	   TOTAL		SINGLE	FAMILY D	ETACHED		SINGLE	i    BUILDING		5 ! 1
	HOUSING UNITS	TOTAL	1 1-4 1 ROOMS	5   ROOMS	6   ROOMS	7 OR 1 7 OR 1 MORE 1 ROOMS	FAMILY	WITH 2-4 UNITS i L		OTHER
ANY EQUIPMENT OR INSULATION ADDED BY FLIGIBLE HOUSING UNITS	and the second second			-		P		name of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state		Came Came agree to a
YFS		1 43	1 49 1 49	1 94 1 44	55 42	} 55   4I	67 1 52	l 35 ( 59	4 B 4 S	48 52
CLIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION RUT NOT EXPENSIVE EQUIPMENT	¥ 2	1 10	To the course	1 1 1 10	10	# 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6	5	1	_
ELIGIBLE UNITS THAT ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	i ! i 7	† 	[     5	       6	1 8	1 8	8	† † †	ī	! ! !
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1	! ! ! ! 3	2	] 	4	1 1 1 1	2   	Ī	2	     
ELIGIBLE UNITS THAT ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	1 37	     34	f     35	     34	 	       32	52	   	<b>3</b> 5	!   
ELIGIBLE UNITS THAT ADDED STORM WINDOWS, OR STORM DOORS, OR ATTIC OR ROOF INSULATION		70	14	<b>1</b> 1 20	21		1 12		10	

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH HEM REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVIY, DEFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION,

TABLE 19A CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY TYPE OF HOUSING STRUCTURE (THOUSAND HOUSING UNITS)

	TOTAL		SINGLE F	FAMILY DET	ACHED		     SINGLE	BUILDING		
	HOUSING   UNITS	TOTAL	1-4 R00MS	5 ROOMS	6 ROOMS	7 OR NORE ROOMS	FAMILY  ATTACHED   	WITH 2-4   UNITS   	MOBILE HOME	OTHER
OTAL HOUSING UNITS 1/	67,457	48,547	8,768	12,696	11,850	15,233	3,128	10,749	4,805	228
(NSULATION ADDED (INEXPENSIVE)							! !	<i>)</i> •		
YES	17,632	13,552	2,003	3,737	3,447	4,366	811	1,826	1,333	110
WFATHERSTRIPPING	4,907	3,737	562	898	1,007	1,270	166	708	296	-
AROUND HOT WATER PIPES	1,286	810	132	197	164	317	33	17	427	-
AROUND HOT WATER HEATER	458	370	17	113	50	190	-	-	88	-
CAULKING	11,078	9,057	1,116	2,515	2,513	2,913	576	946	,	6.
PLASTIC COVERING	5,456	3,796	757	1,119	902	1,018	235	756	622	4
OTHEROCOCOCOCOCOCOCOCOCOC	855	679	101	184	139	256	22	33	91	3
NO	49,826	34,995	6,765	8,959	8,403	10,867	2,318	8,923	3,472	11
INSULATION ADDED (EXPENSIVE)				! 		1	1	† 	! 	
YES	4,226	3,683	476	1,020	858	1,329	1 127	184	232	-
ROOF OR ATTIC	2,843	2,568	312	731	665	861	46	150	79	-
BASEMENT OR CRAWL SPACE	1,271	1.015	79	276	111	549	63	1 21	172	-
OUTSIDE HALLS	1,478	1,350	271	286	399	394	18	65	45	-
NO	63,232	44,864	8+292	11,676	10,991	13,904	3,001	10,565	4,573	22
QUIPMENT ADDED (INEXPENSIVE)	! 		<b>[</b>	 		<b>!</b> 		•	1	! !
YESonoaanaaaaaaaaaaaaaaa	5,274	4,066	654	1,032	1,034	1,346	170	737	270	3
CLOSEABLE SHUTTERS	300	250	37	17	70	126	20	29	-	-
STORM DOORS	2,680	2,234	369	756	391	717	60	261	125	-
AUTOMATIC OR CLOCK THERMOSTAT.	888	717	75	179	276	186	-	110	30	3
NEW WATER HEATING EQUIPMENT	2,132	1,476	304	227	313	632	110	416	130	-
NO ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	62,184	44,481	8,114	11,664	10,816	13,887	2,959	10,012	4.534	19
QUIPMENT ADDED (EXPENSIVE)			; [	{ }		! [	1	1 F		
YES	3,504	2,755	282	605	711	1,158	152	466	131	-
STORM WINDOWS/INSULATING GLASS	2,672	2,127	244	426	555	902	94	338	113	
ELECTRIC HEAT PUMP	67	67	20	· -	36	12	į -	-	-	-
NEW FURNACE	1,048	843	63	197	170	414	59	128	17	! -
N7	63,953	45,792	8,486	12,092	11,139	14,075	2,976	10,283	4 0 6 7 4	22

#### TABLE 19A CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY TYPE OF HOUSING STRUCTURE-CONTINUED (THOUSAND HOUSING UNITS)

	TOTAL		SINGLE	FAMILY DE	FACHED		     SINGLE	    BUILDING		<u> </u> 
	HOUSING UNITS	TOTAL	1-4   POOMS	5   ROOMS 	6 ROOMS	TOR MORE ROOMS	FAMILY  ATTACHED	WITH 2-4   UNITS 	MOBILE   HOME   	OYHER
ADDED ANY INSULATION OR EQUIPMENT		  -  -	 		 				5	
YFS====================================	22,578	17-409	2 9 6 5 4	45741	4-420	! 5:613	1.041	1 1 2,515	1,504	110
NO 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	44 : 979	31+138	6+134	7.755	7,429	7,620	780 25			119
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	3,212	?+786	366	; ; //1	<b>615</b>	1,035	107	i i i 101	217	***
ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	2,490	1#357	172	i ! 355	467	864	1 134	383	116	-
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1,014	898	110	249	244	294	18	l 1 83	15	-
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	15,862	11,968	1,987	]   3,365	3±095	3,420	780	 	1.156	110
ADDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	6,427	5 - 540	650	1,477	1,305	1,908	! ! ! 181	 	287	-

I / EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH #-# REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIN ENTRBY CONSUMPTION SURVEY: OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

#### TABLE 198 CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY TYPE OF HOUSING STRUCTURE (PERCENTAGE OF HOUSING UNITS)

r P	TOTAL		SINGLE	FAMILY DE	ETACHED		SINGLE	BUILDING		OTHER
	HOUSING UNITS	TOTAL	1-4 ROOMS	5 ROOMS	6 ROOMS	7 OR MORE ROOMS	FAMILY ATTACHED	WITH 2-4 UNITS	MOBILE HOME	
TOTAL HOUSING UNITS 1/	100%	100%	100%	100%	1003	100x	100%	100%	100%	100%
INSULATION ADDED (INEXPENSIVE)					1		f .			
YES	26	28	23	29	29	29	26	17 (	28	48
WEATHERSTRIPPING	7	8	6	7	9	8	5	7	5	-
AROUND HOT WATER PIPES	2	2	2	2	1	2	1	- 1	9	- 1
AROUND HOT WATER HEATER	1	1	-	1	-	1	-	-	2	~
CAULKING	1.6	19	13	50	21	19	18	9	9	28
PLASTIC COVERING	8	8	9	9	9	7	8	7	13	20
OTHER	1	1	1	1	1	2	1	- 1	2	13
NO	74	72	77	71	71	71	74	83	72	52
INSULATION ADDED (EXPENSIVE)			, 		; 1	) 	<i>]</i>			! 
YES	6	8	5	8	7	9	j 4	2	5	-
ROOF OR ATTIC	4	5	, 4	6	j 6	) 6	j 1	1	5	-
BASEMENT OR CRAHL SPACE	2	2	1	2	1	4	2	-	4	-
OUTSIDE WALLS	2	3	3	2	3	3	1	1	1	-
ND = = = = = = = = = = = = = = = = = = =	94	92	95	92	93	91	96	98	95	100
EQUIPMENT ADDED (INEXPENSIVE)					•		1			
YES	8	8	7	. 8	9	9	<b>j</b> 5	7	6	1 13
CLOSEABLE SHUTTERS	-	1	<b>-</b>	-	1	1	1	-	-	-
STORM DOORS	4	5	4	6	3	5	2	2	3	-
AUTOMATIC OR CLOCK THERMOSTAT.	L	1	1	i I	1 2	i 1		1	1	13
NEW WATER HEATING EQUIPMENT	3	3	j 3	2	3	4	4	4	3	-
NO	92	92	93	92	91	91	95	93	94	87
EQUIPMENT ADDED (EXPENSIVE)					•	1	1	! !		<b>I</b>
YES	5	6	3	5	6	8	j 5	4	3	i -
STORM WINDOWS/INSULATING GLASSI	Ġ.	4	3	3	i 5	6	i 3	3	2	i -
ELECTRIC HEAT PUMP	_	_	_	_	-	j -	<u> </u>	-	-	i -
NEW FURNACE	2	2	1	. 2	1	i 3	i 2	1	-	1 -
NOnecascus necessas and a consequence of	95	ગઢ	97	95	94	92	95	96	97	. 100

#### TABLE 19B CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY TYPE OF HOUSING STRUCTURE-CONTINUED (PERCENTAGE OF HOUSING UNITS)

	i {   Yotal	   	SINGLE	FAMILY D	ETACHED		     SYNGLE	   BUILDING   	,	† <b>†</b>
	HOUSING   UNITS   	TOTAL	1-4   ROOMS !	   5   ROOMS 	6   ROOMS	7 OR   MORE   ROOMS		WITH 2-4		OTHER
ADDED ANY INSULATION OR EQUIPMENT	]	   	† 7		!	† 	1		!	į į
VES	! 33	! ! 35	1 30	1 37	37	) 1 37	3.5	1 23 I	3.1	i 48
NO	67	5.4	70	63	63	6.5	67	7.7	63	52
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	<u>.</u>	<b>!</b>	# 1	6		1 1 7	<u> </u>		.,	-
ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	- A	1	1 2	7	1	<u> </u>	i i		3	
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	! ! ! 2	?	! !	i ! 2	[ [ 2	! ! ! 2	1		-	    -
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	     24	?4	23	27	   26	22	25	1 18	24	     48
ADDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	! 	! 	]   7	1 12	1 11	1 13	6	6	G	 

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS OUT TO ROUNDING. A DASH M-M REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURC: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, DEFICE OF THE CONSUMPTION DATA SYSTEMS OFFICE OF PROGRAM DEVELOPMENTS ENERGY INFORMATION ADMINISTRATION.

### TABLE 20A CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY TYPE OF HOUSING STRUCTURE (THOUSAND HOUSING UNITS)

	TOTAL		SINGLE	FAMILY DE	TACHED		SINGLE	BUILDING	;   	:
	HOUSING UNITS	TOTAL	1-4 ROOMS	5 ROOMS	6 ROOMS	7 OR MORE ROOMS	FAMILY ATTACHED	WITH 2-4     UNITS 	MOBILE HOME	OTHER
FOTAL HOUSING UNITS 1/	67,457	48#547	8,768	12,696	11.850	15,233	3,128	10,749	4.805	228
INSULATION ADDED (INEXPENSIVE)						Ĭ	1	1		
YESononneenneenneenneenneen	19,579	15,308	2,731	3,698	3,811	5.068	950	1,987	1,268	66
WEATHERSTRIPPING	6,516				1,040	•	•	676	273	-
AROUND HOT WATER PIPES	1,502						,	32	249	•
AROUND HOT WATER HEATER	594	527	113	87	102	226	i -	i -	67	
CAULKING	9,852	7.896	1+187	1,905	2,209	2,595	592	986	377	-
PLASTIC COVERING	8,683	6,628	1,456	1,700	1,424	2,048	355	869	784	47
GTHER	504	448	82	143	•		•	•	13	1
NO	47,879	33,239	6,037	8,999	8,039	10,164	2,178	8,762	3,537	163
(NSULATION ADDED (EXPENSIVE)							] }	1	j 1	
YES	4,545	3,935	590	881	994	1,470	1 114	284	212	_
ROOF OR ATTIC	3,021	2,733	436	549	707	1,041	56	104	128	_
RASEMENT OR CRAWL SPACE	959	796	56	164	165	412	11	54	98	
OUTSIDE WALLS	1,729	1,437	271	243	390	533	47	163	83 1	-
NO	62,912	44,612	8,178	11,815	10,855	13,763	3,014	10,465	4,592	228
!   (QUIPMENT ADDED (INEXPENSIVE)						<b>}</b>	]	1	! !	ł
YES	4 - 956	4,091	543	1,044	1,047	1,456	304	400	162	
CLOSEABLE SHUTTERS	237	222	14	63	72	73	i -	·	15	-
STORM DOORS	2,751	2,369	301	659	559	850	167	148	67	
AUTOMATIC OR CLOCK THERMOSTAT.	736	575	67	111	114	283	j -	1 102	60	-
NEW WATER HEATING EQUIPMENT	1,624	1,272	198	256	399	419	136	150	65	_
NO	62:502	44+456	8,225	11,652	10,802	13,777	2,825	10,349	4,643	22
QUIPMENT ADDED (EXPENSIVE)						} }	]	1		}
YES	4,002	3,279	426	717	934	1,201	191	370	162	_
STORM WINDOWS/INSULATING GLASS	3.078	2,496	379	546	691	880	149	286	148	-
ELECTRIC HEAT PUMP	144	130	-	-	32	•	•	•	- 1	
NEW FURNACE	1,161	1,003	72	221	328	381	29	84	45	
NO	63,455	45,268	8 = 342	11,979	10,915	14,032	1 2,937	10,379	4,642	228

#### TABLE 20 A CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY TYPE OF HOUSING STRUCTURE-CONTINUED (THOUSAND HOUSING UNITS)

	TOTAL		SINGLE	FAMILY DET	TACHED		     SINGLE	    BUILDING	] 	
	HOUSING UNITS	TOTAL	1-4   ROOMS 	5 ROOMS	6 ROOMS	7 OR   7 OR   MORE   ROOMS	FAMILY  ATTACHED	WITH 2-4 UNITS	MOBILE   HOME    -	OTHER
ADDED ANY INSULATION OR EQUIPMENT YES	24 o 178 43 o 280	19:165 29:382	3,294 5,474	     4,525   8,172	4 + 881 6 + 963	6 • 466 8 • 767	     1v122   2v807	2 • 329 8 • 420	1 • 496 3 • 309	   66   162
ADDED EXPENSIVE INSULATION BUT HOT EXPENSIVE EQUIPMENT	3+663	3,123	480	i !   687	774	1,182	114	272	153	2
ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	3,120	2•467	     316	!   524	714	 	191	! ! 358	103	_
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	883	812	110	193	220	     288	-	1 12	 	  -   -
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	     16,513	12,763	 	     3,120	3•1 <b>7</b> 2	}  -   4,083	     817	1,587	1.180	     66
ADDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	7,236	6•171	     939	1.432	1,575	!   2,224	332	 	245	  -   -

1/ EXCLUDES BUILDINGS WITH FIVE OR MORF UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH #-# REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY. OFFICE OF THE CONSUMPTION DATA SYSTEM:
OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

### TABLE 20B CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY TYPE OF HOUSING STRUCTURE (PERCENTAGE OF HOUSING UNITS)

	TOTAL		SINGLE	FAMILY D	ETACHED		SINGLE	BUILDING		<u> </u> 
! !	HOUSING UNITS	   rotal 	1-4   ROOMS	1 5   ROOMS	6 ROOMS	7 OR   7 OR   MORE   ROOMS	FAMILY  ATTACHED   	WITH 2-4	MOBILE HOME	OTHER         
OTAL HOUSING UNITS 1/	100%	109¥	100%	100%	100%	100%	100%	100%	100%	100
NSULATION ADDED (INEXPENSIVE)		[ ]	•	; [		<b>{</b>	1	<b>!</b>		1
Y58		1 12	31	29	32	33	30	1 18	25	29
WEATHERSTRIPPING		1.1	9	11	3	14	5	1 6 1	5	1 -
AROUND HOT WATER PIPES		2		1 3	1 2	1 2	2	- 1	5	-
AROUND HOT WATER HEATER	1	t t	1	1	! 1	1	i -	- 1	I.	-
CAULKING	15	1.5	1 4	15	1 19	1 17	19	, 9	8	] -
PLASTIC COVERING	1.3	14	1.7	13	1 12	13	1 11	8	15	1 50
OFHER	1	1	1	1	Į L	1	1	1 -	-	1
NO	71	<b>્</b> ૬ ધ	59	71	6ª	67	70	82	74	7:
NSULATION ADDED (EXPENSIVE)		? •	; §	1	¥ 5	1	ł	1		l
YES	7	3	7	7	3	10	4	1 3	4	1 -
ROOF OR ATTIC	4	1 5	5	4	5	7	2	1 1	3	-
BASEMENT OR CRAWL SPAC"	1	1 2	1	1 1	1	3	-	-		, .
OUTSIDE WALLS	ζ.	5	3	2	3	1 5	1	{ 2	2	1 -
NO	93	35	93	93	92	90	96	97	96	100
QUIPMENT ADDED (INEXPENSIVE)		{ }	t T	1	1	! !		1	! 	1
YFS	7	9	6	8	9	10	10	4	3	
CLOSEABLE SHUTTERS	-	· -	1 -	i -	1	1 -	-	-	-	1 -
STORM DOORS	4	1 5	3	5	5	5	5	1	1	1
AUTOMATIC OR CLOCK THERMOSTAT.	1	1	1	1	1	1 2	-	1	1	1 .
NEW WATER HEATING EQUIPMENT	?	1 3	1 2	1 2	1 3	1 3	4	1	1	į .
NO	33	92	94	92	91	90	90	96	97	1 10
QUIPMENT ADDED (EXPENSIVE)		<u> </u>	1	1	1	1	-	! 	1	1
YES	ń	7	5	1 6	9	8	6	3	5	1 .
STORM WINDOWS/INSULATING GLASS		5	4	1 4	5	6	5	3	3	
ELECTRIC HEAT PUMP	-	i -	i -	j -	i -	i 1	i -	j -	-	1
NEW FURNACE		2	1	1 2	<b>j</b> 3	3	1	i 1	j 1	1 .
5(0)	34	5	1 95	1 94	1 32	92	74	1 97	97	1 10

#### TABLE 208 CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY TYPE OF HOUSING STRUCTURE-CONTINUED (PERCENTAGE OF HOUSING UNITS)

	     TOTAL	   	SINGLE	FAMILY D	ETACHED		     SINGLE	    BUILDING	 	   
	HOUSING UNITS	TOTAL	l 1≃4 I ROOMS I	I 5 I ROOMS I	   6   ROOMS 	7 OR MORE RJOMS		MITH 2-4		<b>OTHER</b>
ADDED ANY INSULATION OR EQUIPMENT YES	56	**************************************	7 0 52	 	\$1 59	4.2 5.8	     36   64	22 78	31 69	29 71
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT		[ ]	5	الله الله الله الله الله الله الله الله	,	8	 	3	.5	_
ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	ا ا ا	! ! !	, !	† [   4	!     6	5	; ; ,	3	· <b>&gt;</b>	-
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1	2	; ; ! 1	) 	2	5	! -	-	1	-
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	34 	) 	27	! 	27	21	26	16	25	29
ADDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	]   11,	1 1 1 7.5	 	; ; 11 ;	1 1 5	15	! 	5	(, , , , , , , , , , , , , , , , , , ,	-

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUT TO ROUNDING. A DASH #-# REPRESENTS OR ROUNDS TO ZERO. SET GLOSSARY FOR DEFINITIONS OF YERMS USED IN THIS TARLE.

SOURCE: THE 1979 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY. OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

# TABLE 21A CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY YEAR HOUSE BUILT (THOUSAND HOUSING UNITS)

	TOTAL			YEAR	HOUSE BUI	(LT		
	HOUSING UNITS	1975 OR LATER	1970 TO 1974	19 <b>65</b> TO 1969	1960 TO 1964	1950   TO   1959	1940 TO 1949	1939   OR   EARLIEF
TOTAL HOUSING UNITS 1/	67+457	4,869	7,498	6,493	6,530	12,480	7,389	22,198
TOTAL ELIGIBLE HOUSING UNITS	64,957	2,368	7,498	6,493	6,530	12,480	7,389	22,19
INSULATION ADDED (INEXPENSIVE)						<b>!</b>		! 
YES, ELIGIBLE	27,522	735	3,012	1,933	3,202	5,688	3,275	9,677
WEATHERSTRIPPING	10,195	381		567	1,050	2,190	1,142	3,56
AROUND HOT WATER PIPES	2,390	85		144	353	353	256	63
AROUND HOT WATER HEATER	797	30	198	38	80	186	59	200
CAULKING	17,048	275	1,567	1,089	2,043	3,716	2,230	6,12
PLASTIC COVERING	10,656	255	1,060		1,002	1,729	1,295	4,58
OTHER	1.176	99	135	130	157	219	121	j 31
YES. INELIGIBLE	874			-	_	-		í -
NO	39,061	3,259	4,487	4,561	3,328	6,792	4,114	12,52
INSULATION ADDED (EXPENSIVE)								1 }
YES, ELIGIBLE	7,373	280	741	462	698	1,942	836	2,41
ROOF OR ATTIC			362	275	521		566	1,61
BASEMENT OR CRAWL SPACE		•	372	123	123	268	202	52
OUTSIDE WALLS	2,711	48	188	,			379	1,08
YES, INELIGIBLE	575		-	-	_	-	-	-
NO	59,510	4,014	6,757	6,032	5 # 832	10,538	6,553	19,78
EQUIPMENT ADDED (INEXPENSIVE)		and a						T. Co
YES, ELIGIBLE	8,577	417	1,026	687	967	1,827	1,042	2,71
CLOSEABLE SHUTTERS	460	15	134	75	30	58	73	7
STORM DOORS	4,584	326	580	240	384	1,077	573	1,40
AUTOMATIC OR CLOCK THERMOSTAT.		•	136	115	108	231	i 220	1 38
NEW WATER HEATING EQUIPMENT	3,153	,	257	296	507	547	293	1,18
YES. INELIGIBLE	588	•	-	_	-	_	-	-
NO	58,193	•	6,473	5,806	5,563	10,653	6.347	19,48
QUIPMENT ADDED (EXPENSIVE)			Brown Airmid	MAY: MOST		[ ]	ľ	1
YES, ELIGIBLE	6,484	187	587	395	748	1,346	714	2,50
STORM WINDOWS/INSULATING GLASS		•	•	*	,		•	•
ELECTRIC HEAT PUMP		•	-	-	46	22	•	1
NEW FURNACE	1,737	,	136	227	•	•	•	61
YES INELIGIBLE	45%	•	-	-	-	-	-	ì -
Nonnenannen	60,515		1	6,098	5,782	11,134	6,675	17,69

# TABLE 21A CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY YEAR HOUSE BUILT-CONTINUED (THOUSAND HOUSING UNITS)

	TOTAL			YEAR	R HOUSE BUI	LT		
	HOUSING   UNITS	1975   OR   LATER	1970 TO 1974	1965 T0 1969	1960 10 1964	1950 TO 1959	1940 TO 1949	   1939   OR   EARLIER
			1					
ANY EQUIPMENT OR INSULATION ADDED  BY ELIGIBLE HOUSING UNITS  YES	37,779   31,178	1°449 350	3v663 5v835		3•921 2∗709			i i i 11,572 i 10,606
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	5√535	218	563	299 	619	1,612	558	1.667
ELIGIBLE UNITS THAT ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	4 = 647	125	ម្	255	668	1,016	436	! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1,837	62	178	165	80 i	330	278	746
ELIGIBLE UNITS THAT ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	21,759	514 §	2 <sub>9</sub> 513	1 v 7 1 7	2 <sub>9</sub> 4 5 4	4 ± 3.3.7	2.803	 
ELIGINAL UNITS THAT ADDED STORM MINDOWS, OR STORM DOORS, OR ATTIC OR ROOF INSULATION	11,5160	7 A G	1.036	520	1,9235	P <sub>o</sub> Kli i	1+365	; [ 3,856

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TIRMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

# TABLE 21B CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY YEAR HOUSE BUILT (PERCENTAGE OF HOUSING UNITS)

	TOTAL	· · · · · · · · · · · · · · · · · · ·						
	HOUSING UNITS	1975 Or Later	1970   10   1974	1965   TO   1969	   1960   TO   1964	1950   1950   1959	1940 1 TO 1949	1937 OR EARLIER
TOTAL HOUSING UNITS 1/	100%	100%	100%	1 100%	100%	looz	100%	100%
TOTAL ELIGIBLE HOUSING UNITS	96	49	100	100	100	1 100	100	100
INSULATION ADDED (INEXPENSIVE)	'		<b>*</b>		<u> </u>	<b>2</b>	1	Property of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the contr
YES, ELIGIBLE	41 1	15	1 40	30	4.9	46	44	4.4
WEATHERSTRIPPING	15	8	1 17	9	16	18	15	16
AROUND HOT WATER PIPES	4	2	7	. 2	5	3	3	j 3
AROUND HOT WATER HEATER	1	1	. 3	1	i 1	i	i ı	1
CAULKING	25	, , , , , , , , , , , , , , , , , , ,	21	1 17	31	30	3.0	28
PLASTIC COVERING	16	5	1 14	11	15	1 14	18	21
OTHER DESIGNATION OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRA	2	2	1 2	1 2	1 2	2	2	1 1
YES, INELIGIBLE	ī	18	1 ~	-	-	-	1 -	1 -
NO was a same a same a same a same a same	5.R	67	60	70	51	54	56	56
INSULATION ADDED (EXPENSIVE) YES, ELIGIBLE		6 3 3 1 12 82	10 5 1 5 - 3 - 90	7 4 2 1 - 3	1.1 8 2 4 8 9	16 12 2 5 -	11 8 3 5 -	1 11 7 7 2 5 5 - 89
EQUIPMENT ADDED (INEXPENSIVE)			T 4	1	1	1	ş P	1
YES. ELIGIBLE	13	9	14	11	1 15	15	1 14	12
CLOSTABLE SHUTTERS	1	_	2	1	í -	i -	i 1	i -
STORM DOORS	7	7	8	1 4	i 6	9	1 8	j 6
AUTOMATIC OR CLOCK THERMOSTAT.		2	j 2	1 2	1 2	2	3	2
NEW WATER HEATING EQUIPMENT		1	3	5	8	1 4	4	1 5
YES, INELIGIBLE		12		1 -		· -	; ·	1 -
N()	86	79	86	89	85	85	85	88
EQUIPMENT ADDED (EXPENSIVE)		<b>j</b>	4	1	1	1	1	Ť
	10		1 0	1	1 7 1	1 11	1 10	1 11
YES, ELIGIBLE		4	8	6	11	1 3	1 3	1 3
STORM WINDOWS/INSULATING GLASS		3	1 6	3	1 10	1 5	1 7	. 7
ELECTRIC HEAT PUMP		-	-	-	1 1	1	-	4
NEW FURNACE		1	2	1 3	3	3	2	3
YES, INELIGIBLE		9	-	_	_	-	-	_
NO	90	87	92	94	89	89	90	89

# TABLE 21B CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY YEAR HOUSE BUILT-CONTINUED (PERCENTAGE OF HOUSING UNITS)

į	TOTAL			YEA	R HOUSE BU	ILT		
 	HOUSING UNITS	1975 OR LATER	i   1970   10   1974	1965 10 1969	1960 10 1964	1950   1950   10   1959	1940 1 TO 1 1949	1939   DR   EARLIER
ANY EQUIPMENT OR INSULATION ADDED	1	İ	î Î			1	1	i !
BY ELIGIBLE HOUSING UNITS				1	P	1		
		19 50	. 49 1 51	37	59	5.8	55	52
	*; *;	.310	1 21	63	41	4.2	\$ 's	48
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	8	i i	; ; , 8	i i   5	1	; ; ; 13	, A	! ! ! 8
ELIGIBLE UNITS THAT ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	7	3	[ ] [ 5	       4	10	       8	5	 
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	3	1	]     2	       3	; ; ;	i i i 3	1 4	
ELIGIBLE UNITS THAT ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	32	11	]       34	26	       38	       35	       38	       35
FLIGIBLE UNITS THAT ADDED STORM WINDOWS, OR STORM DOORS, OR ATTIC OR ROOF INSULATION	17	<u>.</u>	‡ ‡ ‡	10	1 19	2.5	18	1 17

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF T RMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY. OFFICE OF THE CONSUMPTION DATA SYSTEM. OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

TABLE 22A
CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY YEAR HOUSE BUILT
(THOUSAND HOUSING UNITS)

	TOTAL			YEAR	R HOUSE BU	<b>TLT</b>		
	HOUSING UNITS	1975 OR LATER	1970 TO 1974	1965 TO 1969	1960 TO 1964	1950 T0 1959	1940 TO 1949	1939 OR EARLIER
TOTAL HOUSING UNITS 1/	67,457	4,869	7,498	6,493	6,530	12,480	7,389	22,198
INSULATION ADDED (INEXPENSIVE)								
YESa	17,632	1,152	1,914	1,065	1,865	3,334	2.123	6,180
WEATHERSTRIPPING	4,907	464	648	207	499	944		•
AROUND HOT WATER PIPES	1,286	186	369	79	212	112	83	245
AROUND HOT WATER HEATER	458	87	66	21	56	126	30	72
CAULKING	11,078	614	998	632	1,225	2,272	1,389	3,948
PLASTIC COVERING	5,456	119	513	289	452	825	689	2,569
OTHER	855	184	78	107	75	149	84	178
NO	49,826	3,717	5,585	5,428	4+666	9,146	5,266	16,018
INSULATION ADDED (EXPENSIVE)	,	ı			,		! !	! 
YES		551	412	209	279	1,034	500	1,240
ROOF OR ATTIC	2,843	406	172	128	169	847	333	788
BASEMENT OR CRANL SPACE	1,271	328	208	17	44	175	114	386
OUTSIDE WALLS	1+478	282	58	65	106	297	187	483
NO	63,232	4,318	7,086	6,284	6,251	11,446	6,889	20,957
EQUIPMENT ADDED (INEXPENSIVE)							) {	B
YES:	5,274	685	592	378	526	823	696	1 1.574
CLOSEABLE SHUTTERS	300 i	37	86	33		29	41	1 74
STORM DOORS	2,680	4.89	303	143	186	413	364	782
AUTOMATIC OR CLOCK THERMOSTAT.	888	271	15	81	59	145	156	161
NEW WATER HEATING EQUIPMENT	2,132	283	207	148	281	251	203	759
NO	62,184	4,183	6,907	6,115	6,004	11,657	6,693	20,623
EQUIPMENT ADDED (EXPENSIVE)	! !		1					} f
YES	3,504	414	300	247	250	629	338	1,326
STORM WINDOWS/INSULATING GLASS	2,672	393	241	78				•
ELECTRIC HEAT PUMP				-	_	-	_	19
NEW FURNACE	1,048	163	59	169	41	208	83	325
NO	63,953	4 • 455	7,198	6,247	6,280	11,851	7,051	20,872
			LI	L		L	L	L

#### TABLE 22A CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY YEAR HOUSE BUILT-CONTINUED (THOUSAND HOUSING UNITS)

	TOTAL			YEAR	HOUSE BUT	LT		
	HOUSING UNITS	1975 OR LATER	1970 1970 1974	1965 TO 1969	1960 TO 1964	1950 10 1959	1940 TO 1949	1939 OR EARLIER
ADDED ANY INSULATION OR EQUIPMENT								
755	22,578	1,553	2,480	1,466	2 • 262	9,450	2 • 6 9 8	7+670
NO 2022222222222222222222222222222222222	44,879	3,316	5,018 j	5,028	4 • 268	9.030	4,591	14,528
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	3,212	317	352	81	279	948	363	 
ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	2,490	180	240	118	250	543	202	i     956
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1,014	233	60	123	-	86	137	1 
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	15,862	822	1•828	1,138	1,732	2,874	1 + 996	i     5,473
ADDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	6,427	862	568	306	550	1. v 4 4 5	736	     1,960

I/ FXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 197R NATIONAL INTERIM ENERGY CONSUMPTION SURVEY. OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT. ENERGY INFORMATION ADMINISTRATION.

### TABLE 22B CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY YEAR HOUSE BUILT (PERCENTAGE OF HOUSING UNITS)

	TOTAL	<b>!</b>		YEA	R HOUSE BUT	īLŦ		
	HOUSING UNITS	1975 OR LATER	1 1970 1 TO 1 1974	1965 T0 1969	1960   TO   1964	1950 TO 1959	1940   10   1949	1 1939 I OR I EARLIER
TOTAL HOUSING UNITS 1/	100*	100%	100%	100%	1 100%	100%	100%	100%
INSULATION ADDED (INEXPENSIVE)	· 		1	1	•	] 		1 9
YES-22-0-0		24	56	16	5.9	27	29	28
WEATHERSTRIPPING		10	9	1 3	1 8	8	1 8	7
AROUND HOT WATER PIPES	7	4	5	1	3	1	1 1	1
ARDUNO HOT WATER HEATER	1	2	1	1 -	1	1	-	-
CAULKING	16	1 13	1 13	10	19	18	19	18
PLASTIC COVERING	8	2	7	4	7	7	į a	1.2
OTHER	1	4	i 1	i 2	i t	į 1	<b>i</b> 1	į I
NO	74	76	14	84	71	73	71	72
INSULATION ADDED (EXPENSIVE)		<b>!</b>	1	1	1	}	! <b>!</b>	Ì
YES	6	11	5	3	4	8	7	5
ROOF OR ATTIC	4	8	2	2	3	7	1 5	1 4
BASEMENT OR CRANL SPACE	2	7	3	j -	i 1	i 1	j 2	1 2
OUTSIDE WALLS	9	6	i 1	1	1 2	. 2	3	2
NO	74	89	95	97	96	92	93	34
EQUIPMENT ADDED (INEXPENSIVE)		† <b>†</b>	1	1	1	<b>!</b>	<b>!</b>	1
YFS	9	14	j s	1 6	1 8	j 7	9	, ,
CLOSEABLE SHUTTERS		1	1 1	1	i -	i -	i 1	į -
STORM DOORS		1 10	1 4	2	3	1 3	j 5	1 4
AUTOMATIC OR CLOCK THERMOSTAT.		, , , , , , , , , , , , , , , , , , ,		1	1	1 1	2	1
NEW WATER HEATING EQUIPMENT		6	3	1 2	4	2	i 3	1 3
NO	92	86	92	94	92	1 →3	91	93
EQUIPMENT ADDED (EXPENSIVE)		1	 	1	1	1	 	1
YFS	5	8	4	i 4	4	j 5	j 5	1 6
STORM WINDOWS/INSULATING GLASS		1 8	3	i	3	1 4	1 4	5
ELECTRIC HEAT PUMP		1 1	i _	i -	i -	-	-	i -
NEW FURNACE	,	1 7	1	3	1	2	1 1	i ı
NO assesses assesses assesses assesses	95	92	1 96	1 36	1 96	95	95	94
14-14-4-4-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-	,	1 /6	! /5	1 /0	1 '		. "	

#### TABLE 22B CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY YEAR HOUSE BUILT-CONTINUED (PERCENTAGE OF HOUSING UNITS)

	TOTAL			YEA	R HOUSE BU	ILT		
	HOUSING   UNITS	1975 OR LATER	   1770   TO   1974	1965 100 1969	1960   1960   1964	   1950   TO   1959	1 1940   1940   1949	1939   OR   EARLISE
DDED ANY INSULATION OR EQUIPMENT				† †	! !	!		100
YFS000000000000000000000000000000000000	35	32	1 55	2.5	35	36	3.7	35
191)	57	42	6.7	17	55	5.4	6.3	6.5
DDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	5	7	† † •	†   	i 4	1 8	1 1 5	i i
DDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	4	4	† † 3	2	i     4	;     4	;     3	1
DDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	·1	· •5	]   	2	-	1	7	2
DDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	24	17	24	1 18	27	23	27	25
DDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	10	1.8	[     q	1 5	1 3	] 	! ! ! 10	1 1

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS OUT TO ROUNDING. A DASH #~# REPRESENTS OR ROUNDS TO ZERO. SEC GLOSSARY FOR DEFINITIONS OF TIRMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL THERETH ENERGY CONSUMPTION SURVEY, DEFLOE OF THE CONSUMPTION DATA SYSTEM, DEFLOE OF PROGRAM DEVELOPMENT, EMPRGY INFORMATION ADMINISTRATION,

### TABLE 23A CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY YEAR HOUSE BUILT (THOUSAND HOUSING UNITS)

!	TOTAL		LT					
	HOUSING UNITS	1975 OR LATER	1970 TO 1974	1965 TO 1969	1960 TO 1964	1950 TO 1959	1940 TO 1949	1939   OR   EARLIER
TOTAL HOUSING UNITS 1/	67,457	4,869	7,498	6,493	6,530	12,480	7,389	22,198
INSULATION ADDED (INEXPENSIVE)								
YES	19,579	833	2,076	1,192	2,347	3,708	2,307	7,115
WEATHERSTRIPPING	6,516	456	739	408	687	1,433	618	2,175
AROUND HOT WATER PIPES	1,502	101	202	92	210	240	172	484
AROUND HOT WATER HEATER	594	102	131	69	50	60	48	135
CAULKING	9,852	253	888	516	1,340	2,012	1,203	3,640
PLASTIC COVERING	8,683	313	854	509	839	1,349	1,079	3,740
OTHER	504	54	57	23	82	99	37	152
NO	47,878	4,035	5,422	5,301	4,183	8,772	5,082	15,083
INSULATION ADDED (EXPENSIVE)								{ 
YES	4,545	335	400	290	533	1,115	477	1,395
ROOF OR ATTIC	3,021	155	248	171	417	752	283	995
BASEMENT OR CRAWL SPACE	959	198	165	105	79	143	88	181
OUTSIDE WALLS	1,729	91	146	54	168	372	205	694
NO ************************************	62,912	4,534	7,098	6,204	5,997	11,365	6,912	20,803
EQUIPMENT ADDED (INEXPENSIVE)	! !							<b>9</b>
YFS	4,956	428	587	417	470	1,169	424	1,460
CLOSEABLE SHUTTERS	237	31	48	67	30	29	32	i -
STORM DOORS	2,751	374	3 <b>3</b> 5	137	198	722	256	729
AUTOMATIC OR CLOCK THERMOSTAT.	736	66	137	34	78	103	64	254
NEW WATER HEATING EQUIPMENT	1,624	84	99	179	244	392	120	506
NÚ	62,502	4,441	6,911	6,077	6,060	11,311	6,965	20,738
EQUIPMENT ADDED (EXPENSIVE)								•
YES	4,002	248	397	174	510	825	421	1,427
STORM WINDOWS/INSULATING GLASS				103				1,132
ELECTRIC HEAT PUMP	,		,	-				31
NEW FURNACE	1,161	•	•	71	143	262	61	373
NO	63,455	•		6,319			•	

TABLE 23A

CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY YEAR HOUSE BUILT-CONTINUED

(THOUSAND HOUSING UNITS)

t . !	TOTAL   HOUSING   UNITS	***************************************								
		1975 OR LATER	1970 TO 1974	1965 T0 1969	1960 TO 1964	1950 TO 1959	1940 TO 1949	1939 OR EARLIER		
ADDED ANY INSULATION OR EQUIPMENT	] ]									
YES	24,178 43,280	1 + 113 3 + 756	2•440 5•058	1,517 4,976	2.707 3.823	4,801 7,679		8•740 13•458		
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	3,663	230	294	257	458	934	383	     1,106		
ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	3,120	143	291	142	435	644	327	1,138		
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	883	105	107	32	75	181	 	289		
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	16,513	635	1,749	1,086	1,739	3,042	2 <b>,</b> 055	6,207		
ADDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	7,236	531	661	379	786	1,622	775	?,481		

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

### TABLE 23B CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY YEAR HOUSE BUILT (PERCENTAGE OF HOUSING UNITS)

	TOTAL			YEA1	R HOUSE BU	[LT		
	HOUSING   UNITS	1975 OR LATER	1970 TO 1974	1965   TO   1969	1960 10 1964	1950 TO 1959	1940   10   1949	1939   OR   EARLIER
TOTAL HOUSING UNITS 1/	100%	100%	100%	1 100%	100%	100%	100%	100%
INSULATION ADDED (INEXPENSIVE)	•		E4 P2	1			1	1
YESanananananananananananan	29	17	28	1 18	36	30	31	32
WEATHERSTRIPPING		9	10	6	11	11	8	10
AROUND HOT WATER PIPES	,	2	3	1	3	2	2	1 2
AROUND HOT WATER HEATER		2	, 2	1	1	-	1	1 1
CAULKING	•	5	12	. 8	21	16	16	16
PLASTIC COVERING	, .	6	1 1.1	8	1 13	11	15	1 17
OTHER	1 1	1	1	-	1	1	·	i 1
NO	71	83	72	82	64	70	69	68
INSULATION ADDED (EXPENSIVE)			<b>8</b>		1			
YESanaanaaaaaaaaaaaaaaaa	1 7	7	i 5	1 4	i 8	9	6	6
ROOF OR ATTIC		3	3	1 3	<b>i</b> 6	6	j 4	4
BASEMENT OR CRAWL SPACE		4	. 2	1 2	. 1	1	1	i 1
OUTSIDE WALLS		2	2	1 1	3	3	1 3	j 3
NO	93	93	95	96	92	91	94	94
EQUIPMENT ADDED (INEXPENSIVE)			800 P	9	1		1574 S218	1
YES++++++++++++++++++++++++++++++++++++	i 7 i	9	8	6	7	9	j 6	7
CLOSEABLE SHUTTERS		1	1	1 1	i -	-	-	-
STORM DOORS	•	8	1 4	i ē	, 1 3	6	j 3	j 3
AUTOMATIC OR CLOCK THERMOSTAT.		1	2	1 1	1	1	1	1
NEW WATER HEATING EQUIPMENT		2	1	3	4	1 3	2	2
MO 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	,	91	9.2	94	93	91	94	93
EQUIPMENT ADDED (EXPENSIVE)			-	1	1		1	
YESocooooooooooooooo		5	, 5	j 3	8	7	6	6
STORM WINDOWS/INSULATING GLASS		3	1 4	2	6	5	j 5	j 5
ELECTRIC HEAT PUMP		i	<u> </u>	i -	1	-	j -	į -
NEW FURNACE		4	1 1	i 1	1 2	2	1	2
NOseanaanaanaanaanaanaanaanaa	94	95	95	97	92	93	94	94

TABLE 23B

CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY YEAR HOUSE BUILT-CONTINUED (PERCENTAGE OF HOUSING UNITS)

	TOTAL			YEA	R HOUSE BUT	ILT		
	HOUSING	1975 OR LATER	   1970   TO   1974	   1965   T0   1969	   1960   TO   1964	1950 10 1959	1940 To 1949	   1939   OR   EARLIER
ADDED ANY INSULATION OR EQUIPMENT								1
YES:	36	23	33	23	41	38	39	39
NO	64	77	67	77	59	62	61	i 61
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	5	5	÷ .	4	7	] ] 7	5	[ [ 5
ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	5	3	1 4	2	7	     5	     4	i ! ! 5
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1	2	1	1	] ] ! 1	! ! ! 1	 	! ! ! 1
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	24	13	23	17	27	     24	29	!   28
ADDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	11	11	9	6	12	     13	10	11

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

# TABLE 24A CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY TYPE OF AIR CONDITIONING (THOUSAND HOUSING UNITS)

-	TOTAL HOUSING	NUMBER OF RO	OMS WITH AIR	CONDITIONING	CENTRAL AIR     CONDITIONING	ROOM UNITS	  CENTRAL A/C   AND   ROOM UNITS
 	UNITS	NONE	SOME	ALL	ONLY	ONLY	KOUH UNITS
TOTAL HOUSING UNITS 1/	67,457	29,936	17,775	19,747	15,012	22,274	235
TOTAL ELIGIBLE HOUSING UNITS	64,957	28,720	17,652	18,585	13,818	22,183	235
INSULATION ADDED (INEXPENSIVE)		1	1	1	1		1
YES, ELIGIBLE	27,522	11,671	8,426	7,425	5,311	10,404	136
WEATHERSTRIPPING	10,195	3,866	3,321	3,007	2,336	3,937	56
AROUND HOT WATER PIPES	2 = 3 9 0	1,139	565	676	424	817	-
AROUND HOT WATER HEATER	797	346	284	1 167	144	307	-
CAULKING	17,048	6,933	5,406	4,709	3,449	6,566	100
PLASTIC COVERING	10,656	5,263	3.138	2,255	1 1 284	4,062	46
OTHER	1,176	1 434	1 405	i 337	329	413	<u> </u>
YES. INELIGIBLE	874	336	44	4 95	510	29	i -
NO concessors concessors	39,061	17,928	9,305	11,827	9,192	11,842	99
INSULATION ADDED (EXPENSIVE)		1	1				1
YES. ELIGIBLE	7+373	3,315	1,925	2,133	1.750	2:259	48
ROOF OR ATTIC	4,934	2,247	1,160	1.527	1 1,253	1,386	48
BASEMENT OR CRAWL SPACE	1,771	864	453	453	344	562	i -
OUTSIDE WALLS	2,711	1,320	735	656	569	822	i -
YES, INELIGIBLE	575	247	15	313	328	_	i -
NO	59,510	26,373	15,835	17,302	12,935	20,015	197
   equipment added (inexpensive)		3	Page 1445				1
YES. ELIGIBLE	8.677	3,230	2,562	2,885	2,316	3,095	36
CLOSEABLE SHUTTERS	450	1 141	70	249	210	109	-
STORM DOORS	4,584	1,873	1,280	1 1 4 3 1	1.108	1,567	1 36
AUTOMATIC OR CLOCK THERMOSTAT.	1,258	453	326	489	479	336	j -
NEW WATER HEATING EQUIPMENT	3,153	1,125	1,058	970	773	1,255	<u> </u>
YES, INELIGIBLE	588	257	1 43	289	317	14	i -
NO	58,193	26,449	15.170	16,574	12,379	19,165	199
equipment added (expensive)		6	pana dis				
YES, ELIGIBLE	6,484	2,530	2.017	1 1,937	1.749	2:166	40
STORM WINDOWS/INSULATING GLASSI	4,974	2,019	1,537	1,418	1,188	1,728	40
ELECTRIC HEAT PUMP	36	29017	1 19	67	67	19	-
NEW FURNACE assessment of	1.737	573	I 508	656	663	483	1 18
YESE INELIGIBLE a see a see a see a see a see	458	1 146	1 -	312	312		-
			1	•	12,952	20,108	196
NO	60,515	27, 259	15,758	17,498	1 171207	70 4 T N Q	1 1,0

#### TABLE 24A CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY TYPE OF AIR CONDITIONING-CONTINUED (THOUSAND HOUSING UNITS)

	TOTAL Housing	HOUSING			CENTRAL AIR		•
	UNITS	NONE	SOME	ALL	ONLY !	ONLY	PROOM UNITS
ANY EQUIPMENT OR INSULATION ADDED BY ELIGIBLE HOUSING UNITS		13,949	10,336	9,494	7.136	12,525	170
NO	31+178	14,771	7,316	9,091	6,683	9,658	66
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	5,535	2,459	     1,511	1,565	1,249	1,797	     30
ELIGIBLE UNITS THAT ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	4,647	1.674	1,603	1+370	1,248	1,703	22
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1+837	856	414	567	500	463	18
ELIGIBLE UNITS THAT ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	21.759	8•960	6,808	5,991	4,137	8•562	100
ELIGIBLE UNITS THAT ADDED STORM WINDOWS, OR STORM DOORS, OR ATTIC OR ROOF INSULATION		4,754	3,258	3,358	2•690	3•838	 

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

# TABLE 248 CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY TYPE OF AIR CONDITIONING (PERCENTAGE OF HOUSING UNITS)

i i	TOTAL Housing	NUMBER OF ROC	DMS WITH AIR	CONDITIONING	CENTRAL AIR	INDIVIDUAL ROOM UNITS
	UNITS	NONE	SOME	l ALL	CONDITIONING   	ONLY
TOTAL HOUSING UNITS 1/	100%	100%	100%	100%	100%	100%
TOTAL ELIGIBLE HOUSING UNITS	76	96	99	94	92	100
INSULATION ADDED (INEXPENSIVE)		1		\$ }	1	
YES, FLIGIBLE	41	i 39	47	i 38	36	47
WEATHERSTRIPPING	15	13	19	j 15	16	18
AROUND HOT WATER PIPES	4	j 4	3	3	i 3 i	4
AROUND HOT WATER HEATER		1	2	1	1 1	1
CAULKING		23	30	24	23	29
PLASTIC COVERING		18	18	1 11	9	1.3
OTHER	2	1	2	1 2	1 2	2
YES, INELIGIBLE	1	1		3	3	-
Nocaeeeeeeeeeeeeee	58	60	52	60	61	5.3
INSULATION ADDED (EXPENSIVE)		•		1		
YES, ELIGIBLE	11	11	1.1	11	1 12	10
ROOF OR ATTIC		8	7	8	9	6
BASEMENT OR CRAWL SPACE		3	3	2	1 2	3
OUTSIDE WALLS	4	1 4		1 3	1 4	4
YES: INELIGIBLE	•	1		1 2	. 2	_
NO	88	88	89	88	86	90
EQUIPMENT ADDED (INEXPENSIVE)			<b> </b> 	Apple Autority		
YES, ELIGIBLE	13	11	14	15	1 15	1 4
CLOSEABLE SHUTTERS		1	-	1 1	1 1	-
STORM DOORS		1 6	7	7	8	7
AUTOMATIC OR CLOCK THERMOSTAT.		2	2	2	3 1	2
NEW WATER HEATING EQUIPMENT		4	6	5	1 5	6
YES, INELIGIBLE		1	, u	1 1	1 2	-
NOnesanananananananananananan		88	85	84	82	86
EQUIPMENT ADDED (EXPENSIVE)						
YES+ ELIGIBLE	1 1 1.0	1 8	11	1 10	1 12	1.0
STORM WINDOWS/INSULATING GLASS		7	9	1 7	1 3	8
ELECTRIC HEAT PUMP	,	1	1 ,	1	1	
NEW FURNACE		1 2	1 - 3	3	1 4	2
YES INELIGIBLE		· -	3	•	, ,	
				2	2 1	
NO	90	91	89	89	86	90

# TABLE 24B CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY TYPE OF AIR CONDITIONING-CONTINUED (PERCENTAGE OF HOUSING UNITS)

	TOTAL Housing	NUMBER OF ROC	PHS WITH AIR C		 	INDIVIDUAL ROOM UNITS
	UNITS L	NONE	SOME	ALL	conditioning  	ONLY
ANY EQUIPMENT OR INSULATION ADDED   BY ELIGIBLE HOUSING UNITS					 	
YES	50	47	58	48	48	56
N() • • • • • • • • • • • • • • • • • • •	46	49	41	46	44	43
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	Ŗ	8	9	8	     8	8
ELIGIBLE UNITS THAT ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	7	6	9	7	8	8
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	3	3	2	3	3	2
ELIGIBLE UNITS THAT ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	32	30	38	30	! ! ! 28	38
ELIGIBLE UNITS THAT ADDED STORM WINDOWS, OR STORM DOORS, OR ATTIC OR ROOF INSULATION	17	16	18	17	18	17

<sup>1/</sup> EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERD. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

### TABLE 25A CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY TYPE OF AIR CONDITIONING (THOUSAND HOUSING UNITS)

Ì	TOTAL Housing	NUMBER OF RO	OMS WITH AIR	CONDITIONING	CENTRAL AIR	INDIVIDUAL ROOM UNITS	AND
	UNITS	NONE	SOME	!   ALL	ONLY !	ONLY	ROOM UNITS 
OTAL HOUSING UNITS 1/	67+457	29,936	17,775	19,747	15,012	22,274	235
NSULATION ADDED (INEXPENSIVE)		1		1			1
YES	17,632	7,465	5.200	4,967	3,779	6,317	70
WEATHERSTRIPPING	4 • 907	1,980	1 • 473	1,454	1,076	1,810	41
AROUND HOT WATER PIPES	1,286	598	330	448	327	451	i -
AROUND HOT WATER HEATER	45 <u>8</u>	205	117	1.35	114	1.39	-
CAULKING	11,078	4,469	3 • 479	3,131	2,431	4,128	51
PLASTIC COVERING	5,456	2.707	1,628	1,121	656	2,078	1 14
OTHER	355	249	240	366	354	252	-
NOcaraconaccacacacacacacacacacacacacacacacaca	49,826	22,471	12,575	14.780	11.233	15,757	165
NSULATION ADDED (EXPENSIVE)		1	99	1	; ;		bing Book
YES	4,226	1.888	829	1.508	1 1 303	1.020	15
ROOF OR ATTIC	2,843	1,235	549	1,059	968	625	15
BASEMENT OR CRANL SPACE	1,271	693	231	348	300	278	-
OUTSIDE WALLS	1,473	769	160	549	464	244	-
NO	63,232	28,047	15,945	18,239	1 13,710	21,254	220
QUIPMENT ADDED (INEXPENSIVE)		•	•	1	1		1
YES	5,274	1,961	1 • 476	1 +837	1,603	1.692	18
CLOSEABLE SHUTTERS	300	58	54	188	149	93	-
STORM DOORS	2,690	1,174	636	870	753	735	18
AUTOMATIC OR CLOCK THERMOSTAT.	888	320	200	369	345	223	-
NEW WATER HEATING EQUIPMENT[	2,132	719	658	755	699	714	-
NO	62,184	27,975	16,299	17,910	13,410	20,582	217
GUIPMENT ADDED (EXPENSIVE)		1	1	1	1		1
YES	3,504	1,420	869	1,215	1,097	966	22
STORM WINDOWS/INSULATING GLASS	2,672	1,077	671	924	791	783	22
ELECTRIC HEAT PUMP	67	-	19	48	48	19	1 -
NEW FURNACE	1,048	393	179	476	474	181	-
NO	63,953	1 28.516	16,905	18,532	1 13,916	21,308	1 214

TABLE 25A
CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY TYPE OF AIR CONDITIONING-CONTINUED
(THOUSAND HOUSING UNITS)

, ! !	TOTAL HOUSING	NUMBER OF RO	OMS WITH AIR	CONDITIONING	CENTRAL AIR     CONDITIONING		CENTRAL A/C
	UNITS	NONE	SOME	I ALL	ONLY	ONLY	ROOM UNITS
ADDED ANY INSULATION OR EQUIPMENT   YES	22,578	       9,297	     5,510	! ! ! 6,771	1	7•781	 
NO	44,879	20,638	11.265	12,976	9,616	14,493	132
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	3,212	1,475	592	1,045	888	833	15
ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	2,490	1,006	732	752	682	780	22
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1.014	413	138	463	414	186	-
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	15,862	6,403	4,949	4,511	3,411	5•982	67
ADDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	6,427	2,726	1,551	2,149	1,855	1,791	55

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

## TABLE 25B CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY TYPE OF AIR CONDITIONING (PERCENTAGE OF HOUSING UNITS)

 	TOTAL Housing	I NUMBER OF ROO	DMS WITH AIR (	CONDITIONING	    CENTRAL AIR	,
1	UNITS	I NONE	SOME	l ALL	CONDITIONING	ONLY
TOTAL HOUSING UNITS 1/	100%	1 100%	100%	100%	100%	100%
INSULATION ADDED (INEXPENSIVE)		1		THE AMERICAN	1	
Y.S	26	25	29	25	25	28
WEATHERSTRIPPING	7	1 7	8	7	7	প
AROUND HOT WATER PIPES	•	2	2	2	2	2
AROUND HOT WATER HEATER	1.	1	1	1	1	1
CAHLKING	16	1 15	2.0	16	16	1.9
PLASTIC COVERING	2	1 3	9	j 6	4	9
0.195Russoussossossossossos	7	1	1	1 2	1 2	١
NO	7.4	75	71	75	75	12
INSULATION ADDED (EXPENSIVE)		!	1	Į	1	<b> </b> 
455	6	5	5	I B	9	j 5
ROOF OR ATTICALORS	4	4	3	5		3
BASEMENT OR CRAWL SPACE	7	2	1	1 2	2	1
OUTSIDE WALLS	2	3	1	3	3	1
NO	94	94	95	92	91	95
EQUIPMENT ADDED (INEXPENSIVE)		1			100-1 View	
YESenacoooooooooooooooooo	8	7	8	9	11	8
CLOSEABLE SHUTTERS	Her	-		1	1 1	-
STORM DOORS	4	4	4	4	5	3
AUTOMATIC OR CLOCK THERMOSTAT.	1	1	1	2	1 2	1
NEW WATER HEATING EQUIPMENT I	•	2	4	4	1 5	j 3
$N$ ) a $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$ = $\sigma$	зŚ	93	35	91	1 89	92
EQUIPMENT ADDED (EXPENSIVE)		Direct Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common Co		•		
VESapaannesaassaasaasaasaasaasaas	S	5	5	. 6	1 7	! 4
STORM WINDOWS/INSULATING GLASSI	4	4	, 1 4	5	5	4
ELECTRIC HEAT PUMP		i -	i -		1 **	-
NEW FURNACE	2	1	·	, ,	3	1 1
NOvacasasasasasasasasasasas	95	1 95	95	1 94	93	96
	.,		1	1	1	1
· · · · · · · · · · · · · · · · · · ·				<u> </u>		

## TABLE 25B CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY TYPE OF AIR CONDITIONING-CONTINUED (PERCENTAGE OF HOUSING UNITS)

į	TOTAL Housing	NUMBER OF RO	DMS WITH AIR	CENTRAL AIR	INDIVIDUAL		
 	UNITS	NONE	SOME		CONDITIONING	ONLY	
!  -   Added any insulation or equipment!		1	] } 	] }	]		
YES	33	31	j 37	34	i 36 i	<b>3</b> 5	
NO	67	69	63	66	64	65	
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	5	5	 	5	6	¢	
DDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION!	4	3	 	1	     5	4	
DDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	?	1	 	! ! ! 2	 	1	
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	24	21	! ! ! 28	23	23	27	
DDED STORM WINDOWS, STORM DOORS,   OR ATTIC OR ROOF INSULATION		q	     9	! ! ! 11	 	я	

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERTM ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM.
OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

## TABLE 26A CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY TYPE OF AIR CONDITIONING (THOUSAND HOUSING UNITS)

	TOTAL Housing	NUMBER OF RO	OMS WITH AIR	CONDITIONING	CENTRAL AIR CONDITIONING	ROOM UNITS	CENTRAL A/C
	UNITS	NONE	SOME	ALL	ONLY	ONLY	ROOM UNITS   
OTAL HOUSING UNITS 1/	57,457	29,936	17,775	19,747	15,012	22,274	235
(NSULATION ADDED (INEXPENSIVE)		ļ	1	] ]	1 1		i
YES	19,579	8,428	5.923	5 • 2 2 9	3,900	7,149	102
WEATHERSTRIPPING	6.516	2,400	2,109	2,007	1,716	2,385	1 15
AROUND HOT WATER PIPES	1,502	776	304	421	279	447	i -
AROUND HOT WATER HEATER	5 74	233	182	179	193	168	j -
CAULKING	3,852	4.008	3 - 134	2,710	2 • 062	3,711	j 71
PLASTIC COVERING	9,583	4,435	2,394	1.853	1,053	3 + 148	46
OTHER	504	235	181	88	95	175	j -
NO	47,878	21,508	11.852	14,518	11,112	15,125	1 134
NSULATION ADDED (EXPENSIVE)		1	ens diversity	eau este			1
YES	4,545	1,972	1 1 211	1,363	1 +018	1,523	33
ROOF OR ATTIC	3,021	1,376	661	984	709	902	33
BASEMENT OR CRAWL SPACE	959	367	273	320	260	333	1 -
OUTSIDE WALLS	1,729	770	602	357	315	645	-
NO	62,712	27,964	16,564	18,384	13,995	20,751	202
QUIPMENT ADDED (INEXPENSIVE)		# 0	1		1		1
YESacasasasasasasasasas	4,956	1,934	1,509	1,512	1 1 1 1 9 4	1,810	19
CLOSEABLE SHUTTERS	237	1 133	16	89	39	16	-
STORM DOORS	2,751	1.027	842	882	691	1,014	18
AUTOMATIC OR CLOCK THERMOSTAT.	7 3 6	235	171	330	344	158	-
NEW WATER HEATING EQUIPMENT	1,524	669	550	404	262	692	-
NO	52,592	28,001	16,266	18,235	1 13,819	20,464	217
QUIPMENT ADDED (EXPENSIVE)			1		1		-
YES	4,002	1,464	1 -378	1,161	1,075	1,445	18
STORM WINDOWS/INSULATING GLASS	3 + 0 78	1,174	1 1,015	889	776	1,110	18
ELECTRIC HEAT PUMP	144	-	31	113	113	31	-
NEW FURNACE	1,161	382	424	355	364	396	1 18
NO	63,455	28,472	16+397	18,586	1 13,937 1	20,829	217

### TABLE 26A CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY TYPE OF AIR CONDITIONING-CONTINUED (THOUSAND HOUSING UNITS)

	TOTAL Housing	NUMBER OF RO	OMS WITH AIR	CONDITIONING	  CENTRAL AIR    CONDITIONING		  CENTRAL A/C   AND	
	UNITS	NONE	SOME	ALL	ONLY I	ONLY	ROOM UNITS	
ADDED ANY INSULATION OR EQUIPMENT		10,094 10,842	 	     6,585   13:162	5•064 9•949	8,919 13,355	 	
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	3+663	1+575	988	1,100	799	1+274	15	
ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	3,120	1,067	1,155	898	857	1,197	1 1 1	
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	883	397	223	263	219	249	18	
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	16,513	7,055	5 • 134	4 • 324	3,199	6+200	68	
ADDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	7,236	2,878	2,199	2,159	1,720	2,605	33	

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

## TABLE 26B CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY TYPE OF AIR CONDITIONING (PERCENTAGE OF HOUSING UNITS)

1	TOTAL Housing	NUMBER OF ROC	CONDITIONING	CENTRAL AIR	INDIVIDUAL ROOM UNITS	
1 1	UNITS	NONE	SOME	ALL	CONDITIONING	ONLY
OTAL HOUSING UNITS 1/	100%	100%	100%	100%	100%	100%
NSULATION ADDED (INEXPENSIVE)					1 1	
YES	29	28	33	26	1 26	32
WEATHERSTRIPPING	10	1 8	12	10	1 11	11
AROUND HOT WATER PIPES	2	1 3	2	2	i 2 i	2
AROUND HOT WATER HEATER	1	1	1	1	1 1	1
CAULKING	15	13	18	14	1 14	17
PLASTIC COVERING	13	15	13	9	7	14
OTHER	1	1	1	-	1 1	1
NO	71	72	67	74	74	68
NSULATION ADDED (EXPENSIVE)						
YES	7	7	7	7	7	7
ROOF OR ATTIC	4	j 5	4	5	5	4
BASEMENT OR CRAHL SPACE	1	1	2	2	2	1
OUTSIDE WALLS	3	3	3	2	) 2	3
NO	93	93	93	93	93	93
QUIPMENT ADDED (INEXPENSIVE)		9		<b>,</b>		
YES	7	5	8	8	8	8
CLOSEABLE SHUTTERS	_	- !	-	-	1 1	***
STORM DOORS	4	] 3	5	4	5 5	5
AUTOMATIC OR CLOCK THERMOSTAT.	1	1	1	2	2	1
NEW WATER HEATING EQUIPMENT	2	2	3	2	2	3
NO	93	94	92	92	92	92
QUIPMENT ADDED (EXPENSIVE)		î Ç	Name of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state	4. 80		]
YES	6	5	8	6	7	6
STORM WINDOWS/INSULATING GLASS	5	4	6	5	5	5
ELECTRIC HEAT PUMP	-	-	-	1	1 1	-
NEW FURNACE	2	j 1	, 2	2	3	2
NO	94	i 95	92	94	1 93	74

TABLE 26B
CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY TYPE OF AIR CONDITIONING-CONTINUED
(PERCENTAGE OF HOUSING UNITS)

1	TOTAL HOUSING	NUMBER OF ROC	DMS WITH AIR	 	INDIVIDUAL ROOM UNITS	
	UNITS	NONE	SOME	I ALL	CONDITIONING	•
ADDED ANY INSULATION OR EQUIPMENT   YES	36 64	1 34   1 66	42 58	! ! ! 33 ! 67	 	4 B 6 D
ADDED EXPENSIVE INSULATION   BUT NOT EXPENSIVE EQUIPMENT	5	<u> </u>	6	6	] 	ĸ
ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	E	4	6	† † 5	6	5
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1.	1 1	1	! ! !	2	1
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	24	24	29	55	21	28
ADDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	11	10	12	1 11	11	12

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH M-M REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

# TABLE 27A CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY 1977 FAMILY INCOME (THOUSAND HOUSEHOLDS)

				1977 FAMIL	Y INCOME		į	
	TOTAL Households	LESS THAN \$5+000	\$5+000   TO   \$9+999	\$10,000   TO   \$14,999	\$15,000   TO \$19,999	\$20,000 TO \$24,999	\$25,000 08 MORE	TOTAL POOR
OTAL 1/	67,457	9,105	12,357	12,573	10,491	9,053	13,863	3 • 41
OTAL ELIGIBLE HOUSING UNITS	64,957	8,923	11,926	12.274	10,098	8,744	12,993	8,17
NSULATION ADDED (INEXPENSIVE)			1				; }	
YES. ELIGIBLE	27,522	2,771	4 • 583	5,371	4,918	4,270	5,600	2,75
WEATHERSTRIPPING	10,195	765	1,204	2,192	1,741	1,685	2,505	97
AROUND HOT WATER PIPES	2,380	150	409	554	452	354	451	19
AROUND HOT WATER HEATER	797	18	116	108	128	166	261	5
CAULKING	17,048	1.216	2,563	3.148	3+255	2,971	3,895	1,16
PLASTIC COVERING	10.656	1,624	2,458	2,317	1,615	1,191	1.450	1,78
OTHER	1.176	190	76	206	237	261	205	7
YES. INELIGIBLE	874	-	155	44	225	86	364	
NO	39,061	6,335	7,619	7,158	5,347	4 - 707	7,894	5 • 63
NSULATION ADDED (EXPENSIVE)	ı		1	! !				
YES, ELIGIBLE	7,373	492	982	1,380	1,268	1,199	2,051	50
POOF OR ATTIC	4,934	304	671	855	826	753	1,525	31
BASEMENT OR CRAWL SPACE	1,771	63	171	351	294	514	379	ί ξ
OUTSIDE WALLS	2,711	271	311	623	478	357	672	2
YES. INELIGIBLE	575	-	87	32	145	79	232	-
NO	59,510	8,613	11,288	11,162	9,078	7,784	11.584	7,91
QUIPMENT ADDED (INEXPENSIVE)	] ]		1	! !	1		]	<b>!</b>
YES, ELIGIBLE	8,677	510	1 • 179	1,560	1,531	1,368	2,528	53
CLOSEABLE SHUTTERS	450	-	47	59	77	116	161	. 1
STORM DOORS	4.534	288	572	931	810	631	1,352	5.5
AUTOMATIC OR CLOCK THERMOSTAT.	1,268	86	189	205	209	183	397	
NEW WATER HEATING EQUIPMENT	3,153	172	409	484	617	641	831	14
YESO INELIGIBLE	588	41	17	15	181	42	292	1
NO	58,173	9,555	11,161	10,997	8,779	7,552	11,045	7,8
QUIPHENT ADDED (EXPENSIVE)	; Ì	ş.	<b>5</b>	1			j 1	
YES, ELIGIBLE	6.494	447	906	1,156	1,201	991	1,784	5
STORM WINDOWS/INSULATING GLASS	4,774	382	593	913	983	797	1,299	4:
ELECTRIC HEAT PUMP	96	<b>-</b>	1 17	1 -	14	-	54	
NEW FURNACE	•	55	308	309	251	230	575	,
YES. INELIGIBLE	458	-	-	-	131	67	560	-
NO	60,515	3.659	11,451	11,418	9,157	3,005	11,823	7,8

# TABLE 27A CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY 1977 FAMILY INCOME-CONTINUED (THOUSAND HOUSEHOLDS)

				1977 FAMIL	Y INCOME			
	TOTAL HOUSEHOLDS	LESS THAN \$5,000	   \$5,000   TO   \$9,999	\$10,000 TO \$14,999	\$15,000 TO \$19,999	\$20,000 TO \$24,999	\$25,000   \$25,000   98   More	TOTAL POOR
ANY EQUIPMENT OR INSULATION ADDED BY ELIGIBLE HOUSING UNITS								
YES	33,779	3,244	5,762	6,475	6+048	4,923	7,327	3,194
NO	31+178	5 <b>≠ 6 7</b> 8	6+164	5,799	4,050	3,821	5,465	4,980
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	5,535	350	957	1.048	950	885	1,435	348
ELIGIBLE UNITS THAT ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	4 • 647	304	790	825	383	677	1.168	36 <b>4</b>
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1,937	143	116	331	<b>31</b> 8	314	<b>61</b> 6	153
ELIGIBLE UNITS THAT ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	21 • 759	2,447	3,9 <del>9</del> 0	4+271	3 <b>,</b> 897	3,045	 	2,329
ELIGIBLE UNITS THAT ADDED STORM WINDOWS, OR STORM DOORS, OR ATTIC OR ROOF INSULATION	11,367	738	I + 631	2,140	1,979	1,678	3÷20?	756

<sup>1/</sup> FXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING, A DASH "-" REPRESENTS OF ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, DEFICE OF THE CONSUMPTION DATA SYSTEM, DEFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

# TABLE 27B CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY 1977 FAMILY INCOME (PERCENTAGE OF HOUSEHOLDS)

				1977 FAMI	LY INCOME			l
	TOTAL Households	1.FSS THAN \$5+000	\$5,000   TO   \$9,999	\$10,000 TO \$14,999	\$15,000   \$15,000   T0   \$19,999	\$20.000 TO \$24.999	\$25,000 OR OR MORE	TOTAL Poor
OTAL 1/	100%	100%	100%	100%	100%	100%	100%	100%
OTAL ELIGIBLE HOUSING UNITS	76	98	97	98	96	96	94	97
NSULATION ADDED (INEXPENSIVE)			]	1	<b>1</b>			İ
YES, ELIGIBLE	41	30	37	43	47	47	40	33
HEATHERSTRIPPING		8	1 10	17	17	19	1 19	12
AROUND HOT WATER PIPES	4	2	1 3	4	4	1 4	3	2
AROUND HOT WATER HEATER	•	/- -	1 1	i	i	2	2	1
CAULKING	25	13	21	25	31	f 33	28	14
PLASTIC COVERING	16	18	20	18	15	1 13	10	21
OTHER	2	2	1	1 2	1 2	1 5	1	1
YES. INCLIGIBLE			1 1		1 2	1 1	1 3	i -
•	1 1	70	•		, –		57	67
NO	58	70	62	57	51 !	1 52 1	1 31	, er 1
NSULATION ADDED (EXPENSIVE)	i		İ	ì	•	ĺ	1	ł
YES, ELIGIBLE	11	5	8	11	12	13	15	6
ROOF OR ATTIC	7	3	5	1 7	8	В	11	4
BASEMENT OR CRANL SPACE	3 1	1	1	3	1 3	1 6	3	1
OUTSIDE WALLS	4 1	3	3	j 5	5	4	5	3
YES, INELIGIBLE	1	_	1	-	1 1	1	1 2	- 1
NO	38	95	91	89	87	86	84	94
QUIPMENT ADDED (INEXPENSIVE)	] !						1	ļ •
YES, ELIGIBLE	13	6	10	12	; ! 15	15	18	ا د
CLOSFABLE SHUTTERS		-	1 -	1 -	1 1	1 1	1 1	
STORM DODRS	7	3	5	7	! 1 ! 8	, <u>.</u> 7	1 10	4
	9		1 2	1 2	1 2	1 2	1 3	
AUTOMATIC OR CLOCK THERMOSTAT.		2	•	1 4	!	7	1 6	
NEW WATER HEATING EQUIPMENT		2	} 3	. 4	•	, ,	•	
YES. INELIGIBLE	,	_	-	!	2		2	
NO	86	94	90	87	84	84	1 80 1	ļ 93
QUIPMENT ADDED (EXPENSIVE)	i 		i		1	•		į
YES, ELIGIBLE	10	5	7	9	11	11	13	6
STORM WINDOWS/INSULATING GLASS		4	5	7	9	] 3	9	5
ELECTRIC HEAT PUMP		_	-	j -	i -	i -	<b>i -</b> : i	
NEW FURNACE		1	2	1 2	i 2	1 3	4	
YES, INELIGIBLE	1		-	i -	, <u> </u>	i	2	i -
NO same a second and a second control	1 10	95	1 93	91	87	38	85	1 94
	, , ,	7 J	1 /3	7 1 1	€ 57.€ \$	1 30	1 00	, /T

# TABLE 278 CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY 1977 FAMILY INCOME-CONTINUED (PERCENTAGE OF HOUSEHOLDS)

	İ	: 1		1977 FAMIL	Y INCOME			; ] !
	TOTAL HOUSEHOLDS	LESS THAN \$5,000	   \$5+900   TO   \$9+999	\$10,000   TO   t14,999	\$15.000 TO \$19.999	\$20,000 T0 \$24,999	\$25+000   0R   MORE	TOTAL POOR
			!	[			g	!
ANY EQUIPMENT OR INSULATION ADDED BY ELIGIBLE HOUSING UNITS			j			t İ	† }	<b>!</b>
YES	50	36	47	f 51	58	54	į 53	3.8
NO	46	52	50	46	39	42	41	59
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	8	4	1 7	 	9	10	!  -   10	! ! ! 4
ELIGIBLE UNITS THAT ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	7	3	!     6	† † † 7	8	       7	1 1 1	   
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	3	2	! ! !	! ! ! ! 3	3	]       3	 	2
ELIGIBLE UNITS THAT ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	52	27	52	1 1 1 1 34	37	 	†     30	   
LIGIBLE UNITS THAT ADDED STORM WINDOWS, OR STORM DOORS, OR ATTIC OR ROOF INSULATION	1.7	8	       13		19	       17	! ! ! 23	<u> </u>

<sup>1/</sup> EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TARLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, DEFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

## TABLE 28A CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY 1977 FAMILY INCOME (THOUSAND HOUSEHOLDS)

				1977 FAMIL	Y INCOME		İ	
	TOTAL Households	LFSS THAN \$5.000	\$5,000 TO \$9,999	\$10,000 TO \$14,999	\$15.000 FO \$19.999	\$20.000 FO \$24.999	\$25;000   9R   MORE	TOTAL POOR
TOTAL 1/	67,457	9,106	12,357	12,573	10,491	9,063	13,868	8,414
INSULATION ADDED (INEXPENSIVE)							] 	
YESaansaasaasaanaanaanaana	17,532	1.610	2,795	3,302	3,381	2,301	3+744	1.703
WEATHERSTRIPPING	4,907	337	5.35	1,114	614	928	1 1,378	476
AROUND HOT WATER PIPES	1,285	1 5 2	119	301	225	j 174	337	131
AROUND HOT WATER HEATER	458	1 9	1.37	44	96	19	1 144 1	5.6
CAULKING	11.078	729	1 + 621	1 • 835	2,273	2,032	2 • 589	81
PLASTIC COVERING	5,455	887	1,253	1,161	914	507	734	92
OTHER accessors on the contract of	355	104	49	116	191	223	1 173 1	5
NO	44.326	7,496	9,563	9,271	7.110	6.262	10,124	6,71
ENSULATION ADDED (EXPENSIVE)	 					: **	; ; [ ]	
YES	4,226	305	418	784	677	752	1,290	33
ROOF OR ATTIC	2+843	158	284	544	466	1 481	910	19
BASEMENT OR CRAWL SPACE	1,271	4.0	91	273	203	335	324	7
OUTSIDE WALLS	1,478	176	128	256	224	237	457	16
NO	63,232	9,801	11,939	11,789	9,814	8,310	12,579	8,08
EQUIPMENT ADDED (INEXPENSIVE)	! 		[ [			1	; I 1 †	
YES	5,274	380	449	874	884	993	1 1 693	42
CLOSEABLE SHUTTERS	500		17		62	93	127 1	1
STORM DOORS	2 # 580	189	246	527	411	414	893	24
AUTOMATIC OF CLOCK THERMOSTAT.	888	67	80	130	174	1 129	30 7	8
NEW WATER HEATING EQUIPMENT	2,132	124	129	277	405	540	656	10
NO	62 • 184	8,726	11,908	11.699	9,607	8,069	12,174	7,98
EQUIPMENT ADDED (EXPENSIVE)				j 		1		
Y=5===================================	3+504	259	393	657	477	671	1.047	3.3
STORM WINDOWS/INSULATING GLASS	2,672	208	505	570	404	554	735	27
ELECTRIC HEAT PUMP	67		19		4.8	i -	i - i	1
NEW FURNACE	1,348	51	173	128	84	195	413	4
NO	63,953	8.847	11.964	11,916	10.014	8,392	12+820	8,08

### TABLE 28A CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY 1977 FAMILY INCOME-CONTINUED (THOUSAND HOUSEHOLDS)

	1			1977 FAMIL	Y INCOME			
	TOTAL   HOUSEHOLDS	LESS THAN \$5+000	\$5,000 TO \$9,999	\$10.000 TO \$14.993	\$15,000 TO \$19,999	\$20,000 TO \$24,999	\$25,000   OR   More	TOTAL POOR
ADDED ANY INSULATION OR EQUIPMENT	 		Î ! i	] ] !		 	1	
YES	22•573 44•879	2+809 7+097	3,465 8,892	4+184 8+389	4.122 6,369	3,543 5,519	5,255 8,613	2+133 6+281
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	3,212	194	[     376	623	489	[ 5 <b>4</b> 5	 	209
ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	2•490	148	371	1 496	289	463	723	213
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1+014	111	! 	161	187	208	; 	121
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	15,462	1 •556	2,676	2,904	3,156	2,328	1 	1,590
ADDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	6+427	398	f     656	1,350	967	1,115	 	491

1/ FXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, DEFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

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## TABLE 28B CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY 1977 FAMILY INCOME (PERCENTAGE OF HOUSEHOLDS)

	İ			1977 FAMIL	LY INCOME			1
	TOTAL     HOUSEHOLDS   	LESS THAN \$5,000	\$5.000   TO   \$9.799	   \$10.000   TO   \$14.999	\$15,800   TO   \$19,999	\$20.000 TO \$24,999	\$25+000   \$25+000   OR   MORE	TOTAL POOR
TOTAL 1/	100%	100%	100%	100%	100%	100%	100%	100%
INSULATION ADDED (INEXPENSIVE)	! !						1	
YES	26	1.8	23	26	32	31	27	20
WEATHERSTRIPPING	7	4	4	9	6	10	10	6
AROUND HOT WATER PIPES	1 2 1	1	j t	2	?	5	j 2	1 2
AROUND HOT WATER HEATER	1 i	_	j 1	i -	1	-	1	1
CAULKING	16	В	13	15	22	22	1 19	10
PLASTIC COVERING	8	10	1 10	9	1 9	6	5	1 11
OTHER	i 1 i	1	-	1	2	2	1	1
NO	74	32	7.7	7.4	68	59	73	80
INSULATION ADDED (EXPENSIVE)	1			9 •	<b>!</b> ♦		1	1
YES	6	3	, 3	6	6	8	1 2	1 4
ROOF OR ATTIC		2	1 2	1 4	4	5	7	1 2
BASEMENT OR CHANL SPACE		1	1	2	2	4	,	i i
OUTSIDE WALLS		2	1	2	. 2	3	1 3	1 2
NO	94	3.4	37	94	94	92	71	96
EQUIPMENT ADDED (INEXPENSIVE)	, ,		1	1	1		1	1
YEShaabaaaaaaaaaaaaaaaa	1 8 1	4	1 4	7	, 1 8	11	1 12	5
CLOSEABLE SHUTTERS	,	· <u>·</u>			1 1	1	i	-
STORM DOORS	1 1	2	1 2	1 4	1 4	; ;	6	3
AUTOMATIC OR CLOCK THERMOSTAT.	,	1	1 2	1 1	. 2	, , 1 1	1 2	1
NEW WATER HEATING EQUIPMENT	. ,	1	1 1	2	4	1 4	5	1 1
NO	•	26	96	93	92	ล์	88	75
EQUIPMENT ADDED (EXPENSIVE)	1		1	1	1		i	1
YES	5	3	1 3	, 1 5	I 5	!   7	1 8	1 6
STORM WINDOWS/INSULATING GLASS	, ,	2	1 2	, J	1 4	,	1 5	1 7
ELECTRIC HEAT PUMP		۷	1 4	1 3	, <del>,</del>	,	, J	
NEW FURNACE		•			-	2	3	
	, ,	1 07	1 1	1	1 95		,	
NO	35	97	1 37	95	95	93	72	96

### TABLE 28B CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY 1977 FAMILY INCOME~CONTINUED (PERCENTAGE OF HOUSEHOLDS)

	<u> </u>			1977 FAMI	Y INCOME			
 	TOTAL HOUSEHOLDS	LESS THAN \$5,000	1 \$5,000 1 TO 1 \$9,999	   \$10,000   TO   \$14,997	\$15,000 TO \$19,999	\$20,000 TO \$24,999	\$25,000   OR   MORE	TOTAL POOR
 			!	1			] [	<u> </u>
YES	! 3	22	1 28	53	39	39	; i 38	1 25
NO	<del>5</del> 7	78	72	57	61	31	53	75
DDED EXPENSIVE INSULATION	 		1	1		<u> </u> 	]	} !
BUT NOT EXPENSIVE EQUIPMENT	5	2	3	5	5	6	7	2
DDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	4	2	3	 	3	5	5	
DDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	2	1	-	1	2	2	! ! ! 2	! ! !
DDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	24	17	22	23	30	25	23	   ! 19
DDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	19	4	- 5	1 11	9	12	     14	! !   6

1/ FXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH M-M REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY. DEFICE OF THE CONSUMPTION DATA SYSTEM. DEFICE OF PROSEAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

## TABLE 29A CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY 1977 FAMILY INCOME (THOUSAND HOUSEHOLDS)

				1977 FAMIL	Y INCOME		1	
	TOTAL HOUSEHOLDS	LESS THAN \$5,000	   \$5,000   TO   \$9,999	\$10,000 TO \$14,999	\$15+000 FO \$19+999	\$20,000 TO \$24,799	\$25+000 OR MORE	POOR
TOTAL 1/	67,457	9,106	12,357	12,573	10,491	9,063	13.868	8.414
INSULATION ADDED (INEXPENSIVE)			!				!	
YES	19,579	1,987	3,299	3,780	3+525	2,941	4,047	1,921
WTATHERSTRIPPING	6,515	449	811	1+131	1,458	946	1.721	545
AROUND HOT WATER PIPES	1,502	29	359	355	256	219	284	96
AROUND HOT WATER HEATER	534	-	14	91	78	147	265	***
CAULKING	9.352	722	1,525	1 • 8 3 8	1,688	1,599	2,478	635
PLASTIC COVERING	8,583	1,343	1.820	1,878	1,474	1,007	1,161	1 + 4 3 4
OTHER	504	86	27	104	<b>7</b> 5	114	98	23
NO	47.378	7.119	9.058	R, 793	S • 966	5,122	9,821	6+492
INSULATION ADDED (EXPENSIVE)	•							
YES	4 - 5 - 4 5	223	717	753	840	793	1.219	187
ROOF OR ATTIC	3.021	144	510	412	550	474	923	126
BASEMENT OR CRAWL SPACE	759	15	1 137	97	216	241	254	15
OUTSIDE WALLS	1+727	95	198	427	387	233	389	79
NO	62,112	R, 883	11,640	11,820	9+651	8,269	12,647	8,227
EQUIPMENT ADDED (INEXPENSIVE)	] 		1	 			E Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of the Property of	
455	4,756	235	782	894	1.029	588	1,32/	191
CLOSEARLE SHUTTERS	237	-	30	59	26	48	74	-
STORM DOORS	2 • 751	140	326	486	655	520	925	91
AUTOMATIC OR CLOCK THERMOSTAT.	7.35	10	141	74	131	139	231	-
NEW WATER HEATING EQUIPMENT	1 + 624	87	300	305	313	230	388	109
NO	62,502	9.871	11,575	11,679	9,462	8,374	12,540	8,217
EQUIPMENT ADDED (EXPENSIVE)		•	1	i Î	; [	Į.	; {	
YES	4+003	188	593	588	924	490	1 1,219	187
STORM WINDOWS/INSULATING GLASS		174	422	376	717	413	976	18
FLECTRIC HEAT PUMP	144	-	] -	-	27	<u> </u>	116	
NEW FURNACE	1,161	14	185	231	278	77	376	
NO	63,453	8 918	11,764	11.985	9.567	8,573	12,548	8,23

## TABLE 29A CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY 1977 FAMILY INCOME-CONTINUED (THOUSAND HOUSEHOLDS)

	] 			1977 FAMIS	Y INCOME			
	TOTAL HOUSEHOLOS	LESS THAN \$5.000	\$5,000 T0 \$9,999	\$10,000   F0   \$14,999	\$15,000 TO \$19,999	\$20,000 TO \$24,999	\$25+000 09 MORE	TOTAL Poor
 	 		! !	! !				
YES-0030000000000000000000000000000000000	24,178	2 • 22 9	4.216	4.568	4.315	3,511	1 5.338 1	2.135
NO.	43,230	5 # 8 7 6	8 • 1 4 1	8,005	6,176	5,552	8+529	6,278
DDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	3,653	191	608	618	690	665	890	155
DDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	3,120	157	 	; 	774	362	391	151
DOED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	883	32	109	136	150	128	329	32
DDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	16,513	1 • 857	3,015	3,362	2,700	2+356	3,229	1,798
DDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	7+236	381	 	1:042	1•511	979	2 <b>•15</b> 8	321

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH #-# REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION BURVEY, DEFICE OF THE CONSUMPTION DATA SYSTEM. OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

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## TABLE 29B CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY 1977 FAMILY INCOME (PERCENTAGE OF HOUSEHOLDS)

	ļ	·		1977 FAMI	LY INCOME		1	
	TOTAL HOUSEHOLDS	LESS THAN \$5+000	\$5,000 TO \$9,999	\$10,000   TO   TO   \$14,999	\$15,000 TO \$19,999	\$28±000 TO \$24±999	\$25,000 OR MORE	TOTAL POOR
TOTAL <u>1</u> /	199%	100%	100%	1 100%	100%	100%	100%	100%
INSULATION ADDED (INEXPENSIVE)			1	) 1				
455000000000000000000000000000000000000	29	2.2	1 27	30	34	32	29	2.3
WEATHERSTRIPPING	10	5	7	9	14	10	12	6
AROUND HOT WATER PIPES	2	-	1 3	3	2	2	2	1
AROUND HOT WATER HEATER	1	-	i -	1	1	2	2	
CAULKING	15	8	1 12	15	16	18	1 18	9
PLASTIC COVERING	13	15	15	15	14	11	1 8	1.7
OTHER	1	1	-	1	1	1	i 1	-
NO	71	78	73	70	66	68	71	77
INSULATION ADDED (EXPENSIVE)			1	<b>1</b>			<b>L</b>	
YES	7	2	6	6	8	9	9	2
ROOF OR ATTIC	4	2	1 4	1 3	5	5	7	2
BASEMENT OR CRANL SPACE	1	_	i	1	2	3	2	_
OUTSIDE WALLS	3	1	2	3	4	3	3	1
NO	93	78	94	94	92	91	91	98
EQUIPMENT ADDED (INEXPENSIVE)			•				; 1	
YES	7	3	1 6	1 7	1 10	3	10	2
CLOSEABLE SHUTTERS	_	<u> </u>	-	-		1	1 1	-
STORM DOORS	4	2	3	4	6	4	6	1
AUTOMATIC OR CLOCK THERMOSTAT.	1	_	1	1 1	,	, ,	2	-
NEW WATER HEATING EQUIPMENT	2	1 1	2	į Ž	3	3	3	1
NO	- '	97	94	93	90	32	90	98
EQUIPMENT ADDED (EXPENSIVE)		•	1	 				
YES	5	2	i 5	5	9	5	9	2
STORM WINDOWS/INSULATING GLASS	5	2	5	3	7	5	7	2
ELECTRIC HEAT PUMP	-	<u> </u>	-	-	-	i -	i	_
NEW FURNACE	?	_	7	2	3	! 1	i 3	-
NO	74	98	95	75	91	95	91	98

## TABLE 29B CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY 1977 FAMILY INCOME-CONTINUED (PERCENTAGE OF HOUSEHOLDS)

	1			1977 FAMIL	Y INCOME			
	TOTAL HOUSEHOLDS	UTSS THAN \$5,000	\$5,000 ro \$9,999	\$10,000 TO \$14,999	\$15+000 10 \$19+999	\$20.000 FO \$24,399	   \$25+000   OR   MORE	FOTAL POOR
 	 						† •	
YC\$	36 54	24 76	34 66	36 54	<b>41</b> 59	39 61	39 52	25 75
NDDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	5	?	5	5	7	7	     5	     2
DDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	S	2	1 4	4	7	! ! ! 4	6	2
DDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1	<del></del>	} } ! I	1	l I	1	]     2	-
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	7.4	~ O	 	27	25	25	23	21
DDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION		4	     9	9	14	     11	 	}     4

1/ EXCLUDES RUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSAPY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY. OFFICE OF THE CONSUMPTION DATA SYSTEM. OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

# TABLE 30A CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY SELECTED DEMOGRAPHIC CHARACTERISTICS (THOUSAND HOUSEHOLDS)

		AGE	OF HEA	\D	RAC	CE		ION OF		MARITAL	STATUS 0	F HEAD
	TOTAL Households	<b>3</b> 5	36	60		   	8	9	13		NOT MA	RRIED
		0₹   L⊏S\$	TO. 59		WHITE.	BLACK	OR LESS	TO 12	AND OVER	MARRIED	FEMALE HEAD	MALE HEAD
TOTAL 1/	67,457	20,312	27+552	18,994	61.960	6,398	11,510	31,755	24,193	47,696	13,965	5,797
TOTAL ELIGIBLE HOUSING UNITS	1 1 54,957	19,687	26,507	18+662	58•689	6,258	11,237	30,963	22,757	45,723	13,621	5,613
INSULATION ADDED (INEXPENSIVE)											6 512	1 (77
YES, ELIGIBLE									•	21,333		
WEATHERSTRIPPING					9,609			5,227	•	•		615
AROUND HOT WATER PIPES		•	1.035		2,308	•		1•305 327			•	
AROUND HOT WATER HEATER	17,048	267			737 116,261	*			•	14,047	,	
PLASTIC COVERING	10.656				9.582	•			• •		'	
OTHER	1 1,176	397333			1 1 1 1 3 4							
YES. INELIGIBLE	1 874	445	,			•		•	•	•		
NO					,	,				25,578		
INSULATION ADDED (EXPENSIVE)	1				•				! !			
YES. ELIGIBLE	7,373	2.220	3.522	1 1 . 6 3 1	7,206	167	899	3,806	2.568	6.113	8601	400
ROOF OR ATTIC	,	•	•		4.908	,		2,385	•	•		
BASEMENT OR CRAYL SPACE		598			1,750	•			•		•	
OUTSIDE WALLS	,	•	1.309		2,630	•		1,553	•	•	•	111
YES, INELIGIBLE	575	249				•			•	•		
NO	•	•	•		1	•	•	•	•		13,070	
EQUIPMENT ADDED (INEXPENSIVE)	1	] 	, ,		1	1	•	 	} #			
YES. ELIGIBLE	3.677	2.533	4.447	1.697	7.944	733	1.077	4,061	3.539	7.071	1,207	398
CLOSEABLE SHUTTERS		218		,	•	,		, .	• •	•		
STORM DOORS	•	1,416		•	4,269	•		2,432	•	•		
AUTOMATIC OR CLOCK THERMOSTAT.	1.258	405	604	259	1.140	128	127	555	587	994	212	52
NEW WATER HEATING EQUIPMENT	3,153	752	1,669	732	2,869	283	461	1.205	1 .487	2,507	450	196
YES, INELIGIBLE	583	253	268	66	544	,	•	1		•	•	
NO	73,193	18.125	22,837	17.231	152,572	5,621	10,359	27,489	20,345	40,096	12,714	5,383
EQUIPMENT ADDED (EXPENSIVE)	1	ŧ		! 	1	1	} <del> </del>		1	2 1		
YES, ELIGIRLE		•		•	6,068	•		3,473			•	
STORM WINDOWS/INSULATING GLASS	•	,			4,705	•	•	2 + 6 3 6		•	•	
ELECTRIC HEAT PUMP		33	•		•		•		•	•	•	
NEW FURNACE		4 3 9	,	•	1,609	•	•	1.031	•	•		
YES, INELIGIBLE		196	,			1					•	
VO	1 50,515	₹18 • ° 03	24 • 145	117,467	154,577	5,738	110,808	28 • 141	121,566	42,112	12,897	5 + 506
See fretrotes at end of table.	1	L	L	L	1	1	L	L	L	L	L	

# TABLE 30A CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY SELECTED DEMOGRAPHIC CHARACTERISTICS-CONTINUED (THOUSAND HOUSEHOLDS)

	 	AGE	OF HE	ND	l RA	CE		TION OF IN YEARS		  MARITAL	MARITAL STATUS OF HEAD		
	TOTAL HOUSEHOLDS			60	*	] 			13	; } !	AM TON	RRIED	
	! ! ! !				WHITE.  OTHER 		•	TO   12 	,	MARRIED    -  -	!  FEMALE     HEAD		
ANY EQUIPMENT OR INSULATION ADDED BY ELIGIBLE HOUSING UNITS	! ! !	 			ł •	# # #					! !		
YFS	35+779   31+178												
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	 	1,000	2•437	1,298	       5,424	       112	     775	]     2,773	 	       4,468	     667	400	
ELIGIBLE UNITS THAT ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	 	1,393	2,034	1,170	     4•286	 	560	2,439	1,648	       3,541	 	275	
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	 	420	1,086	3 32	     1,782	     55	125	1,033	679	! ! ! 1,644	193	-	
ELIGIBLE UNITS THAT ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	21.753	6±285	10,006	5+468	     19•733	2.025	     3,583	    10,690	7•486	i     16,306	3+979	1 +473	
ELIGIBLE UNITS THAT ADDED STORM WINDOWS, OR STORM DOORS, OR ATTIC OR ROOF INSULATION	! ! ! 11,357	3,373	5•553	2,442	      10,751 	613	1,321	       5,723 	4 <sub>+</sub> 325	     9+144 	1.866	559	

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZFRO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM INERGY CONSUMPTION SURVEY, DEFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

# TABLE 30B CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY SELECTED DEMOGRAPHIC CHARACTERISTICS (PERCENTAGE OF HOUSEHOLDS)

	 	AGE	OF HE	AD	I RAG	CE		ION OF N YEARS		MARITAL	STATUS (	OF HEAD
	TOTAL HOUSEHOLDS		36	60		   	8	9	13	<b>!</b>	M TGN	ARRIED
	:	OR LESS	10 59		WHTTE+   OTHER 	BLACK	OR     LESS	10 12	ANU OVER	MARRIEO     	  FEMALE   HEAD	MALE   MEAD 
TOTAL 1/	1 190 ×	100%	109%	100%	100%	100%	100%	100%	100%	100%	100%	   100%
TOTAL ELIGIBLE HOUSING UNITS	1 75	94	97	98	1 † 96	98	98	38	94	96	1 98	97
INSULATION ADDED (INEXPENSIVE)	1			]	!				7.0		1	
YES, ELIGIBLE		40	45	•	•			44		,	1 32	29
WEATHERSTRIPPING		17		1	•			15			11	11
AROUND HOT WATER PIPES	,	5			,		,	4	,	1 4	,	3
AROUND HOT WATER HEATER	•	1			•	•		1	•	•	1	1
CAULKING	•	21	30	24	*	*	,	2.8	25	•	16	14
PLASTIC COYERING	,	Id	16	1.3			1	,		16	~	12
OTHER	•	2		•		,	,			•	1 2	1
YES, INELIGIBLE		2	1	1 1	,	•	. ,	1 1		2	1	-
ND	58	5.8	54	54	57	1 68	65	55	58	54	[ 57	71
INSULATION ADDED (EXPENSIVE)	1			1	1	1				<b>!</b>		1
YES, ELIGIBLE	1 11	11	13	9	1 12	3	8	12	11	1.3	G	7
ROOF OR ATTIC	7	7 ]	9	- 6	1 8	2	5	8	3	3	5	4
BASEMENT OR CRAWL SPACE	3	3	3	1	1 3	-	1	3	3	1 3	1	5
OUTSIDE WALLS	1	4	£.	3	4	1	3	-5	3	5	2	2
YES, INELIGIBLE	i 1 i	1	1	i -	1 1	i -	1	1	1	1	j -	į -
NO	88	3.8	8.6	91	87	97	92	8.7	88	86	94	93
EQUIPMENT ADDED (INEXPENSIVE)	1			1	1	1				1	1	1
YES. FLIGIBLE	1 13	12	16	9	1 13	. 11	9	13	15	1 15	1 9	7
CLOSEABLE SHUTTERS	•	1		•	•			1	1	i	i -	i -
STORM DOORS		7	-		-		•	8	7		5	i 3
AUTOMATIC OR CLOCK THERMOSTAT.		2			,	7		ž	2		2	1 1
NEW WATER HEATING EQUIPMENT		4		•	•	•	,	4	1 5	4	3	1 3
YES, INELIGIBLE	1	1		•		1		1		•	i -	-
V/1	•	87				88		87	•	84	71	93
TOUTDMENT ADDED ACMBERGIBES	1	! :			!	!			Marian II	1	1	!
EQUIPMENT ADDED (EXPENSIVE)	1			!	!	!			!	!	!	-
YES, ELIGIBLE	10	্	~	•	,	7	•	11		•	7	5
STORM WINDOWS/INSULATING GLASS		7	•	5		1 4	7	8	•	•	5	4
ELECTRIC HEAT PUMP	•	-	1	-	1	-	•	-	•		-	-
NEW FURNACTARRAGES	•	2	•	2	•	2	1	3	•	•	2	1
YES, INELIGIBLE	1	1	-		1	1		-	. ~	•		
NO	ניו ו	90	8.8	92	89	93	94	8.9	89	1 38	32	95
	1	L	L	L	L	<b></b>	L	L	L	<b></b>	<del></del>	<b></b>

# TABLE 30B CONSERVATION EFFORTS UNDERTAKEN BETWEEN APRIL 1977 AND DECEMBER 1978 AND ELIGIBILITY FOR 1978 TAX CREDIT BY SELECTED DEMOGRAPHIC CHARACTERISTICS-CONTINUED (PERCENTAGE OF HOUSEHOLDS)

	1	AGE	OF HE	AD	I RA	CE		TION OF		  MARITAL	STATUS	OF HEAD
	TOTAL HOUSEHOLDS		36	60	! !	1	8	9	13	] ]	M TCN	ARRIED
		OR LESS	TO   59		WHITE,  OTHER 		DR LESS		AND OVER	(MARRIED)   	FEMALE HEAD	   MALE   HEAD 
ANY EQUIPMENT OR INSULATION ADDED BY ELIGIBLE HOUSING UNITS	1 1		i !				 			Part		 
YES	50 1 46	47 47		44 55	•	40 58			49 45	54	41 57	] 37   60
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	! ! ! ! 9	9	9	7	! ! ! 9	       2	       7	9	8	! ! ! 9	     5	     7
ELIGIBLE UNITS THAT ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	]     7	7	8	6	] ] ] 7	]     6	     5	i     8	 	 	     6	 
ELIGIBLE UNITS THAT ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	! ! !	2	4	2	] ] ] 3	]     1	! ! ! 1	3	 	     3	] ] [ 1	
ELIGIBLE UNITS THAT ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	! ! ! 32	30	36	29	32	32	]     31	34	       31	34	28	     25
ELIGIBLE UNITS THAT ADDED STORM WINDOWS, OR STORM DOORS, OR ATTIC OR ROOF INSULATION	 	16	20	13	18	10		19	18	19	12	10

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH \*-\* REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, OFFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

## TABLE 31A CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY SELECTED DEMOGRAPHIC CHARACTERISTICS (THOUSAND HOUSEHOLDS)

	! !	AGE	OF HE	<b>ND</b>	RAI	Œ		TION OF IN YEARS		MARITAL	STATUS O	IF HEAD
	TOTAL HOUSEHOLDS	35	35	50	   	 ! !	8	9	1 1 3		NOT MA	RRIED
		OR LESS	70 59	AND OVER	•	BLACK	0R   LESS	T0   12 	AND OVER	MARRIED    	FEMALE HEAD	MALE HEAD
TOTAL 1/	57+457	20.712	27,552	19.974	61,960	6,378	11,510	31,755	24,193	47,696	13,965	5,797
INSULATION ADDED (INEXPENSIVE)					•	ļ !	1		} }	i 1		
Y	17.532	5 + 868	7,900	3,864	116.435	1.106	2,317	8,727	6,588	13,835	2,664	1,132
WEATHERSTRIPPING		•	2.182	•	4,616	•	•	2,408			,	
AROUND HOT WATER PIPES		687	•	•	1,286			•	,	•	•	
AROUND HOT WATER HEATER		210		•	•	,	, -			•		
CAULKING	•	•		•	10.647	•		5,470		•		
PLASTIC COVERING		•		•	4 9873		,	2 ,846		•	•	
OTHER		375						•		•		
NO	1 49,825	(15+U44) !	19,502	15,130	44 9 6 2 5 	5,201 	79193 	23 <sub>9</sub> 028 	17,605 	33,850 	[ 11+301  	4,665
INSULATION ADDED (EXPENSIVE)	İ	,		; }	i	i		! }	i	Ì	}	
Y5.S.,	•	1,548	1,940	733	4.119	107	443	2,095	1,588	3,521	•	
POOF OF ATTIC	, , , , , ,	,	1,399	•	2.736	•	,	1,333	•		•	
BASEMENT OR CRAWL SPACE	,	528	,	•	1,271	•		,	,			•
OUTSIDE WALLS	,	1 520	,		1,426	1		•			•	•
NO	53.232	119,364	25,611	18.256	156,941	6,291	111,067	129,660	22,505	44,175	13:480	5,576
EQUIPMENT ADDED (INEXPENSIVE)	# #	1	,	] [	) [	1	] [	!	]	1	]	l l
YES	5,274	1 1 , 7 9 4	2,669	311	4,872	402	662	2,291	2 - 321	4,353	693	228
CLOSEABLE SHUTTERS	300	145	133	22	283	17	j -	8.3	216	283	17	-
STORM BOORS	3,680	993	1,373	314	2,550	130	297	1,329	1,055	2 • 287	231	112
AUTOMATIC OR CLOCK THERMOSTAT.	888	383	383	122	838	51	50	367	471	646	193	49
NEW WATER HEATING EQUIPMENT	,		1,124		1,928		•		1.020			
NO : : : : : : : : : : : : : : : : : : :	52,184	119,118	24+883	18,183	156.183	1 5,316	113,848	29,464	121 +872	43,343	13,272	5,569
FQUIPMENT ADDED (EXPENSIVE)	1	}	1 1	7	1	1	1	1	1	1	ŧ !	l I
YC So. 201 20 20 20 20 20 20 20 20 20 20 20 20 20	3.504	1.300	1,773	931	3,254	2 10	337	1,825	1.341	2,699	512	193
STORM WINDOWS/INSULATING GLASS	•	1,063		•	2,498	,	•	1,301	•	•		•
ELECTRIC HEAT PUMP	67	55	1 12	-	48	19	-	55	1 12	67	j -	! -
NEW FURNAC	1,049	293	•	•	990	58	96	627	j 325	796	205	j 46
VO	65,953	19,612	25,779	18.562	157,806	6 . 147	111,173	29,929	22,852	44,997	13:353	5,604
	1	1	L	1	1	1	1	1	1	L	1	L

## TABLE 31A CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY SELECTED DEMOGRAPHIC CHARACTERISTICS-CONTINUED (THOUSAND HOUSEHOLDS)

	1	AGE	OF HEA	\D	RAI	CE (		ION OF		MARITAL	STATUS O	F HEAD
	!   TOTAL    HOUSEHOLDS	35	]   36	60	}   		8	9 1	1.5		NOT MA	RRIED
	     	OR LESS	T0 59		WHITE. OTHER	BLACK	OR LESS	T0 12		MARRIED	FEMALE     HEAD	MALE HEAD
ADDED ANY INSULATION OR EQUIPMENT											   3.525    10.4440	
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	1		1.349		3,131	ļ		1.496				
ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	?•49A	982	1,192	527	2.266	225	2701	1 • 227	993	1,841	472	177
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	1.014	318	591	105	988	26	66	599	<b>34</b> 8	858	140	16
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	   15,362	4 + 345	7,211	3+705	14,569	1+273	2,327	7•751	5,735	12.204	2,569	1,090
ADDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	i		3.191	346 L	   6•368 	   359  	701	3,031	2,694	5+227	834	355

1/ EXCLUDES BUILDINGS WITH FIVE OR MORT UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH #~# REPRESENTS OR ROUNDS TO ZERO. SEE BLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, DEFICE OF THE CONSUMPTION DATA SYSTEM.
OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

## TABLE 31B CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY SELECTED DEMOGRAPHIC CHARACTERISTICS (PERCENTAGE OF HOUSEHOLDS)

	TOTAL HOUSEHOLDS	AGE	OF HE	<b>D</b>	RA(	CE !		ION OF N YEARS		MARITAL STATUS OF HEAD		
		35	36	5 D		   	8	9	13		M TON	ARRIED
		DR LFSS	T0 59		WHITE. OTHER	BLACK	OR LESS	TO (		MARRIED   	  FEMALE   HEAD	MALE   HEAD
TOTAL 1/	100%	100%	100%	100%	100%	100%	100%	100%	100%	190%	100%	100%
INSULATION ADDED (INEXPENSIVE)		\$ {	1		! <del> </del>	! 		1	1	**	1 [	1
45500000000000000000000000000000000	25 1	28	29	2.0	27	13	20	27	27	29	19	50
HEATHERSTRIPPING	7	10	8	43	3	5	3	8 1	9	R R	5	4
AROUND HOT WATER PIPES	2	3 1	2	.1	2	j -		2	2	2	. 2	2
AROUND HOT WATER HEATER	1 1	1	1		1	i -	1	1	1	1 1	-	1 1
CAULKING	15 i	15	. 19 i	13	17	7	11	17	18	j 19	1 10	1 8
PLASTIC COVERING		10	Я	7	8	i 9	10	9	6	i 8	1 7	8
OTHER	1 1	2			1	· -	-	2 1	1	iı	1 1	i 1
NO	74	72					, ,	•	-	,	31	30
INSULATION ADDED (EXPENSIVE)						<b>‡</b>	) 1   1			1	1	1
YES	5	7 (	7	4	7	2	4	7	7	7	3	4
ROOF OR ATTIC	4	5	5	3	4	?	3 1	4	5	5	2	2
BASEMENT OR CRAWL SPACE	?	3	2	1	1 2	-	i 1 i	2	3	2	1 1	1
OUTSIDE WALLS		2 (	. 3	1	1 2	1	2 1	3 1	2	i 3	I 1	1 1
NO	74	93		_	• -				93	•	97	76
EQUIPMENT ADDED (INEXPENSIVE)					<b>{</b> †	1						1
YEShaanaaaaaaaaaaaaaaaaaa	3 1	'3	10	4	9	1 6	6	7	10	9	5	4
CLOSEABLE SHUTTERS		1		-	•	-		_	1	1 1	i -	-
STORM DOOR Seesees seesees	,	Ŝ		2	i i 4	1 2	1 3	4		,	1 2	2
AUTOMATIC OR CLOCK THERMOSTAT.	, ,	2		1		,					1 1	1
NEW WATER HEATING EQUIPMENT		.3		2		1 -	•	_		•		1 2
NO accommens and a construct the second	1 " )	21		95		•	•	-		91	35	96
EQUIPMENT ADDED (EXPENSIVE)	1		,			1	ļ		<b>!</b>	1	1	1
YES ADDED (CAPERSIVE)	5	6	6	2	1 5	1 4	3	6	6	1 5	1 4	1 3
STORM WINDOWS/INSULATING GLASS		5 5		•	,	,	, - ,			*	1 3	1 3
ELECTRIC HEAT PUMP				! i	•	; , ; –			,	1 -	1 -	1 -
		•	- 2	1	1 2	1	, ,		,	1 2	1 1	1 1
NEW FURNACE	}	74	94	] 1 ! 98	] ? ! 95	1 96		-	1 74	1 94	1 76	1 97
VO												

TABLE 31B
CONSERVATION EFFORTS UNDERTAKEN DURING 1978 BY SELECTED DEMOGRAPHIC CHARACTERISTICS-CONTINUED
(PERCENTAGE OF HOUSEHOLDS)

	TOTAL	AGE	AGE OF HEAD   RACE			,	TION OF		  MARITAL STATUS OF HEAD 			
		35 08	35 10	50   50   AND	]		8   08	9	1 13	j 	мэт ми	ARRIED
		tesa	, ,		OTHER	BLACK     	LESS I	TO     12   	0 <b>V</b> ER	MARRIED	FEMALE HEAD	MALE HEAD
ADDED ANY INSULATION OR EQUIPMENT				 		† !			<b>!</b>			de de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de la composição de
YE Sa	33   67	55 54		[ 25   75	,	•			•	•	25 75	26 74
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	; 5 ;	4	,     5	3	! 	] [ ]	1 3	5	! 5	i ! ! 6	 	4
ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	! !	5	4	2	1 4	1 4	2	4	     4	1 1 1 4	] ] 3	! ! ! 3
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	2	2	2	! ! ! 1	2	-	1	2	! ! ! 1	?	! <del> </del>   1	· -
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	24	24	25	5.0	24	20	20	24	1 3 1 24	26	1   18	1     19
ADDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	10	11	! ! ! 12	! ! ! 4	1 10	1 6	!     6	10	1 11	1 11	!     6	6

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS BUT TO ROUNDING. A DASH #-# REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM THERSY CONSUMPTION SURVEY, DEFICE OF THE CONSUMPTION DATA SYSTEM. OFFICE OF PROGRAM DEVELOPMENT. ENERGY INFORMATION ADMINISTRATION.

## TABLE 32A CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY SELECTED DEMOGRAPHIC CHARACTERISTICS (THOUSAND HOUSEHOLDS)

		I AGE	OF HE	סו	RAC	E		TION OF IN YEARS		MARITAL	STATUS 0	F HEAD
	TOTAL Households	35	36	60		 	8	9	13	! !	NOT MA	RRIED
		OR LESS	10 59		WHITE, OTHER		OR LESS	12 10	AND OVER	MARRIED    -	FEMALE HEAD	MALE HE AD
TOTAL 1/	67+457	20,912	27,552	18,994	61,060	6,398	11,510	31,753	24,193	47,696	13,965	5,797
INSULATION ADDED (INEXPENSIVE)	]	1	Ì					1		 	! !	
YESa	19,579	5.492	9,080	5,017	18,188	1,392	2,987	9,946	6,546	15,113	3,249	1,218
WEATHERSTRIPPING	6,516	2,122	2.881	1.514	6+206	310	676	3,326	2,514	5,256	842	419
AROUND HOT WATER PIPES	,	460	728	313	1,397	105	197	724	581	1,183	212	107
AROUND HOT WATER HEATER	534	201	308	86	552	43	38	184	372	511	56	1.3
CAULKING	1 9,352	2,325	4 9 9 1 5	2,612	9+364	487	1,239	5,196	3,416	8 • 184	1.201	
PLASTIC COVFRING	8 • 68 3	3,071	3,634	1,977	7:320	853	1,784	4,410	2 489	5,468	1,695	
OTHER	514	128	138	238	489	15	77	214	214	318	1511	
NO	47+878	15,429	18,471	13,977	42.372	5,006	8 • 523	21 + 809	17,547	32+583	10,716	4,579
INSULATION ADDED (EXPENSIVE)	1	·			! !	! <b>!</b>			( !	1		
YES	4 + 545	1,277	2.133	1.116	4,468	77	664	2 . 227	1,655	3,877	457	211
ROOF OR ATTIC	3,021	852	1,327	842	2,984	1 56	448	1,375	1,197	2,543	3471	130
BASEMENT OR CRAWL SPACE	1 959	354	498	107	348	1 11	109	452	398	884	47	29
OUTSIDE WALLS	1 1.729	480	813	436	1,700	29	198	958	573	1,492	157	90
NO	63,412	19+614	25,419	17,878	56,592	6,320	10,846	29 • 528	22.538	43,819	13,507	5,586
EQUIPMENT ADDED (INEXPENSIVE)	1			i I	! 	! 1	 		1	1	9 9	
, YES	4,955	1 . 310	2,581	1.064	4,507	448	574	2,383	1,999	4.064	673	219
CLOSEABLE SHUTTERS	237	74	133	30	208	29	- 1	143	89	222	- 1	
STORM DOORS	2 . 751	708	1,446	596	2,522	228	262	1,440	1,048	2,237	445	68
AUTOMATIC OR CLOCK THERMOSTAT.	736	212	372	152	659	78	92	336	309	•	1	44
NEW WATER HEATING EQUIPMENT		391			1,431					,,		
NO	62.502	19,601	24.970	17,930	56,553	5,949	10,936	29 • 372	122,194	43,632	13,292	5,578
EQUIPMENT ADDED (EXPENSIVE)	1	•		! 	1 [	; {	; •	1	i I	!		
YES	4 + 002	935	1,901	1:166	3,774	229	421	2,162	1,419	3,382	477	144
STORM WINDOWS/INSULATING GLASS	3 + 078	705	1,464	910	2,939	139	285	1,682	1.111	2,594	389	96
FLECTRIC HEAT PUMP	144	58	5.4	22	144	j -	j -	59	84	1 128	- 1	16
NEW FURNACE	1,161	297	537	327	1.071	89	137	660	364	1,041	87	32
$N\cap_{\sigma_{M}}$ , and a source of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second o	63,455	119,077	25.650	17.828	157,286	6,159	111:088	129,593	22,774	44,314	13,488	5,553
See footnotes at end of table.	1	L	L	L	I	L	L	L	L	L	ll	

## TABLE 32A CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY SELECTED DEMOGRAPHIC CHARACTERISTICS-CONTINUED (THOUSAND HOUSEHOLDS)

	† 	AGE OF HEAD		RAC			ATION OF HEAD (IN YEARS)		MARITAL STATUS OF H		OF HEAD	
	!   TOTAL    HOUSEHOLDS	35	36	50		   	8	9	13		NOT MA	RRIED
		09   LESS	10 59		WHITE:	, ,	OR   LESS		AND OVER	MARRIED		MALE HEAD
ADDED ANY INSULATION OR EQUIPMENT	 	6.457	 	6.391	 	     1.7691	3.702	10.178	A. 298	19-696	3.473	1.519
NO											9,792	
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	3 • 663	1.063	1,722	879	3,615	   48	620	1 • 7 30	1,313	'3•026	426	211
ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	3,120	700	1,491	923	2,720	199	377	1,665	1,078	2+531	445	144
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	।   <u>१</u> ९२३	235	411	237	853	39	44	497	342	851	32	-
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	[   16+513	4,459	7,707	4 # 347	    15•020	1,472	2,661	8•285	     5•566	12,278	3,071	1,154
ADDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	i	1.896	3.420	1,921	   6,873 	   363  	887	3+639 L	2,710	5,928 L	1.032	277

1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO FOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERD. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY. OFFICE OF THE CONSUMPTION DATA SYSTEM. OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

## TABLE 32B CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY SELECTED DEMOGRAPHIC CHARACTERISTICS (PERCENTAGE OF HOUSEHOLDS)

		AGE	OF HE	/D	RA	CE !		ION OF		   MARITAL 	STATUS	OF HEAD
	TOTAL     TOTAL     HOUSEHOLDS	35	36	   50		   	8	3	13	!   	NOT M	ARRIED
		OR LESS	T0 59	•	WHITE, OTHER	BLACK	OP LESS	10 12	AND OVER	MARRIED   	  FEMALE   HEAD	MALE HEAD
TOTAL 1/	190%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
INSULATION ADDED (INEXPENSIVE)	] \$	•				1	1			1	]	I I
YES====================================	j 20 j	26 1	33	26	3.0	i 22 :	26	31	27	52	j 23	1 21
WEATHERSTRIPPING		10 1	10						10	11	1 6	7
AROUND HOT WATER PIPES		2	3	•						•	, 2	2
AROUND HOT WATER HEATER		1 1	1	-		•			2	i ı	<b>i</b> -	i -
CAULKING	,	11	18	•		,			•		9	i 8
PLASTIC COVERING		15		•						•	1 1 2	9
OTHER		1 1	-	,	,				,		1 1	i
NO	71	74	67		,	•	74	•		•	77	79
INSULATION ADDED (EXPENSIVE)	1	1		l	) 					1	<b> </b>	1
YFS	7	6	8	6	7	1 1	5	7	7	1 8	1 3	4
ROOF OF ATTIC	4	4	5	4	5	1 1	4	4	5	5	i 2	1 2
BASEMENT OR CRANL SPACE	1	2	2	1	2	i -	1	1	. 2	1 2	i -	i -
OUTSIDE WALLS		2 1		2	3	i -	2	3	1 2	i 3	i 1	i 1
NO	93	94	92		93	97	_	•	93	92	97	95
EQUIPMENT ADDED (INEXPENSIVE)	1	1		<b>!</b>		1	 			1	) 1	1
YES	7	5	9	6	7	1 7	5	8	8	1 9	5	4
CLOSEABLE SHUTTERS	1	- 1	_					-	i -	-	-	i -
STORM DOORS	•	3	5	•	t	<b>1</b>	2	, † 5	1 4	5	1 3	1 1
AUTOMATIC OR CLOCK THERMOSTAT.	•	1	1			,		, -	1	, ,		1
NEW WATER HEATING EQUIPMENT		2 1		, -				•	3		1	2
NO	93	94	91	,	•	•		•	•	91	j ∋ŝ	96
EQUIPMENT ADDED (EXPENSIVE)		] ;		1	9	1		<b> </b>	1000 DEC	1	!	1
YES ADDED TEATERSIVE	1 5	4,	7	1 6	1 6	1 4	!   4	1 7	16	7	1 3	2
STORM WINDOWS/INSULATING GLASS		3 1	5	5		1 2	2		1 5	1 5	3	2
ELECTRIC HEAT PUMP	•	- I	_	] -	1 -	1 4	4	•	1 -		1 -	1 4
	,	. ,		1	*	,	,	•	1 2	ł	1 1	1 1
NEW FURNACE	1 94	1 95	93	1 34	2 94	1 96	1   96	1 93		1 93	77	1 98
NO	1 79	75	9.3	7 7 7	74	75	75	1 22	74	* ,	1 41	78

TABLE 32B
CONSERVATION EFFORTS UNDERTAKEN DURING 1977 BY SELECTED DEMOGRAPHIC CHARACTERISTICS-CONTINUED
(PERCENTAGE OF HOUSEHOLDS)

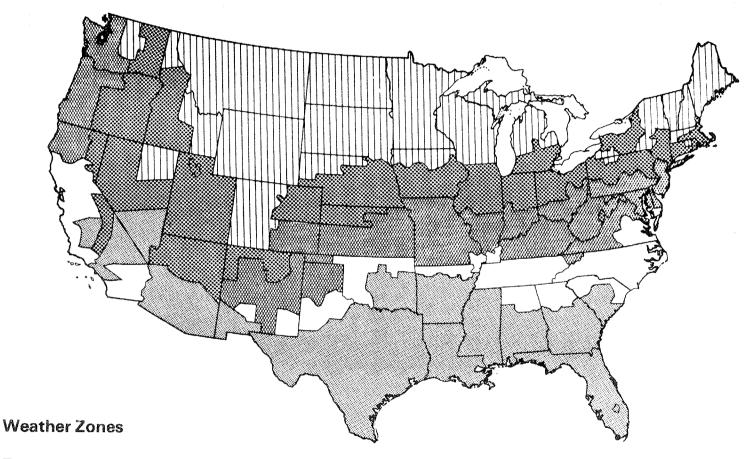
	TOTAL	AGE	OF HEA	ND.	RA	CE		ION OF		  MARITAL 	STATUS (	OF HEAD
		35	36	50	     	 ! !	3	9	13	;   	M TCM	ARRIED
		OR   LESS	- , -	, ,	WHITE •     OTHER   	     BLACK	OR     LESS	12 12	AND   DV=R 	MARRIED   	FEMALE   HEAD	MALE HEAD
ADDED ANY INSULATION OR EQUIPMENT				 		! [	i i		 	! !	1	
YES	36 64	31 69	41 59	•	*			38 62		•	28 1 72	26 74
ADDED EXPENSIVE INSULATION BUT NOT EXPENSIVE EQUIPMENT	     5	5	5	     5	6	! ! ! î	]     5	5	! ! ! 5	! ! ! 6	! ! [ 3	     4
ADDED EXPENSIVE EQUIPMENT BUT NOT EXPENSIVE INSULATION	5	٦,	5	     5	5	1 3	3	5	1     4	1 5	3	2
ADDED EXPENSIVE INSULATION AND EXPENSIVE EQUIPMENT	]     1	1	1	! ! ! 1	1	! ! -	; 	2	;     1	2	i i –	; ; j -
ADDED ONLY INEXPENSIVE INSULATION OR EQUIPMENT	! 	21	28	23	25	23	23	26	23	26	22	20
ADDED STORM WINDOWS, STORM DOORS, OR ATTIC OR ROOF INSULATION	1 11	O.	12	10	1 11	6	8	11	11	12	;   7	5

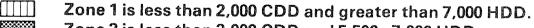
1/ EXCLUDES BUILDINGS WITH FIVE OR MORE UNITS.

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: THE 1978 NATIONAL INTERIM ENERGY CONSUMPTION SURVEY, DEFICE OF THE CONSUMPTION DATA SYSTEM, OFFICE OF PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION.

## United States Weather Zone Map of Heating Degree Days (HDD) and Cooling Degree Days (CDD)





Zone 2 is less than 2,000 CDD and 5,500 - 7,000 HDD.

Zone 3 is less than 2,000 CDD and 4,000 - 5,499 HDD.

Zone 4 is less than 2,000 CDD and greater than 4,000 HDD.

Zone 5 is greater than 2,000 CDD and less than 4,000 HDD.

### NATIONAL INTERIM ENERGY CONSUMPTION SURVEY: HOW THE SURVEY WAS CONDUCTED

#### Introduction

The National Interim Energy Consumption Survey (NIECS) 1 was designed by the Energy Information Administration (EIA) to provide information related to energy consumption by the residential sector. 2 This survey, along with analogous studies for the commercial and industrial sectors, will enable the analysis of comprehensive consumption patterns for the United States.

Information on energy use in the residential sector was collected at the household level. A representative (national) sample of households was selected in the 48 contiguous States plus the District of Columbia. The data on actual energy consumption was obtained from fuel records maintained by the household's fuel suppliers. An inventory of motor vehicles used by the household was also included in the survey.

#### Data Collection

Response Analysis Corporation (RAC), of Princeton, New Jersey conducted the interviews. A total of 4,849 housing units were drawn in the original sample. Of these, 342 were ineligible for this survey because they were either vacant or seasonal units (the occupants did not live in them for more than half of the year). Of the 4,507 eligible units, interviews were obtained from 3,842 households, yielding an initial response rate of 85.2 percent. Subsequently, mail questionnaires were sent to the 665 households that were not interviewed. Completed mail questionnaires were received from 239 of the households. This additional effort increased the response rate by 5.3 percent.

Initial household contacts were begun in October 1978. The 44-minute interview covered: structural features related to energy, such as size, insulation, and openings; the heating and cooling systems and the fuels used in these systems; energy conservation efforts; information on household appliances and vehicles; and demographic data on household members. At the conclusion of the interview, respondents were asked to sign waivers authorizing Response Analysis Corporation (RAC) to obtain their records of fuel consumption from their fuel supplier.

<sup>1</sup>Not to be confused with NEIC--the National Energy Information Center which is EIA's public information office.

<sup>&</sup>lt;sup>2</sup>Form Number EIA-84; OMB 38S-780028

Most of the 327 interviewers employed by RAC had had previous survey experience. Training for NIECS was done by mail, using a 59-page instruction booklet. The booklet included specific procedures for conducting this survey and provided guidelines on how to handle various interpretations of guestions. A practice interview and a guiz on the instructions were also parts of the training. An interviewer conducted about 12 interviews on the average. The most interviews conducted by a single interviewer was 47 while several interviewers completed as few as one. Twenty percent of the interviews were verified to insure that interviews were conducted in person.

#### Sample Design

The NIECS sample is a representative area probability sample consisting of 103 primary sampling units (PSU's). These PSU's were selected from approximately 1,140 PSU's that collectively form a mutually exclusive and exhaustive division of the contiguous United States. Each PSU is a well-defined geographic unit, usually consisting of one or more counties. Based on the 1970 Census, PSU sizes range from a population of 50,000 to approximately 3,300,000. Region, metropolitan status, and size classification were the primary considerations in the selection of the sampled PSU's.

Within each PSU, secondary sampling units (SSU's) were defined. Based upon 1970 Census counts, 400 SSU's were selected from the 103 PSU's. Each of these SSU's contained approximately 2,500 persons and consisted of one or more blocks in urban areas and one or more enumeration districts in the nonurban areas. An additional 56 SSU's were selected independently. These 56 SSU's comprised a probability selection of areas that had undergone substantial new construction since 1970. Independent sources (Reuben H. Donnelley address lists and county data) were used to update the population for these SSU's. This effort to locate areas of new construction was undertaken to control the variation in cluster size.

Within each SSU, subdivisions were made. Census block statistics and rough field counts were used to break up each SSU into segments. Interviewers listed all housing units in the segment, completing this phase of the survey in the summer of 1978. The segments were formed so that they ultimately contained about 25 households. Finally, a sample of 10 or 11 households was selected to be visited. Thus, within each SSU 10 or 11 households were sampled, within each PSU an average of 40 to 45 households were sampled, and nationally, about 4,500 units were sampled.

#### Survey Estimates

Weights were calculated for each sample household to: 1) compensate for differences in probabilities of selection, 2) adjust for differences in interview completion rate in individual sampling locations, and 3) expand data for sample households to estimates for the total universe (all households in the contiguous 48 States plus the District of Columbia).

In order to increase the precision of our estimates, a technique called ratio estimation was employed. Ratio estimation uses known distributions of the population. These adjustments took place in two stages for the NIECS. The first stage factor was a ratio of the total number of households in each region by fuel type to an estimate of the number of households in each category. Only the PSU's in our sample and their appropriate weights were used. figures used in both the numerator and denominator were based on the 1970 Census. The implementation of this factor reduced the amount of variance due to the sampling of PSU's. The second stage factor adjusted data from the survey to independently derived current estimates of the number of households for specified groups. The ratio adjustment was calculated for each region by type of community. The second stage factor reduced both the between PSU variance, as in the first stage, and the within PSU variance.

#### Estimation for Nonresponse

When data was unattainable from a nonresponding household, the weights from the households in the final cluster were increased to make up for the nonresponding household.

Item nonresponse required a customized procedure for each data element. The data elements were divided into two categories: those with minimum nonresponse (about one percent), and those with more substantial nonresponse. The basic procedure attributed the most common response (modal value) to the first class of variables. In the second group where nonresponse was significant, a "hot deck" procedure was implemented. There were variations to this procedure depending on the importance of the data element, the interrelationship of data elements, and the consistency of data. Some elements such as amount of attic insulation were not imputed at all and a "don't know" response was accepted. Square footage and transportation data were not imputed.

#### Minimizing Nonresponse

The Office of Federal Statistical Policy and Standards (OFSPS) encouraged an analysis of the effect of nonsampling error in the NIECS. An intensive effort to minimize non-response was the outcome of several meetings and memoranda dealing with the nonsampling error issue. Many of the following procedures were used to test the feasibility of a multi-wave, multicontact approach and may or may not be used in the larger Residential Energy Consumption Surveys (RECS). Most households received two letters in October 1978, prior to the interview. An EIA letter stressed the importance of the survey and a RAC letter announced the upcoming arrival of the interviewer.

To elicit rapport and cooperation, a \$2 incentive was given to the respondent before the interview. Over 99 percent of the respondents accepted the incentive. Interviewers made up to eight call-backs at different times of the day and week. They also queried neighbors as to the most opportune time to contact the respondent.

A second wave was conducted in December 1978 to contact households that were not available during the first wave and to convince the first-wave refusals to reconsider. A new set of letters preceded the second-wave interview. For the second wave, a different interviewer was assigned who endeav--- ored to complete the interview by making up to five contacts.

A third wave followed in January 1979. This was an effort to reach nonrespondents in 14 sample locations that had low interview completion rates.

In a final attempt to complete an interview, an abbreviated version of the questionnaire, adapted for self-administration, was mailed to nonrespondents in February 1979. The \$2 incentive was included in the mailing.

In an attempt to evaluate the effects of a multi-wave, multicontact approach the following was noted:

- Eighty-seven percent of all responding households cooperated on the first wave, 12 percent on the second wave, and 1 percent were picked up at the third wave.
- Household and family characteristics such as income, age of head of household, education, and geographical location had little relation to the wave in which the respondent completed the interview.
- Thirty-seven percent of all responding households required only one contact.

#### Evaluation of Nonresponse

Basic information on all 4,507 households was obtained from the listing procedure. It was, therefore, possible to compare the responding households to the non-responding households.

Table 1 gives a percentage breakdown of respondents and non-respondents by structure type and SMSA classification.

TABLE 1

	Respondents	Nonrespondents
Single-Family Detached Structures Having	66	57
5 or More units	11	16
Other	23	27
Large SMSA	39	54
Small SMSA	27	23
Outside SMSA	34	23

Response rates in large urban areas (where apartment buildings with five or more units are more common) were somewhat lower than in other geographic locations.

Our nonrespondents were classified into eight sub-categories including "not-at-home," "refused," "illness," "language barrier," "interview of wrong household," "security building," "moved after initial contact," and "other." Of the 426 non-respondents, 21 percent were not at home, 75 percent refused, and 4 percent were in the remaining categories.

TABLE 2

	Nonrespor	Respondents	
	Not-at-home	Refusals	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s
Single-Family			
Detached	43	62	66
Structures Having 5			
or More Units	23	14	11
Other	34	24	23
Large SMSA	58	53	39

Table 2 shows that the distribution of structure type for refusals was more similar to the respondents than the notathome households. On the other hand, the geographic distribution indicated a somewhat different trend. Refusals and not-at-home households were distributed more like each other than to responding households.

## Additional Survey Components

One purpose of the NIECS was to test the procedures and methodology for RECS. Three studies, in addition to the basic NIECS survey, are also being conducted. These studies will be used to determine what additions and modifications should be made for RECS.

When renters did not pay directly for their fuel costs, an interviewer contacted the apartment manager by telephone to ask what space and water heating fuels were used in the apartment building. These data have been incorporated into the NIECS data set, resulting in more accurate information about rental housing units.

A transportation panel consisting of a subset of the NIECS sample began in June 1979. Participating households are asked to keep a log of their fuel purchases and odometer readings for a two-month period. The panel consists of 500 to 1,000 households reporting each month. Separate tabulations of these data are planned.

Fifty NIECS households were selected to be part of an energy assessment study. Trained technicians analyzed the energy-related components of a house. Exact square footage, temperature distribution in various parts of the house, presence of insulation, and features of major appliances (including heating and cooling equipment) were surveyed. Detailed evaluations of this pretest are being developed.

Data From Non-household Sources (Fuel Suppliers)

Respondents in 95 percent of the interviewed households signed waivers to permit fuel suppliers to give Response Analysis Corporation the monthly record of their past year's fuel purchases. The data contained both the amount sold and the price of the fuel. The suppliers were contacted between March and May 1979 and were asked to supply fuel billing information for the previous 12-month period.

In order to attain the highest response rate possible, the following procedures were used:

• Letters were sent to each company after RAC located the person who would act on the request for fuel bills. Follow up telephone calls were made to insure the receipt of the letter and to help with any problems that may have arisen. Response Analysis Corporation also personally visited several companies to offer assistance.

• Some fuel oil and liquid petroleum gas (LPG) suppliers provided the fuel purchase information over the telephone. The telephone was adequate for these types of suppliers because each company supplied data for only a few customers and the fuel records were not as detailed as records for electricity and natural gas sales. About 600 of the approximately 800 fuel suppliers contacted in this survey were fuel oil or LPG distributors.

One unique aspect of this survey was the opportunity to obtain electricity and natural gas data for households that did not complete the interview or did not sign the waiver. Utilities would not supply individual household data without a waiver, but did supply aggregate data for groups of non-respondents. This information provides the ability to analyze the potential bias introduced by nonresponse and to improve the accuracy of consumption estimates in the residential sector.

#### Weather Data

The first type of temperature data used was the 45-year annual average heating degree days (HDD) and cooling degree days (CDD) for the National Oceanic and Atmospheric Administration (NOAA) weather division in which the household was located.

These data will aid in analyzing the effects of weather on personal decisions to make changes in basic housing structure or equipment. The second type of data used were HDD and CDD totals for each billing period. These data will allow more complete analysis of fuel consumption.

Weather conditions will be calculated for the appropriate billing period. For example, one household may be billed on the 1st of every month, while another may be billed on the 5th. Obviously, there will be different 30-day averages of HDD and CDD for each billing period.

## Editing Completed Questionnaires

Interviewers mailed the completed questionnaires to Princeton, New Jersey, where they were reviewed for completeness and correct identifying information. This manual edit was segmented and each part was worked on separately.

A machine edit checked for reasonable values, proper skip patterns, and logical consistencies.

Telephone calls were made to individual households to clarify ambiguities in the data. Additional editing resolved discrepancies among the household interview, the rental agent survey, and the information from fuel suppliers. For example, information on the fuel used in apartment buildings was taken from the rental agent survey to correct the data from the household. In other cases, a fuel supplier reported supplying kerosene to a household not fuel oil as was reported by the household. The data, therefore, do not always represent the respondents' reports, exclusively.

All key punching was verified.

Response Analysis Corporation Princeton, New Jersey

#### HOUSING UNIT RECORD SHEET

1100011	THE ONLY TREATMENT OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROP
Location # Housi	ng Unit #
Address (or description)	
Post Office (city or town)	
State	Zip code
INTRODUCTION	
Hello, I'm from Response Anal We are working on a national survey the head of the household?	ysis, a survey organization in Princeton, New Jersey. for the U.S. Department of Energy. May I speak to
CONTINUE WITH HEAD OF HOUSEHOLD, OR	ONE OF HOUSEHOLD HEADS, OR SPOUSE
We would like to ask some questions appliances, and related topics.	about your home, about heating and air-conditioning,
HAND PRIVACY ACT NOTICE TO RESPONDEN household is protected by the Privac	T: This notice explains that information about your y Act of 1974 and will remain confidential.
	ESPONDENT: As Response Analysis mentioned in the sare a token of appreciation for your participation
CONTINUE WITH INTERVIEW	
1 INTERVIEWER OBSERVATION OF TY	PE OF LIVING QUARTERS
01 [] MOBILE HOME OR TRAILER 02 [] ONE-FAMILY HOUSE	DETACHED  [] ATTACHED ON ONE SIDE (SEMI-DETACHED)  [] ATTACHED ON TWO SIDES
03 [] HOUSE OR BUILDING WITH 2 - 4 HOUSING UNITS	[] DETACHED     [] ATTACHED ON ONE SIDE (SEMI-DETACHED)     [] ATTACHED ON TWO SIDES
04 [] BUILDING WITH 5 OR MORE UNITS	NUMBER OF UNITS:
22 [] OTHER DESCRIBE IN DETAIL ANY ST	RUCTURE THAT DOES NOT FIT ONE OF THE ABOVE.

(2) T	2 TYPE OF OCCUPANCY OF HOUSING UNIT					
	### MARK ANSWER WHETHER HOUSING UNIT IS OCCUPIED OR VACANT SEE P. 10 OF INSTRUCTION BOOKLET FOR INTERVIEWERS.					
3 R	3 RECORD OF VISITS TO HOUSING UNIT					
Visit number	Time of day (include AM or PM)	Date	Day of week	Result or comments		
USE THIS SPACE FOR ADDITIONAL NOTES OR COMMENTS ABOUT VISITS TO THIS HOUSEHOLD.  DESCRIBE FULLY IF REFUSAL OR OTHER NONINTERVIEW.						
$\sim$	IFT TO HOUSEH					
M,	MARK TO SHOW WHETHER TWO DOLLAR COIN PACKET WAS ACCEPTED  1 [] TWO DOLLAR COIN PACKET ACCEPTED BY HOUSEHOLD  0 [] NOT ACCEPTED					
6 N/	AME AND PHONE	NUMBER	OF HEAD OF HO	JSEHOLD (OR ONE OF HOUSEHOLD HEADS)		
Name				Phone number Area code ( )		
7 11	NTERVIEWER'S !	NAME AND	I.D. NUMBER			
Interv	<u>/iewer</u>			I.D. number		

OMB No. 385-78028 Expires June 30, 1979

# 1978 - 79

# RESIDENTIAL ENERGY CONSUMPTION SURVEY

106-107:01

	LOCATION #	HOUSING UNIT #	TIME INTERVIEW STARTED:	
L	111-115	116-117		
1.	In what year did your family move	into	01 [] BEFORE 1940	121-
	this house (apartment)?		<i>02</i> [] 1940-1949	122
			<i>03</i> [] 1 <b>95</b> 0-1959	
			<i>04</i> [] 1960-1964	
			<i>05</i> [] <b>1965-</b> 1969	
			<i>06</i> [] 1970-1974	
			<i>07</i> [] <b>197</b> 5	
			08 [] 1976	
			09 [] 1977	
			10 [] 1978	
			11 [] 1979	
	IF "1977," "1978," OR "1979," ASK	:		123.
	2. In which month did you move i (SPECIFY MONTH AND ENTER LAST	n?	MONTH:	124
	OF YEAR.)		YEAR: 197	
3.	In what year was this house (build	ding) built?	<i>01</i> [] BEFORE 1940	125
	Just your estimate.		<i>02</i> [] <b>1940-</b> 1949	126
			<i>03</i> [] <b>1950-</b> 1959	
			<i>04</i> [] <b>1960</b> -1964	
			<i>05</i> [] <b>1965-</b> 1969	
			06 [] 1970-1974	
			07 [] 1975	
			08 [] 1976	
			09 [] 1977	
			10 [] 1978	
			11 [] 1979	
4.	How many floors do you use as yea	r-round living	1 [] ONE FLOOR	127
	space here in your house (apartment	nt)?	2 [] 1-1/2 FLOORS	
	AREAS USED AS REGULAR YEAR-ROUND	LIVING SPACE (FOR	₃[] TWO FLOORS	
	BEDROOM, KITCHEN, STUDY, ETC.) IN SHOULD BE COUNTED.	BASEMENT OR ATTIC	4 [] 2-1/2 FLOORS	
			5 [] THREE OR MORE FLOORS	
	DO NOT COUNT UNFINISHED AREAS USE UTILITY ROOM, LAUNDRY ROOM, ETC.	D FOR WORKROOMS,	-	

2			

5.	Altogether (counting all areas that are used as year-round living space), how many rooms do you have in your living quarters? Do not count bathrooms, unheated porches, foyers, or hallways.	NUMBER OF ROOMS: 128
6.	Do you have complete plumbing facilities in your living quarters, that is, hot and cold running water, a flush toilet, and a bathtub or shower?	2 [] YES 2 [] NO, HAVE SOME BUT NOT ALL PLUMBING FACILITIES 3 [] NO PLUMBING FACILITIES IN LIVING QUARTERS
	<ul><li>IF "YES," ASK:</li><li>7. Are they for this household only or are they also used by another household?</li></ul>	1 [] FOR THIS HOUSEHOLD ONLY 2 [] ALSO USED BY ANOTHER HOUSEHOLD
	8. How many complete bathrooms and how many half-bathrooms do you have? (A complete bathroom is a room with a flush toilet, bathtub or shower, and a sink/washbasin with running water. A half-bath has at least a flush toilet or bathtub or shower, but does not have all the facilities for a complete bathroom.) IF NONE, ENTER "O."	NUMBER OF COMPLETE BATHROOMS: 138  NUMBER OF HALF-BATHROOMS: 133
9.	Do you happen to know how many square feet of living space you have here in your house (apartment)?	
1	<pre>### How many square feet, just ### approximately?  ### ### What would be your best guess ### about the number of square feet?</pre>	NUMBER OF 135- SQUARE FEET: 133

10. How about the largest room (living or family room) of your house (apartment) -- what is your estimate of the length and width in feet?

INTERVIEWER: PUT RESPONDENT'S ESTIMATE IN BOXES IN RECTANGULAR OR L-SHAPED SKETCH AT RIGHT, AS APPROPRIATE. IF RESPONDENT IS UNABLE TO MAKE ESTIMATE, PUT IN YOUR OWN BEST ESTIMATE.

NOTE BELOW WHETHER LARGEST ROOM IS RECTANGULAR OR L-SHAPED, AND HOW ESTIMATE WAS MADE.

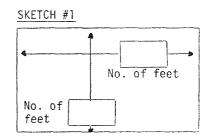
1 [] LARGEST ROOM IS RECTANGULAR: ENTER
DIMENSIONS IN SKETCH #1

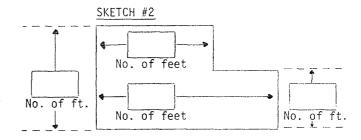
2 [] LARGEST ROOM IS L-SHAPED: ENTER DIMENSIONS IN SKETCH #2

#### SOURCE OF ESTIMATE

139

- 1 [] ESTIMATE MADE BY RESPONDENT
- 140 2 [] ESTIMATE MADE BY INTERVIEWER
  - 3 [] RESPONDENT/INTERVIEWER MEASURED





141-152

11.	What is the main heating equipment for your home?				
	CENTRAL HEATING SYSTEM				
	OI [] HOT WATER PIPES RUNNING THROUGH A SLAB FLOO	R (RAD	IAN	T HEATING)	
	02 [] STEAM OR HOT WATER SYSTEM WITH RADIATORS OR	CONVE	сто	RS	
	03 [] CENTRAL WARM-AIR FURNACE WITH DUCTS TO INDI (DO NOT COUNT ELECTRIC HEAT PUMP HERE)	VIDUAL	RO	OMS	
	04 [] ELECTRIC HEAT PUMP				
	05 [] BUILT-IN ELECTRIC UNITS (PERMANENTLY INSTAL	LED IN	ИΑ	LL, CEILING, OR BASEBOARD)	
	06 [] FLOOR, WALL, OR PIPELESS FURNACE				4.00
					-153~ -156
	HEAT ONLY IN INDIVIDUAL ROOMS				
	11 [] ROOM HEATERS WITH FLUE OR VENT, BURNING GAS	, OIL,	0R	KEROSENE	
	12 [] ROOM HEATERS WITHOUT FLUE OR VENT, BURNING	GAS, O	ΙL,	OR KEROSENE (NOT PORTABLE)	
	13 [] FIREPLACES OR HEATING STOVES				
	14 [] PORTABLE ROOM OR SPACE HEATERS				
	21 [] OTHER (SPECIFY):				
	96 [] DON'T KNOW				
	00 [] NO HEATING EQUIPMENT USED SKIP TO Q. 19				
TAKE	BACK EXHIBIT 11				
IANL	DACK EMILDIT IT				
IF	ONE-FAMILY HOUSE, MOBILE HOME, OR TRAILER, SKIP TO	Q. 13.			
12.	Is your home heated by a central system for your	7	rı	CENTRAL SYSTEM FOR BUILDING	
12.	building (or group of buildings) or is the main			CENTRAL SYSTEM FOR BUILDING MAIN HEATING EQUIPMENT FOR	255
	heating equipment for your living quarters only?	2	L.J	THESE LIVING QUARTERS ONLY	
HAND	RESPONDENT EXHIBIT 13				
		0.7	гı	CAS TROM UNDERGROUND DIDEC	
13.	Which fuel is used by the main heating equipment for your house (apartment)?	01	L .J	GAS FROM UNDERGROUND PIPES SERVING THE NEIGHBORHOOD	
		02	[]	GAS, LPG (BOTTLED OR TANK GAS)	
		03		FUEL OIL	~ 6.4
		04		KEROSENE OR COAL OIL	156 157
		05	[]	ELECTRICITY	
		06	[]	COAL OR COKE	
		07	[]	WOOD	
		08	[]	SOLAR COLLECTORS	
		21	[]	OTHER (SPECIFY):	
アルレビ	DACK EVILLET 12				

## TAKE BACK EXHIBIT 13

14.	Do you have a thermostat, radiator valve, or other control to adjust the temperature in your house (apartment) in the winter?	2 [] YES 0 [] NO	158
	IF "YES," ASK: 15. Which do you have? (MARK ALL THAT APPLY.)	[] RADIATOR VALVE(S)	159 160 161
		and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s	
HAND	RESPONDENT EXHIBIT 16		
16.	You have already mentioned your main heating equipment. Are any of these types of equipment used in your home <u>in addition to your main equipment?</u>	<pre>1 [] YES 0 [] NO TAKE BACK EXHIBIT 16</pre>	162
	IF "YES," ASK:		· \
	17. What type do you use? (IF MORE THAN ONE TYPE	IS MENTIONED, MARK ONLY THE ONE USED MOS	iT.)
	CENTRAL HEATING SYSTEM  01 [] HOT WATER PIPES RUNNING THROUGH A SLAB  02 [] STEAM OR HOT WATER SYSTEM WITH RADIATOR  03 [] CENTRAL WARM-AIR FURNACE WITH DUCTS TO (DO NOT COUNT ELECTRIC HEAT PUMP HERE)  04 [] ELECTRIC HEAT PUMP  05 [] BUILT-IN ELECTRIC UNITS (PERMANENTLY I OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED OCCUPIED	RS OR CONVECTORS INDIVIDUAL ROOMS  NSTALLED IN WALL, CEILING, OR BASEBOARD)  G GAS, OIL, OR KEROSENE NING GAS, OIL, OR KEROSENE (NOT PORTABLE	163- 164
	21 [] OTHER (SPECIFY):		
	TAKE BACK EXHIBIT 16; HAND RESPONDENT EXHIBIT 18  18. Which fuel is used by this additional equipment? (MARK ONLY ONE FUEL FOR THE TYPE OF ADDITIONAL EQUIPMENT USED MOST.)	O1 [] GAS FROM UNDERGROUND PIPES SERVING THE NEIGHBORHOOD  O2 [] GAS, LPG (BOTTLED OR TANK GAS)  O3 [] FUEL OIL  O4 [] KEROSENE OR COAL OIL  O5 [] ELECTRICITY  O6 [] COAL OR COKE	165 <b>-</b> 166
	TAVE BACK EYHIRIT 18	07 [] WOOD 08 [] SOLAR COLLECTORS 21 [] OTHER (SPECIFY):	_

19.	Do you have air-conditioning, either a central system or individual window or wall units? (MARK ALL THAT APPLY.)	[] YES, CENTRAL SYSTEM [] YES, INDIVIDUAL (WINDOW/WALL) UNITS [] NO SKIP TO Q. 26	167 168
20.	How many rooms in your house (apartment) are air-conditioned?	NUMBER OF ROOMS:  95 [] ENTIRE HOUSE OR APARTMENT	169 170
	IF "INDIVIDUAL (WINDOW/WALL) UNITS" ON Q. 19, AS  21. How many window or wall units do you have in your house (apartment)?	K:  NUMBER OF (WINDOW/WALL) UNITS:	171 172
	IF "CENTRAL SYSTEM" ON Q. 19, ASK:  22. Does the central air-conditioning system use gas or electricity?	Z [] GAS 2 [] ELECTRICITY 6 [] DON'T KNOW	3 <b>23</b>
	IF ONE-FAMILY HOUSE, MOBILE HOME, OR TRAILER, SK	IP TO Q. 24.	
	23. Is it a central air-conditioning system for your building (or group of buildings) or is the main air-conditioning equipment for you living quarters only?	2 [] CENTRAL SYSTEM FOR BUILDING 2 [] AIR-CONDITIONING IS FOR THESE LIVING QUARTERS ONLY	2 <b>2</b> 4
	24. Do you have a thermostat, high-low switch, or other control to adjust the air conditioning level in the summer?	1 [] YES 0 [] NO	1 <b>2</b> 8
The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	IF "YES," ASK:  25. Which do you have? (MARK ALL THAT APPLY.)	[] THERMOSTAT(S) [] HIGH-LOW SWITCH(ES) [] OTHER CONTROL(S) (SPECIFY):	170 172 178

26. Please look at this diagram of different kinds of windows and sliding glass doors. How many of each of these types of windows or doors are there in your home?

Please include basement, attic, garage, and porch windows only if those areas are heated.

(EACH WINDOW THAT OPENS SEPARATELY SHOULD BE COUNTED AS ONE WINDOW. ALSO COUNT WINDOWS THAT ARE FIXED IN PLACE. IF NO WINDOWS OF A PARTICULAR TYPE. ENTER "OO.")

				NUMBER OF WINDOWS	NUMBER WITH STORM WINDOWS OR INSULATING GLASS
		SINGLE OR DOUBLE HUNG	-		
		CASEMENT	-		
		PICTURE (FIXED IN PLACE)			
		TILTING OR AWNING TYPE			
		JALOUSIE			
		SLIDING GLASS DOOR		· · · · · · · · · · · · · · · · · · ·	
		OTHER (SPECIFY TYPE BELOW): .		V	*
					ė.
FOR FACE	H TYPE OF WINDO	W IN THE HOME, ASK:			
27. How hav	v many of the ve storm window INDOWS [AND SLI	windows (and sliding glass vs (and storm doors) or insulatin DING GLASS DOORS] MADE OF DOUBLE	g gl	ass? SS	
27. Hov hav (W) ANI THI	w many of the ve storm window INDOWS [AND SLID OTHER TYPES (E SAME AS STORM SULATING GLASS	windows (and sliding glass vs (and storm doors) or insulatin	g g1 GLA NTED R	ass? SS	
27. How has (W) AND THE INS	w many of the ve storm window INDOWS [AND SLID OTHER TYPES (E SAME AS STORM SULATING GLASS HIBIT 26 than the sliding doors do you area? (INCLUS GARAGE. DO N	windows (and sliding glass is (and storm doors) or insulating the storm doors) or insulating the storm doors or insulating the storm windows of the storm windows of the storm windows of the storm windows of the storm windows of the storm windows with the storm windows in the storm windows in the storm windows in the storm windows in the storm windows with the storm windows with the storm windows with the storm windows with the storm windows with the storm windows with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm wit	g gl GLA NTED R	ass? SS	
27. How haw AND THE INSTANCE BACK EXION MANY UNHEATED PORCH OF HALLWAY PERMANEN	w many of the ve storm window INDOWS [AND SLID OTHER TYPES (E SAME AS STORM SULATING GLASS HIBIT 26  than the sliding doors do you area? (INCLUR GARAGE. DO NOTHER SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SEALED SHUTTLY SHUTTLY SEALED SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTTLY SHUTT	windows (and sliding glass is (and storm doors) or insulating the storm doors) or insulating the storm doors or insulating the storm windows of the storm windows of the storm windows of the storm windows of the storm windows of the storm windows with the storm windows in the storm windows in the storm windows in the storm windows in the storm windows with the storm windows with the storm windows with the storm windows with the storm windows with the storm windows with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm wit	g gl GLA NTED R	ASS? SS NUMBER OF OPENING OU	
27. How have a second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the s	w many of the ve storm window INDOWS [AND SLID O OTHER TYPES (E SAME AS STORM SULATING GLASS HIBIT 26  than the sliding doors do you area? (INCLU R GARAGE. DO NOTHER SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SEALED SHULLY SHULLY SEALED SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHULLY SHUL	windows (and sliding glass is (and storm doors) or insulating the storm doors) or insulating the storm doors or insulating the storm windows of the storm windows of the storm windows of the storm windows of the storm windows of the storm windows with the storm windows in the storm windows in the storm windows in the storm windows in the storm windows with the storm windows with the storm windows with the storm windows with the storm windows with the storm windows with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm with the storm wit	g gl GLA NTED R	ASS? SS NUMBER OF OPENING OU	TSIDE:

30.	Last winter, in the winter of 1977-78, did you	1 []	YES	
	completely close off one or more rooms for a week or longer?	0 []	NO SKIP TO Q. 32	247
	IF "YES," ASK:	5 []	DID NOT LIVE HERE LAST WINTER SKIP TO Q. 32	
	HAND RESPONDENT EXHIBIT 31			
	31. Why was the room closed off? (MARK ALL THAT	[]	TO SAVE ON FUEL COSTS	248
	APPLY.)	[]	FUEL UNAVAILABLE IN THIS AREA	249
		[]	COULD NOT KEEP ROOM(S) WARM	250
		[]	ROOM(S) NOT BEING USED	251
		[]	OTHER (SPECIFY):	252
	TAKE BACK EXHIBIT 31			
HAND	RESPONDENT EXHIBIT 32			
32.	Which fuel is used <u>most</u> for heating water?	01 []	GAS FROM UNDERGROUND PIPES SERVING THE NEIGHBORHOOD	
		02 []	GAS, LPG (BOTTLED OR TANK)	
		03 []	FUEL OIL	
		04 []	KEROSENE OR COAL OIL	253-
		05 []	ELECTRICITY	254
		06 []	COAL OR COKE	
		07 []	WOOD	
		08 []	SOLAR COLLECTORS	
		21 []	OTHER (SPECIFY):	
TAKE	BACK EXHIBIT 32	00 []	NO FUEL USED SKIP TC Q. 36	
33.	Do you have hot running water in your home?	1[]	YES	258
		0 []	NO SKIP TO Q. 36	
IF	ONE-FAMILY HOUSE, MOBILE HOME, OR TRAILER, SKIP TO Q.	35.		
34.	Is your hot water supplied by a central system for	1 []		
	your building (or group of buildings) or is the water heater for your living quarters only?	2 [7	SKIP TO Q. 36	256
		٤١,	FOR THESE LIVING QUARTERS ONLY ASK Q. 35	
35.	Is the water heater part of the furnace that heats	1 []	PART OF FURNACE	
	your home, or is the water heater separate?	2 []	SEPARATE	257
		6 []	DON'T KNOW	

# IF LIVING QUARTERS ARE IN A BUILDING WITH 5 OR MORE HOUSING UNITS, SKIP TO Q. 49.

36.	Do you have attic or roof insulation?	1 [] YES 0 [] NO 6 [] DON'T KNOW	258
	IF "YES," ASK:  37. How many inches of insulation do you have		259-
	in the attic (roof)?	INCHES OF INSULATION:	260
		96 [] DON'T KNOW	
	HAND RESPONDENT EXHIBIT 38		
	38. Do you happen to know what type of insulation you have in the attic (roof)? Is it listed	[] BLANKETS OR BATTS ROLLS OR PIECES	261
	on this exhibit or is it some other type of insulation? (MARK ALL THAT APPLY.)	[] LOOSE FILL OR BLOWN MATERIAL	262
	THOUTAGON: (TANK NEE TIME THE ETT)	[] PLASTIC FOAM BOARDS	263
		[] FOAM	264
		[] OTHER (SPECIFY):	265
		[] DON'T KNOW	•
	IF "LOOSE FILL OR BLOWN MATERIAL," ASK:		
	39. Was fiberglass, cellulose, or some-	1 [] FIBERGLASS	
	thing else used for the loose fill?	2 [] CELLULOSE	266
		5 [] OTHER (SPECIFY):	-
	TAKE BACK EXHIBIT 38	6 [] DON'T KNOW	•
40.	Do you have insulation in the outside walls	ı [] YES	
	of your home?	o [] NO	267
		6 [] DON'T KNOW	

41. Please look at this list and tell me which items, if any, you have added or installed in your home since January 1, 1977.

MARK "YES," "NO," OR "IN PROCESS" FOR EACH ITEM. COUNT AS "IN PROCESS" ANY WORK STARTED BUT NOT YET COMPLETED. DO NOT COUNT ANY CHANGES MADE BEFORE THIS HOUSEHOLD MOVED IN.

		D OR INST AST TWO Y				
	YES	IN PROCE	SS NO			302:33
<ul> <li>a. Storm windows or windows with insulating glass (double glazed)</li> </ul>	1 []	2 []	0 []	MONTH: [] IN PROCESS	YEAR: 197_	337-3.
b. Closeable shutters	1 []	2 []	0 []	MONTH:	YEAR: 197	325-3
c. Storm doors on doors to the out- side or doors with insulating glass	1 []	2 []	0 []	MONTH:	YEAR: 197	318-8
d. Weatherstripping around outside doors or windows	1 []	2 []	0 []	MONTH:	YEAR: 197	328-3
e. An automatic or clock thermostat	1 []	2 []	0 []	MONTH:	YEAR: 197	327-3
f. Roof or attic insulation	1 []	2 []	0 []	MONTH:	YEAR: 197	381-3
g. Insulation in the outside walls	1[]	2 []	0 []	MONTH:	YEAR: 197	337 - 37
h. Insulation in basement or crawl space below floor of house	1[]	2 []	0 []	MONTH: [] IN PROCESS	YEAR: 197	336-76
i. Insulation around hot water pipes	1[]	2 []	0 []	MONTH:	YEAR: 197	348-78
j. Insulation around the hot water heater	1 []	2 []	0 []	MONTH:	YEAR: 197	362-88
k. Any insulation other than already mentioned: (SPECIFY)	1[]	2 []	0 []	MONTH: [] IN PROCESS	YEAR: 197	351-77
l. Electric heat pump	1[]	2 []	0 []	MONTH:	YEAR: 197	   355-00
m. New water heating equipment	1[]	2 []	0 []	MONTH:	YEAR: 197	380-28
	1 []	2 []	0 []	MONTH:	YEAR: 197	363-25

TAKE BACK EXHIBIT 41

		406-407:04	11
43.	Since January 1, 1977, have you added any caulking around your windows or doors that lead to the outside?	1 [] YES 0 [] NO SKIP TO Q. 46	1
	IF "YES," ASK:		
	44. Have you done this on one occasion, or on more than one occasion since January 1, 1977?	1 [] ONE OCCASION 2 [] MORE THAN ONE OCCASION 41.	2
	45. In what month(s) and year(s) was that done? (LIST MONTH AND ENTER LAST DIGIT OF YEAR FOR EACH OCCASION.)	[] IN PROCESS  MONTH: YEAR: 197 41.	
		MONTH: YEAR: 197418	
		MONTH: YEAR: 197 41.	
46.	Since January 1, 1977, have you put plastic coverings over your windows or doors?	1 [] YES 0 [] NO SKIP TO Q. 49	2
	_IF "YES," ASK:		
	47. Have you done this on one occasion, or on more than one occasion since January 1, 1977?	1 [] ONE OCCASION 2 [] MORE THAN ONE OCCASION	3
	48. In what month(s) and year(s) was that done? (LIST MONTH AND ENTER LAST DIGIT OF YEAR	[] IN PROCESS	4_
	FOR EACH OCCASION.)	MUNTH: YEAR: 197 428	6
		MONTH: YEAR: 197423	
		MONTH: YEAR: 197430	

49.	Do you have a refrigerator in your home?	1 [] YES	
		0 [] NO SKIP TO	Q. 55
	IF "YES," ASK:		
ĺ	50. Do you have one refrigerator, or more than	1 [] ONE	
	one that is presently in use?	2 [] TWO	434
		3 [] THREE OR MORE	
	ASK FOR EACH REFRIGERATOR		
	ASK FIRST ABOUT REFRIGERATOR USED MOST:	REFRIGERATOR #1	REFRIGERATOR #2
		435	443
	51. Is it electric or gas?	1 [] ELECTRIC	1 [] ELECTRIC
		2 [] GAS	2 [] GAS
	HAND RESPONDENT EXHIBIT 52		
	52. Which of these best describes your refrigerator?	436	444
	·	450	444
	<ul> <li>Freezer section (or ice cube section) must be defrosted periodically</li> </ul>	1[]	1 []
	<ul> <li>Freezer section defrosts automatically after frost builds up (catch pan must be emptied)</li> </ul>	2 []	2 []
	<ul> <li>Full frost-free (frost does not build up)</li> </ul>	3 []	3 []
	TAKE BACK EXHIBIT 52		2 []
	THE BION ENTIRE TO		
	53. Can the freezer compartment be opened without	1 [] YES 437	1 [] YES 445
	opening the refrigerator section?	0 [] NO	0 [] NO
	54. Which of the following features does your refrigerator have? (MARK "YES" OR "NO" FOR		
	EACH ONE.)	450	
	• Temperature control	1 [] YES 438	1 [] YES 446
		0 [] NO	0 [] NO
		e [] DON'T KNOW	ε [] DON'T KNOW
	A Louisia for malou	1 [] VEC	2 E3 VEC
:	Automatic ice-maker	1 [] YES	1 [] YES
		0 [] NO 6 [] DON'T KNOW	0 [] NO
		P [] DOM I KINOM	6 [] DON'T KNOW
	<ul> <li>Automatic ice-water dispenser</li> </ul>	I[] YES	1 [] YES
		0 [] NO	0 [] NO
		6 [] DON'T KNOW	6 [] DON'T KNOW
			- 57 450
	<ul><li>Energy saver switch (anti-sweat)</li></ul>	1 [] YES	1 [] YES
		0 [] NO	0 [] NO
		6 [] DON'T KNOW	6 [] DON'T KNOW
Ì	<ul> <li>Extra insulation in walls or doors</li> </ul>	1 [] YES 442	1 [] YES 450
		0 [] NO	0 [] NO
		6 [] DON'T KNOW	

HAND	RESPONDENT	FXHIBIT	55

i }	Please look at this list, and tell me which is used at least occasionally for cooking in your nousehold. (MARK ALL THAT APPLY.)	AS TOASTER O [] MICROWAVE OV [] ELECTRIC OVE [] GAS OVEN [] ELECTRIC RAN BURNERS) [] GAS RANGE (S [] OUTDOOR GAS	N GE (STOVE-TOP OR TOVE-TOP OR BURNERS GRILL	451 452 453 454 455 )456 457
TAKE	BACK EXHIBIT 55	[] NONE SKIP	10 Q. 61	
	IF "ELECTRIC OVEN" OTHER THAN MICROWAVE OVEN, ASK:			
í	56. Do you use one electric oven or more than one?	<pre>1 [] ONE OVEN 2 [] MORE THAN ON</pre>	E	458
	ASK ABOUT MOST-USED ELECTRIC OVEN FIRST:  57. Does your oven have a self-cleaning or continuous cleaning feature?  IF "GAS OVEN," ASK:  58. Do you use one gas oven or more than one?	SELF-CLEANING CONTINUOUS CLEANING NEITHER OF THESE  1 [] ONE OVEN	OVEN #1 OVEN #2  450 460  1 [] 1 [] 2 [] 2 [] 0 [] 0 []	401
	ASK ABOUT MOST-USED GAS OVEN FIRST:  59. Does your oven have a self-cleaning or continuous cleaning feature?	2 [] MORE THAN ON  SELF-CLEANING  CONTINUOUS CLEANING  NEITHER OF THESE	OVEN #1 OVEN #2  462 463  1 [] 1 []  2 [] 2 []  0 [] 0 []	
HAND F	RESPONDENT EXHIBIT 60			
(	Thinking of all the different kinds of cooking done here, which fuel is used most?	O1 [] GAS FROM UND SERVING THE O2 [] GAS, LPG (BO O3 [] FUEL OIL O4 [] KEROSENE OR O5 [] ELECTRICITY O6 [] COAL OR COKE O7 [] WOOD OR CHAR 21 [] OTHER (SPECI	NEIGHBORHOOD TTLED OR TANK GAS) COAL OIL COAL	464- 465

61. Which of these do you use here in your home?

463	0 [] NO	1 [] YES	AUTOMATIC WASHING MACHINE
46.7	o [] NO	1 [] YES	WRINGER WASHING MACHINE (ELECTRIC)
<b>46</b> 3	o [] NO	I [] YES	ELECTRIC DISHWASHER
469	0 [] NO	1 [] YES	FOOD FREEZER SEPARATE FROM REFRIGERATOR
<b>£2</b> .7	0 [] NO	1 [] YES	ELECTRIC CLOTHES DRYER
<b>#2</b> .1	0 [] NO	1 [] YES	GAS CLOTHES DRYER
97.1	o [1 NO	1 [] YES	OUTDOOR GAS LIGHT

TAKE BACK EXHIBIT 61

506-507:05

- 62. Do you or other members of your household own or have the regular use of any cars, trucks, vans, motorcycles, mopeds, or similar vehicles?
- 2 [] YES 511 0 [] NO -- SKIP TO Q. 85 --TAKE BACK EXHIBIT 62/64

63. How many do you have?

01 [] ONE 02 [] TWO 03 [] THREE

512-513

04 [] FOUR
05 [] FIVE

]] FIVE

06 [] SIX 07 [] SEVEN

08 [] EIGHT OR MORE

606-607:06 706-707:07 806-807:08

				000-001.00	700-707.07	000 001.00
		1	V E	HICLE	NUMBE	R
			1	22	3	4
64.	Which type(s) do you have? (IF HOUSE-		514-515	614-615	714-715	814-815
	HOLD HAS MORE THAN	STATION WAGON	01 []	01 []	01 []	01 []
	FOUR VEHICLES, MARK ANSWERS FOR THE	AUTOMOBILE	02 []	02 []	02 []	02 []
	FOUR VEHICLES USED	JEEP OR SIMILAR VEHICLE	03 []	03[]	03 []	03 []
	MOST.)	PASSENGER VAN OR MINIBUS	04 []	04 []	04 []	04 []
		CARGO VAN	05 []	05 []	05 []	05 []
		PICKUP TRUCK	06 []	06 []	06 []	06 []
		OTHER TRUCK	07 []	07 []	07 []	07 []
		MOTOR HOME	08 []	08 []	08 []	08 []
		MOTORCYCLE	09 []	09 []	09 []	09 []
		MOPED/MOTORIZED BICYCLE	10 []	10 []	10 []	10 []
		OTHER (SPECIFY):	21 []	21 []	21 []	21 []
		<b>)</b>				
			<del> </del>		Water Hard Street Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Commission Comm	
			516-517	616-617	716-717	816-817
65.	Please tell me the m (of each one). (ENT OF MODEL YEAR.)	ake and model year ER LAST TWO DIGITS MAKE				
	or nodel remary	THAL	518-519	618-619	718-719	818-819
			010-010	010-010	710-710	010-018
		MODEL YEAR	19	19	19	19
			EDA 501	202 201	800 201	000 001
			520-521	620-621	720-721	820-821
66.	What is the model na each one)?	me (of MODEL NAME		Vanishing daily and a second of the sufficient decision.		
	•	•			W. W	

TAKE BACK EXHIBIT 62/64

## ALL HOUSEHOLDS WITH ONE OR MORE VEHICLES ON Q's. 62-63

ASK Q's. 67-84 FIRST ABOUT FIRST VEHICLE, THEN SECOND, THIRD, AND FOURTH.

These next questions are about your (first/			VEHICLE NUMBER				
seco	second/third/fourth) vehicle.			1	2	3	4
67.		you get this vehicle within the past nonths or did you have it before that?		522	622	722	888
		WITHIN PA	ST 12 MONTHS	1 []	1[]	1 []	1 []
		HAD IT MORE THAN SKIP TO Q. 73	12 MONTHS	2 []	2 []	2 []	2 ]]
ſ	IF "	WITHIN PAST 12 MONTHS," ASK:		523-525	623-625	723-725	823-885
	68.	In what month and year did you get	HTMOM				
	it?	it?	YEAR	197	197	197	197
				5€6-530	626-630	726-730	828-230
	69.	How many miles has it been driven since you have had it?	MIL.ES				
			DON'T KNOW	[]	[]	[]	
	70.	About how many miles were driven on a highway (that is, with rela-	MILES	531-535	631-635	731-735	831-835
		tively little "eten and co"	D ON HIGHWAY			[]	
		driving).	DON'T KNOW	[]	[]	[]	[]
	71.	Is it used on-the-job, that is, for any reason other than for going to or from work, by anyone in your household?	YES NO	536 1 [] 0 []	636 1 [] 0 []	736 1 [] 0 []	686 I[] o[]
	i	IF "YES," ASK:		537-541	637-641	737-741	837-841
		72. About how many miles were driven on-the-job since you have had it?	MILES				
			DON'T KNOW	[]	[]	[]	

ALL HOUSEHOLDS WITH ONE OR MORE VEHICLES ON Q's. 62-63

		<u> </u>	V E H	ICLE	NUMI	BER
			1	2	3	4
IF "	HAD IT MORE THAN 12 MONTHS" ON Q. 67, A	SK:	542-543	642-643	742-743	842-843
73.	In what year did you get it?	YEAR	19	19	19	19
			544-548	644-648	744-748	844-848
74.	How many miles was it driven during the past 12 months, just approximately?	MILES DON'T KNOW	[]	[]	[]	[]
			549-553	649-653	749-753	849-853
75.	In the past 12 months, about how many miles were driven on a highway (that is, with relatively little "stop and go" driving)?  NOT U	MILES SED ON HIGHWAY	[]	[]	[]	[]
76.	Is it used on-the-job, that is, for		554	654	754	854
	any reason other than for going to or	YES	1 []	1 []	1 []	1 []
	from work, by anyone in your house-hold?	NO	0 []	0 []	0[]	0 []
	IF "YES," ASK:		555-559	655-659	755-759	855-859
	77. About how many miles were driven on-the-job in the past 12 months?					
		DON'T KNOW		[]	[]	

ALL HOUSEHOLDS WITH ONE OR MORE VEHICLES ON Q's. 62-63

			V E H	ICLE	N U M	BER
			1	2	3	4
IF L	ISED FOR HIGHWAY DRIVING ON Q. 70 OR Q. 75,	ASK:	560-561	660-661	760-761	860-861
78.	How many miles per gallon does it get in highway driving, just MILES approximately?	PER GALLON DON'T KNOW	[.]	[]	[]	
79.	How many miles per gallon does it get in local driving, just	PER GALLON	562563	662-663	762-763	862-863
	approximately? MILES	DON'T KNOW			[]	[]
	IF MILES PER GALLON GIVEN, ASK:  80. Has someone actually figured out the miles per gallon, or is it more a general impression?	ACTUAL IMPRESSION	564 1 [] 2 []	664 1 [] 2 []	764 1 [] 2 []	864 1 [] 2 []
IF N	OT USED FOR HIGHWAY DRIVING ON Q. 70 OR Q.	75, ASK:	565-566	665-666	765-766	865-866
81.	For the kind of driving for which it is used, how many miles per gallon does it get, just approximately?	PER GALLON DON'T KNOW	[]	[]	[]	[]
	IF MILES PER GALLON GIVEN, ASK:  82. Has someone actually figured out the miles per gallon, or is it more a general impression?	ACTUAL IMPRESSION	567 1 [] 2 []	667 1 [] 2 []	767 1 [] 2 []	867 1 [] 2 []

ALL HOUSEHOLDS WITH ONE OR MORE VEHI	CLES ON Q's. 62-63				
		VEH	ICLE	N U M	BER
		11	2	3	4
HAND RESPONDENT EXHIBIT 83		568-569	668-669	768-769	868-869
83. What kind of fuel is used most					
	UNLEADED REGULAR GASOLINE	01 []	01 []	01 []	01 []
	UNLEADED PREMIUM GASOLINE	02 []	02 []	02 []	02 []
	REGULAR GASOLINE	03 []	03 []	03 []	03 []
PREM	IUM OR HIGH TEST GASOLINE	04 []	04 []	04 []	04 []
	DIESEL	05 []	05 []	05 []	05 []
	ELECTRICITY	06 []	06 []	06 []	06 []
	OTHER (SPECIFY):	21 []	21 []	21 []	21 []
	¥				
TAKE BACK EXHIBIT 83	DON'T KNOW	96 []	96 []	96 []	96 []
HAND RESPONDENT EXHIBIT 84		570-571	670-671	770-771	870-871
84. What type of engine does it have	? 1-CYLINDER	01 []	01 []	01 []	01 []
	2-CYLINDER	02 []	02 []	02 []	02 []
	3-CYLINDER	03 []	03 []	03 []	03 []
	4-CYLINDER	04 []	04 []	04 []	04 []
	5-CYLINDER	05 []	05 []	05 []	05 []
	6-CYLINDER	06 []	06 []	06 []	06 []
	8-CYLINDER	08 []	08 []	08 []	08 []
	ROTARY	11 []	11 []	11 []	11 []
	ELECTRIC	12 []	12 []	12 []	12 []
	OTHER (SPECIFY):	21 []	21 []	21 []	21 []
TAKE BACK EXHIBIT 84	DON'T KNOW	96 []	96 []	96 []	96 []

# ASK EVERYONE

## HAND RESPONDENT EXHIBIT 85/87

TAKE BACK EXHIBIT 85/87

*906-907:09* 

85.	Did you or other members of your household own or have the regular use of any vehicles a year ago or anytime in the past 12 months that you don't have now (that you traded or sold or disposed of in some other way) such as cars, trucks, vans, motorcycles, mopeds, or similar vehicles?		YES  NO SKIP TO Q. 95 TAKE BACK EXHIBIT 85/87			
i	IF "	YES," ASK:				
	86.	How many vehicles did you or other mem household have in the past 12 months t have now?	bers of your hat you don't	1 [] ( 2 [] 1 3 [] 1		918
					VEHICLE	NUMBER
					1	2
	87.	Which type(s) did you have?			913-914	943-946
		(IF HOUŠÉHÓLÓ HAD MORE THAN TWO VEHICLES, MARK ANSWERS	STATION	//AGON	01 []	01 []
		FOR THE TWO USED MOST.)	AUTOM	OBILE	02 []	02 []
			JEEP OR SIMILAR VE		03 []	03 []
			PASSENGER VAN OR MI		04 []	04 []
				O VAN	05 []	05 []
			PICKUP		06 []	06 []
			OTHER		07 []	07 []
			MOTOR		08 []	08 []
		MOTORC			09 []	09 []
			MOPED/MOTORIZED BIO		10 []	10 []
			OTHER (SPEC	141):	21 []	21 []
				•		
					915-916	945-946
	88.	Please tell me the make and model year	(of each	MAKE		
		one). (ENTER LAST TWO DIGITS OF MODEL	YEAR.)		917-918	347-948
			MODEL.	YEAR	19	19
					919-920	949-950
1	89.	What was the model name?	MODEL	NAME		

			VEHICLE	NUMBER
			1	2
IF "	YES" ON Q. 85 (CONTINUED):		921-922	951~952
ASK SECO	Q's. 90-94 FIRST ABOUT FIRST VEHICLE, THEN ND.			
90.	How many miles per gallon did it get	MILES PER GALLON		
	in local driving, just approximately?	DON'T KNOW		[]
			923~925	953-955
91.	In what month and year did you dispose	MONTH	The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	
	of it?	YEAR	197	197
			926-930	956-960
92.	Just approximately, how many miles was			
<i>3</i>	it driven between this time a year ago	MILES		
	and the time you disposed of it?	DON'T KNOW		
			931	961
93.	Was it used on-the-job, that is, for any reason other than for going to or from	YES	2 []	1 []
	work by anyone in your household?	NO	0[]	0 []
	IF "YES," ASK:		932-936	962-966
	94. About how many miles were driven		The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	
	on-the-job between this time a year ago and the time you dis-	MILES		
	posed of it?	DON'T KNOW		[]

95. Now I have some questions about the people who live here. Please tell me who they are, just in relation to you (if they are related to you), and their ages on their last birthdays. Please begin with yourself.

1006-1007:10

1157-1158

RELATIONSHIP	SEX			Q.100-E	EMPLOYMENT	(AGE 14+)	
TO RESPONDENT	FEMALE	MALE	AGE	FULL TIME	PART TIME	NOT EMPLOYED	
RESPONDENT	1[]	2 []		1 []	2 []	0 []	1011-1016
	1 []	2 []		1[]	2 []	0 []	1021-1028
	1 []	2 []		1[]	2 []	0 []	1031-1039
	1[]	2 []		1[]	2 []	0[]	1041-1048
	1 []	2 []		1[]	2 []	0 []	1051-1058
	1 []	2 []		1[]	2 []	0[]	1061-1068
	1 []	2 []		1 []	2 []	0 []	1071-1079
	1[]	2 []		1[]	2 []	0[]	1106-1107:11 1111-1116
	1 []	2 []		1[]	2 []	0[]	1121-1180
	1[]	2 []		1[]	2 []	0[]	<b>1131-</b> 1136
	1 []	2 []		1[]	2 []	0[]	1141-1140
	1 []	2 []		1[]	2 []	0[]	1151-1156

		<b>†</b>
	I have listed (READ RELATIONSHIPS FROM Have I missed	M Q. 95 ABOVE).
96.	Any babies or small children?	[] YES (ADD TO LISTING) [] NO
97.	Any lodgers, boarders, or persons in your employ who live here?	[] YES (ADD TO LISTING) [] NO
98.	Anyone who usually lives here but is away traveling or in the hospital? (PERSONS WHO ARE NORMALLY MEMBERS OF THE HOUSEHOLD BUT WHO ARE NOW LIVING AWAY FROM HOME [E.G., COLLEGE STUDENTS OR MEMBERS OF THE ARMED FORCES] SHOULD NOT BE LISTED.)	[] YES (ADD TO LISTING) [] NO
99.	Anyone else staying here who does not have a regular residence elsewhere?	[] YES (ADD TO LISTING) [] NO
	FOR EACH PERSON 14 YEARS OLD OR OLDER  100. Is he/she employed full time (3) per week), part time, or not em	O hours or more

MARK	ANSWER;	ASK IF NECES	SARY.			
101.		u now married ou never been	, widowed, divorced, separated, or married?	2 [] 3 []	NOW MARRIED WIDOWED DIVORCED OR SEPARATED NEVER MARRIED	1159
102.	What i	s your race?		2 []	WHITE BLACK OR NEGRO OTHER (SPECIFY):	1160
103.	Does a	nother family	share your home here with you?	1 [] 0 []	YES NO	1161
		INTERVIEWER:	IF ANOTHER FAMILY SHARES THE SAME LISTED IN HOUSEHOLD COMPOSITION TO SHARES AS SEPARATE RULES AS A SEPARATE HOUSING UNIT, SHOULD BE LISTED ON YOUR HOUSING TION. SEE SAMPLING INSTRUCTIONS INTERVIEW SHOULD BE COMPLETED.	ABLE ON PRE APARTMENT T THE ADDITI UNIT ADDRES	CEDING PAGE.  THAT IS DEFINED BY OUR ONAL HOUSING UNIT SS LIST FOR THIS LOCA-	
104.	How ma	ny members of	your household can drive a car?	DR	IMBER OF LIVERS:	1162 1163

	re just a rem questions for background statistical purposes.							
105.	What is the highest grade (or year) you attended in school?	00	[]	NEVER ATTEN	DED	SC	H00L	
	<b>7</b> -1	01		FIRST	07	[]	SEVENT	Ή
		02	[]	SECOND	08	[]	EIGHTH	
		03	[]	THIRD	09	[]	HTMIN	
		04	[]	FOURTH	10	[]	TENTH	
		05	[]	FIFTH	11	[]	ELEVEN	TH
		06		SIXTH	12	[]	TWELFT	
			co	IECE (ACADEI	ut c	٧E	Anc \	- 1164 - 1165
		1 2	[]	LLEGE (ACADE)			C4	
			[]				C5	
			[]				C6 OR	MODE
		13	۲٦	03	10	ΓJ	COOK	PROTE.
106.	Did you finish that grade (or year)?	.1	[]	YES				
			[]					1166
IF RE	SPONDENT IS MARRIED, ASK:							
107.	What is the highest grade (or year) that your (husband/wife) attended in school?	00		NEVER ATTEN	DED	SCI	100L	
	onde your (nassand, write, accentace in sensor,	01	[]	FIRST	07	[]	SEVENT	H
		02		SECOND	08	[]	EIGHTH	
		03	[]	THIRD	09	[]	NINTH	
		04	[]	FOURTH	10	[]	TENTH	
		05	[]	FIFTH	11	[]	ELEVEN	TH
		06	[]	SIXTH	12	[]	TWELFT	
			601	1 FOF /404DF1	47.0	V	1001	1167 11 <b>6</b> 8
				LEGE (ACADEN				
			[]		16			
			[]		17			MODE
		13	[]	U.S	18	LJ	C6 OR	nore.
108.	Did (he/she) finish that grade (or year)?	7	<b>[</b> ]	YES				
	(,)		[]					1169
		-						

109. Now let's look at this list of income groups. Please tell me which group letter best describes the total combined income in 1977 of all members of your family living here, from all sources -- wages, dividends, social security, and so forth -- before taxes and deductions.

#### 

07 - G \$15,000 - \$19,999 96 [] DON'T KNOW 08 - H \$20,000 - \$24,999 97 [] REFUSED

#### TAKE BACK EXHIBIT 109

110. Do you or members of your household own your home

1 [] OWN (BUYING)

2 [] RENT

1172

here or do you rent?

3 [] OCCUPIED WITHOUT PAYMENT OF RENT

### IF "OWN (BUYING)," ASK:

111. Is this house (apartment) part of a condominium or cooperative building or development? 1 [] YES, CONDOMINIUM
2 [] YES, COOPERATIVE

1173

0 [7 NO

#### HAND RESPONDENT EXHIBIT 112

112. How much do you think this property, that is, (house and lot/condominium/cooperative) would sell for on today's market? Just give me the letter.

#### CIRCLE LETTER FOR GROUP

06 - F \$60,000 - \$79,999 96 [] DON'T KNOW 97 [] REFUSED

## TAKE BACK EXHIBIT 112

## IF "RENT" ON Q. 110, ASK:

1176-1179

1174-

1175

113. What is the monthly rent of your house/apartment?

\$	.00	PER	MONTH
Г٦	OCCUPTED U	TTUO	iΤ

[] OCCUPIED WITHOUT PAYMENT

IF RENT IS NOT PAID BY THE MONTH, NOTE IN THE SPACE BELOW THE TIME PERIOD COVERED, AND THE AMOUNT PAID PER TIME PERIOD.

TIME PERIOD COVERED:

AMOUNT PAID PER TIME PERIOD: \$ .00

114. We may have covered some of these points before, but just to be sure, please look at this exhibit and tell me whether these fuels are used here in your household.

			NOT	Γ	PAID BY	INCLUDED	OTHER	
	ELECTRICITY	USED	USED		HOUSEHOLD	IN RENT	(SPECIFY)	_ }
a.	FOR LIGHTING AND OTHER APPLIANCES	1[]	0 []		1 []	2 []	5 []	1811-1818
b.	FOR COOKING	1[]	0 []		<i>1</i> []	2 []	5 []	1213-1224
c.	FOR HOT WATER	1 []	0 []		1 []	2 []	5 []	1215-1275
d.	FOR HEATING YOUR HOME	1[]	0 []		1 []	2 []	5 []	_ 1812-1818
e.	FOR AIR-CONDITIONING (CENTRAL OR WINDOW/WALL UNITS)	1 []	0 []		1 []	2 []	5 []	_   1219-1220
	GAS FROM UNDERGROUND PIPES SERVING YOUR NEIGHBORHOOD							
f.	FOR COOKING	1 []	0[]		1 []	2 []	5 []	_  1221-1388
g.	FOR OTHER APPLIANCES (INCLUDE OUTSIDE GAS LIGHT HERE)	1 []	0 []		1 []	2 []	5 []	1223-1324
h.	FOR HOT WATER	1 []	0 []		1 []	2 []	5 []	_   1225-1226
i.	FOR HEATING YOUR HOME	1[]	0 []		1 []	2 []	5 []	1237-1398
j.	FOR CENTRAL AIR-CONDITIONING	1 []	0 []		1 []	2 []	5 []	_  1229-1736
	GAS, LPG (BOTTLED OR TANK GAS)							
k.	FOR COOKING	1 []	0 []		1 []	2 []	5 []	1231-1133
1.	FOR OTHER APPLIANCES	1[]	0[]		1 []	2 []	5 []	1233-1136
m.	FOR HOT WATER	1 []	0 []		1 []	2 []	5 []	1235-1136
n.	FOR HEATING YOUR HOME	1 []	0[]		1 []	2 []	5 []	1237-1238
0.	FOR CENTRAL AIR-CONDITIONING	1 []	0[]		1 []	2 []	5 []	1239-1810
	FUEL OIL							
p.	FOR HOT WATER	1[]	0[]		1[]	2 []	5 []	_   1241-1849
q.	FOR HEATING YOUR HOME	1 []	0 []		1 []	2[]	5 []	1243-1246
				<u> </u>				

## FOR EACH USE OF EACH FUEL, ASK:

115. Is that paid for by your household, included in your rent, or do you get it some other way? -

#### IF ANY FUEL BILLS ARE PAID BY HOUSEHOLD, ASK:

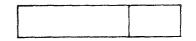
116. Do any of your household fuel bills include charges for fuel used for purposes other than for your own living quarters? For example, do any of your fuel bills include fuel used for farm equipment, or for a business of any kind, or for the living quarters of another household?

## IF "YES," ASK:

117. What is included in the household bills? (DESCRIBE IN DETAIL.)

1246-1257

IF HO	USEHOLD PAYS FOR FUEL OIL, ASK:	
118.	About how many deliveries of fuel oil does your household usually get in a year?	NUMBER OF FUEL OIL 1258- DELIVERIES: 1259  [] LIVED HERE LESS THAN 1 YEAR
119.	Did you buy fuel oil for this house (apartment) in the past 12 months from one company, or from more than one company?	1 [] ONE COMPANY 2 [] MORE THAN ONE COMPANY
	IF "MORE THAN ONE," ASK:	
	120. How many different companies?	2 [] TWO
		3 [] THREE 1261
		4 [] FOUR OR MORE
TE 110	HICKHOLD DAVE FOR LINE ACK.	
121.	USEHOLD PAYS FOR LPG, ASK:  About how many deliveries of LPG does your household usually get in a year?	NUMBER OF 1262- LPG DELIVERIES: 1263
122	Did you have IDC for this haves (anontment) in	
122.	Did you buy LPG for this house (apartment) in the past 12 months from one company, or from	1 [] ONE COMPANY 1264
	more than one company?	2 [] MORE THAN ONE COMPANY
	IF "MORE THAN ONE," ASK:	
	123. How many different companies?	2 [] TWO
	,	3 [] THREE 1265
		4 [] FOUR OR MORE
ı		
IF HO	USEHOLD PAYS FOR ELECTRICITY AND/OR GAS AND/OR FUEL C	DIL
124.	In addition to the types of fuel you use, we are int and in the amount that people pay for electricity, g parts of the United States.	cerested in the quantities used, pas, and fuel oil in different
	I have a form that would authorize the companies that vide that information to Response Analysis Corporati	
	Since this study is being done nationwide, it will g ferences in fuel cost and use all over the country. help establish important national energy policies.	
	INTERVIEWER: REMOVE PERFORATED FORM AND HAND TO RES DENT SHOULD FILL IN THE NAMES OF COMPA FUEL OIL COMPANY HAS BEEN USED SINCE O TIONAL COMPANY NAMES ON OTHER SIDE OF	NIES. IF MORE THAN ONE LPG OR OCTOBER 1, 1977, FILL IN ADDI-
	1 [] AUTHORIZATION FORM COMPLETED	
	o [] AUTHORIZATION FORM NOT COMPLE	TED INTERVIEWER, EXPLAIN BELOW:
1		





## U.S. DEPARTMENT OF ENERGY SURVEY

#### Authorization Form for Residential Energy Consumption Survey

I hereby give permission to the company (companies) below to provide information to Response Analysis Corporation for confidential use in connection with their survey for the U.S. Department of Energy.

This authorization covers use of fuels (electricity, natural gas or LPG, or fuel oil) by my household from October 1, 1977 through March 31, 1979, including:

- 1) the total amount of fuels used by my household.
- 2) the total price charged for fuels used by my household.

Companies are authorized to provide this information by monthly periods or by delivery date, whichever applies.

A photocopy of this authorization may be accepted with the same authority as the original.

PLEASE PRINT	YOUR NAME		
Entive wy	ADDRESS		APT. NO.
	CITY OR POST OFFICE	STATE	ZIP CODE
	TELEPHONE AREA CODE:NUM	MBER:	
PL	EASE COMPLETE ONE BLOCK BEI (IF MORE THAN ONE SUPPLIER OF A PA		
CTRICITY	PRINT FULL NAME OF ELECTRI	C COMPANY	
CINIOIT	LOCATION OF COMPANY (IF KNO	DWN) - CITY AND STATE	
	TELEPHONE AREA CODE:NU	MBER:	
	PRINT FULL NAME OF GAS COM	PANY	Museuwa ar Nafi-ku wakasi Mi Unio wa promoni kaleum - Birin katika pania na 1994 waka mwa
om underground pipes r LPG (bottled or tank gas)	LOCATION OF COMPANY (IF KNO	OWN) - CITY AND STATE	
	TELEPHONE AREA CODE:NUI	MBER:	
	FOURT FULL HAME OF OU COM		
L OIL	PRINT FULL NAME OF OIL COMI		
	TELEPHONE		
	AREA CODE:NUI	MBER:	

	SECOND GAS COMPANY
GAS —	PRINT FULL NAME OF GAS COMPANY
LPG (bottled or tank gas)	LOCATION OF COMPANY (IF KNOWN) - CITY AND STATE
	TELEPHONE AREA CODE:NUMBER:
	THIRD GAS COMPANY
	PRINT FULL NAME OF GAS COMPANY
	LOCATION OF COMPANY (IF KNOWN) - CITY AND STATE
	TELEPHONE AREA CODE: NUMBER:
	SECOND FUEL OIL COMPANY  PRINT FULL NAME OF OIL COMPANY
FUEL OIL -	PRINT FULL NAME OF OIL COMPANY
	LOCATION OF COMPANY (IF KNOWN) - CITY AND STATE
	TELEPHONE AREA CODE:NUMBER:
	THIRD FUEL OIL COMPANY
	PRINT FULL NAME OF OIL COMPANY
	LOCATION OF COMPANY (IF KNOWN) - CITY AND STATE
	TELEPHONE AREA CODE:NUMBER:

IME INTER	RVIEW COMPLETED:	LENGTH OF INTERVIEW:	MINUTES			
ank you v	k you very much for your help.					
	TELEPHONE NUMBER: (AREA CODE:		——————————————————————————————————————			
	RESPONDENT'S NAME:					
6. For f	interview verification purposes, may					
K EVERYON	<u>VE</u>					
	CITY OR TOWN/STATE/ZIP CODE:					
	STREET ADDRESS:					
	NAME: TELEPHONE NUMBER: (AREA CODE:	)				
5. We ma I hav	ay be getting some additional informative the name of the person or company	to whom you pay rent?				

#### GLOSSARY

Air Conditioning is cooling air by a refrigeration unit. It does not include fans, blowers, or evaporative cooling systems which are not connected to a refrigeration unit.

Air conditioning units which are not currently in working condition or not used, but are in place in the housing unit, are included.

Billing Period refers to the time between meter readings. It does not refer to the time the bill was sent or when the payment was to have been received. In some cases, the billing period is the same as the billing cycle which corresponds closely (within several days) to meter reading dates. For fuel oil and LPG, the billing period is the number of days between fuel deliveries.

Building with 5 or More Housing Units contains living quarters for 5 or more separate households or families.

Built-in Electric Units. Individual resistance electric heating units are permanently installed in the floors, walls, ceilings, or baseboards, and are part of the electrical installation of the building. Electric heating devices that are plugged into an electric socket or outlet are not considered built-in.

Caulking around windows or doors whether in a heated part of the house or an unheated part, such as an attic or basement. Caulking can be done from the inside or outside of the house. Caulking done by the previous owner or caulking done to the respondent's previous home is not included.

Central Warm Air Furnace with Ducts to Individual Rooms. A central furnace provides warm forced air through ducts leading to various rooms. Electric heat pumps are not included in this category.

Condominium Ownership. A condominium is a type of ownership that enables a person to own an apartment or house in a project of similar units. The owner has his or her own deed and, very likely, has a mortgage on the unit. The owner also holds common or joint ownership in all common areas such as hallways, entrances, and elevators.

Condominium ownership may cover single-family houses, row houses, townhouses, as well as apartments.

Conservation Efforts undertaken by respondents or respondent's family in the housing unit the family occupies. Efforts undertaken by a landlord are not included. Changes made before the respondent moved in are not included.

Continuous Cleaning Oven has a system that automatically dissolves any buildup as it occurs.

Cooling Degree Days are the number of degrees the daily average temperature is above 65 degrees Fahrenheit. Normally cooling is not required in a building when the outdoor average daily temperature is below 65 degrees. Cooling degree days are determined by subtracting the base of 65 from the daily average temperature. For example, a day with an average temperature of 85 degrees has 20 cooling degree days (85-65=20), while one with an average temperature of 65 degrees or lower has none.

Doors to a heated hallway in an apartment building or permanently sealed doors are not included. Double doors are counted as one door.

Education--Highest Grade Attended includes attendance at graded public, private, or parochial schools, colleges, universities, or professional schools, whether day or night school. Only schooling which advances a person toward an elementary or high school diploma, or a college, university, or professional school degree is included. Other schooling is included only if the credits obtained are acceptable in the regular school system.

Persons who have attended "post graduate" high school courses after completing high school, but have not attended college, are considered to be "Twelfth" grade graduates.

Persons who have attended more than four years of college, or who have attended professional schools (law, medicine, or dentistry, for example) are considered to have a college education plus graduate or professional schooling after completion of four years of college.

The equivalent grade of the regular American school system is assumed for a person who obtained his formal education through other systems.

For persons who skip or repeat grades, the highest grade attended is accepted.

Electric Heat Pump (Reverse Cycle System). A heat pump is a year-round heating-air-conditioning system in which refrigeration equipment supplies both heating and cooling through ducts leading to individual rooms. It generally consists of a compressor, both indoor and outdoor coils, and a thermostat. Heat pumps using any fuel other than electricity are excluded.

Electricity refers to electric power supplied by a central utility to a residence via underground or above ground power lines. It does not refer to electricity generated on site for the exclusive use of the residence. In this case, the fuel used for the generator will be indicated.

Eligibility for Tax Credit. A household was eligible if the house was substantially completed prior to April 20, 1977, and the items were installed on or after April 20, 1977.

Estimated Bill is calculated by the fuel supplier when the meter is not read. The estimate may be based on one or more of the following factors: past usage of the household, usage of similar households, weather data.

Family Income includes wages, salaries, tips, commissions, social security, pensions, interest, dividends, rent, public assistance, unemployment insurance benefits, and the like. Income is calculated before taxes and deductions. Income is obtained for all members of the family who lived in the household in 1977, regardless of whether they were living there at the time of the interview. Income of nonfamily members of the household is not included.

Fireplaces or Heating Stoves that burn wood or coal are included.

Floor, Wall, or Pipeless Furnace. A floor furnace is located below the floor and delivers heated air to the room immediately above or, if under a partition, to the room on each side.

A wall furnace is installed in a partition or in an outside wall and delivers heated air to the rooms on one or both sides of the wall.

A pipeless furnace is installed in a basement and delivers heated air through a large register in the floor of the room or hallway immediately above.

Fuels refers to primary delivered fuel at the residential site. It may be converted at the site to some other energy form.

Fuel Oil is any grade fuel oil which might be burned by the dwelling for space heating or water heating purposes.

Head of Household. If the respondent was married and living with his or her spouse, the male was considered to be the head of the household. Otherwise, the respondent was the head of the household.

Heating Degree Days are the number of degrees the daily average temperature is below 65 degrees Fahrenheit. Normally, heating is not required in a building when the outdoor average daily temperature is above 65 degrees. Heating degree days are determined by subtracting the average daily temperature below 65 degrees from the base 65. For example, a day with an average temperature of 50 degrees has 15 heating degree days (65-50=15), while one with an average temperature of 65 or higher has none.

Home-Owner/Renter. Own means the owner or co-owner is a household member of the unit, even if the unit is mortgaged or not fully paid for. Own/rent refers to the structure itself, not the land on which it is located.

Hot Water Pipes Running Through a Slab Floor. A central radiant system supplies hot water to pipes inlaid in concrete.

House or Building with Two to Four Housing Units is divided into living quarters for two, three, or four families or households. This category also includes houses originally intended for occupancy by one family or for some other use, but have since been converted to a separate dwelling for two to four families. Typical arrangements in these types of living quarters are separate apartments, downstairs and upstairs, or one apartment on each of three or four floors.

 $\underline{\textit{Household}}$  includes all persons who occupy a housing unit. By definition, the count of households is the same as the count of occupied housing units.

Household Appliances. The following appliances are included if they are used in the home: refrigerator, cooking appliances (small electric appliances, oven, range, or grill), washing machine, dishwasher, freezer, dryer, outdoor gaslight. Air conditioning units are included whether or not they are used or are in working order.

Housing Unit is a structure or part of a structure where a household (family or individual) lives or could live. It has a separate entrance from the outside or from a common hall or lobby, or it has cooking facilities for the exclusive use of the occupants. Housing units do not include group quarters such as prisons, hospitals, dormitories, nursing homes, fraternity houses or convents. Hotel rooms, motel, mobile homes, or trailers are considered housing units if occupied.

Insulation is any material which, when placed between the interior of the dwelling and the outdoor environment, reduces the rate of heat (cold) loss to the environment.

Blankets or Batts--Rolls or Pieces are nailed or stapled between the roof rafters.

Foam is initially a liquid that solidifies after being sprayed on a surface or poured into a cavity to be insulated.

Loose Fill or Blown Material is loose insulation which is poured between the attic floor joists (beams) or blown into open spaces.

Plastic Foam Boards are rigid boards (such as styrofoam), that can be cut to size and either edged, nailed, or glued in place.

Insulation Added, Equipment Added does not include additions that were in the process of being completed but were not completed at the time of the survey.

Kerosene is a distilled product of oil or coal with the generic name kerosene and used for space heating, water heating, cooking, or lighting.

LPG or Liquid Petroleum Gas is any fuel gas supplied to a residence in liquid form. It is usually delivered by tank truck and stored near the residence in a tank or cylinder until used. Propane and butane are liquified petroleum gases.

Metropolitan refers to locations within Standard Metropolitan Statistical Areas as defined in the 1970 Census.

Migratory Housing Unit is intended for occupancy by migratory workers employed in farm work during the crop season.

Mobile Home or Trailer is a structure which has all the facilities of a dwelling unit, but is built on a movable chassis. It may be placed on a permanent or temporary foundation and contain one or more rooms. Even if additional rooms are added to the structure, it is still considered a mobile home.

Monthly Rent is rent paid for the sample unit only. If the rent actually paid by the household includes rent for a business unit or for living quarters occupied by others, that part of the total rent which the respondent estimates to be for his/her own unit only is reported.

The rent paid or scheduled to be paid to the landlord or rental agent is reported, without deduction for any payments received from lodgers or roomers, or for the cost of any furniture, utilities, or service provided by the landlord. Any part of the rent that may be paid by friends or relatives living elsewhere, a church, Government agency, or similar organizations is not deducted.

Natural Gas is utility gas supplied by pipeline to individual housing units by a central utility company. It does not refer to privately owned gas wells operated by the household.

Number of Floors includes floors for all areas used as year-round living space. Unfinished areas used for workrooms, utility rooms, or laundry rooms are not included. Finished attics or basements are included. If the attic or basement is partially finished and the finished part is used as living space on a year-round basis, the area is counted as one-half floor. The basement level of an apartment building is not counted. Any level of a house that is more than one-half the length and width of the house is one floor. Any level that is less, is one-half floor.

Number of Rooms. Whole rooms are rooms such as living rooms, dining rooms, bedrooms, kitchens, lodger's rooms, finished basements, or attic rooms, recreation rooms, and permanently enclosed sun porches which are used year-round. Rooms used for offices by a person living in the unit are included.

Bathrooms, halls, foyers, or vestibules, balconies, closets, alcoves, pantries, strip or pullman kitchens, laundry or furnace rooms, unfinished attics or basements, open porches and unfinished space used for storage are not included.

A partially divided room, such as a dinette next to a kitchen or living room, is a separate room only if there is a partition from floor to ceiling, but not if the partition consists solely of shelves or cabinets. If a room is used by occupants of more than one unit, the room is included with the unit from which it is most easily reached.

Rooms are counted as year-round living space if they are completely enclosed from the outside with permanently installed walls, windows, and roof and can be heated.

Occupied Housing Unit is occupied if someone was living in it as his or her usual or permanent place of residence at the time of the first field contact.

Plastic Coverings are placed over the doors or windows on either the outside or inside of the house. Plastic coverings installed by previous occupants of the housing unit or installed in the respondent's previous home are not included.

Poon. The following definition of poor was used based on family income and the number of persons in the household.

Household Size	Income Range
1	less than \$ 3,000
2	less than \$ 4,999
3	less than \$ 4,999
4	less than \$ 7,999
5	less than \$ 7,999
6	less than \$ 9,999
7 or more	less than \$11,999

Portable Room or Space Heaters can be picked up and moved. Included are electric heaters that get current through a cord plugged into an electrical wall outlet.

Property Value for Owned Property consists of the entire building in which the owner lives, the land on which it stands, and any additional buildings such as garages on the same plot of land. The value of the land is included whether or not the land is on the same plot owned or owned jointly.

Race. The interviewer determines the race of the respondent by observation only.

Refrigerator. A "temperature control" is usually a dial with a range such as 1 to 10 which designates the temperature range one can select inside the refrigerator.

Automatic Defrost--defrosts automatically after the frost builds up (catch pan must be emptied).

Automatic Ice Maker is a device in the freezer section of the refrigerator which is connected to the household water supply. It has a valve which regulates the amount of water taken in to be made into ice cubes.

Automatic Ice-Water Dispenser is connected to the household water supply. It has a valve which regulates the amount of water taken in for a constant supply of cold water.

Energy Savet Switch (anti-sweat) is a control which raises the temperature inside the refrigerator. It saves energy when the humidity is high and water is condensing on the inside walls of the refrigerator.

Extra Insulation in Walls or Doors is featured in some new refrigerators. The extra insulation retains the cold air and makes the refrigerator more energy efficient.

Full Frost-Free--frost does not build up.

Manual Defrost--freezer section or ice cube section must be defrosted periodically.

Room Heaters with Flue on Vent. Circulating heaters, convectors, radiant gas heaters, other nonportable room heaters that burn gas, oil, kerosene, or other liquid fuel, and are connected to a flue, vent, or chimney to remove smoke and fumes.

Room Heaters without Flue. Nonportable room heaters that burn gas, cil, or kerosene which are not connected to a flue, vent, or chimney.

Room(s) Closed Off During Winter includes households that completely close off one or more rooms for a week or longer. A room is closed off if the door to the room is closed and the heat in that room is turned down, regardless of whether any heat from surrounding rooms can be felt.

Rural refers to nonurban areas.

<u>Seasonal Housing Unit</u> is intended for occupancy only at certain seasons of the year. Seasonal units include those intended for recreational use, for example, beach cottages and hunting cabins that have not been converted to year-round use.

Self-Cleaning Oven has a cleaning cycle that can be turned on when desired.

Single Family Housing Unit provides living space for one household or family. The structure may be detached, attached on one side (semi-detached), or attached on two sides. Attached houses are considered single family houses as long as the house itself is not divided into more than one housing unit and has an independent, outside entrance.

Solar Collectors refer to active, thermal, concentrating collectors using either air or liquid as the working fluid. They do not refer to passive collection of solar thermal energy.

Square Feet refers to the living space in the housing unit. If the respondent does not know the square footage of living space, the respondent is asked for his/her best guess. If the respondent is unable to answer, an answer is obtained, when possible, from any knowledgeable household member present at the time of the interview.

Living space includes living rooms, dining rooms, bedrooms, kitchens, lodger's rooms, finished basement and attic rooms, recreation rooms, permanently enclosed sun porches which are used year-round, bathrooms, hallways, and closets located in the living quarters. The living space does not include hallways connecting one housing unit to another or unfinished areas used for work rooms, or laundries. Rooms used by occupants of more than one unit are included in the square footage of the unit from which the room(s) is most easily reached.

Steam or Hot Water System with Radiators or Convectors. A central heating system supplying steam or hot water to conventional radiators, baseboard radiators, heating pipes embedded in the walls or ceilings, or heating coils or equipment which are part of a combined heating-ventilating or heating-air-conditioning system.

Storm Doors are made of double glass or insulating glass such as thermopane. Glass or plexiglass placed over a sliding glass door on either the exterior or interior is counted as a storm door. A plastic sheet covering the door is not a storm door.

Storm Windows are windows added to the exterior of existing windows. Windows made of double glass or insulating glass, such as thermopane, are storm windows. Glass or plexiglass placed over windows on either the exterior or interior side are included. Plastic sheets covering windows are not included.

Urban includes housing in areas of 2,500 inhabitants or more as defined in the 1970 Census.

Vacant Housing Unit is vacant if it was not occupied at the time of the first field contact. An occupied seasonal or migratory housing unit is classified as vacant at the time of the first field contact when all persons had a usual place of residence elsewhere.

<u>Vehicles</u> are automobiles, station wagons, passenger vans, cargo vans, motor homes, pickup trucks, other trucks, jeeps or similar vehicles, motorcycles, mopeds, and motorized bicycles.

Any motorized vehicle which is owned (being bought) by one or more members of the household is included. Company cars, trucks, taxicabs, and other motorized vehicles which are not owned by household members, but are regularly available to household members for their personal use and are ordinarily kept at home are included.

Vehicles of all members of the household, including lodgers or other nonrelatives living in the house (apartment) are included. Cars rented or leased for one month or more are included.

Not included are motorized vehicles used solely for business purposes, such as police cars or other Government-owned vehicles. Dismantled or dilapidated vehicles in an early stage or being junked, or immobile vehicles used only as a source of power for some piece of machinery are not included. Vehicles used primarily for competition or display purposes such as racing cars, stock cars, or antique cars not used as passenger automobiles are not included.

<u>Vehicle Types</u>. Passenger vans or minibuses which are equipped for carrying passengers and have a seating capacity of from 5 to 15 passengers.

Pickup trucks include cars with an open load area (for example, a Ford El Rancho).

A jeep or similar vehicle has 4-wheel drive and is capable of off-road operation.

The miscellaneous category contains vehicles that do not fit into any of the designated categories.

Weatherstripping around outside doors or windows.

Windows to the Outside. All windows to the outside found in year-round living space are included. Windows in the basement, attic, garage, or porch are included if those areas are heated. Each window that opens separately is counted as one window. Windows fixed in place are included. Windows in doors are not included.

Year-Round Housing Unit is occupied or intended for occupancy at any time during the year. Mobile homes or trailers are considered year-round units if they also satisfy this condition.

## USE OF THE GENERALIZED VARIANCE TABLES

The following tables allow the user to estimate the standard error of estimates calculated on the National Interim Energy Consumption Survey (NIECS) data.

Standard Error of Estimated Percentages. (To be used with the "B" series of tables.) The estimated standard error or reliability of a percentage depends upon both the percentage and the base upon which the percent was calculated.

## In order to use Table 1:

- o Determine how many households in the sample belong to the base that are to be considered for the characteristic. (This will be illustrated in the second example.) The appropriate row in the table is now available.
- o Using the table of estimates, determine what percentage was estimated for this characteristic. The appropriate entry in the table is now located.
- o Since these tables are based on one standard deviation, a 95 percent confidence interval (two standard deviations) would equal twice the value in the table.

## Two examples follow:

o Suppose that of the 67.5 million households, 37 percent have all doors covered with storm doors. Using the Standard Error of Percentages Table (see Table 1), the 67.5 row and 50 percent column yield a table value of 1.3 (which is an overestimate since our percent is less than 50). This means that the 95 percent confidence interval is 34.4 to 39.6 (37 +2(1.3)).

$$\frac{(37-25) (1.3-1.1)}{(50-25)} + 1.1 = 1.2$$

lIf one wishes to obtain a more precise estimate of sampling error, interpolation of table values can be employed. The following method would be used to interpolate a value for 37 percent on a base of 67.5 million which would be between 1.1 and 1.3

Now, suppose that an estimate of the percent of households in the South that have all the doors covered with storm doors is desired. The base is all households in the South, 22.3 million, and the estimated percentage is 22 percent. The proper entry in the table is 1.8 which belongs in the 25.0 million row and the 25 percent column. Our 95 percent confidence interval now is 18.4 to 25.6 (22 + 2(1.8)).

1,000 2.1 3.0 4.6 6.3 5.00 2.0 25,000 .7 .9 1.5 2.0 2.0 2.0 2.0 3.0 4.6 6.3 2.0 2.0 3.0 4.6 6.3 3.0 4.6 6.3 3.0 4.6 6.3 3.0 4.6 6.3 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3	95 10	15 or 85	25 or 75 50	5.0
2.1 3.0 4.6 .9 1.3 2.1 .7 .9 1.5 .4 .6				
2.1 3.0 4.6 .9 1.3 2.1 .7 .9 1.5 .4 .6 .9				
.9 1.3 2.1 .7 .9 1.5 .4 .6 .9		7.5	9.2	10.6
.4 .6 1.5		3.4	4.1	4.7
6. 9. 4.		2.4	2.9	9°3
		1.5	1.8	2.1
.3 .4 .7.	6.	٦. ۲.	1.3	1.5
67,500 .3 .4 .6 .8	8.	6.	1.1	1.3

Standard Error of Estimated Counts. Linear interpolation should be used for counts not specifically shown in Table 2. An example follows:

• If the estimated count is 48,000,000, then the estimate of the standard error can be computed by linear interpolation as follows:

$$\frac{(48-45)}{(50-45)} \quad (.76-.81) + .81 = .78$$

Standard Errors of Ratio. For ratios of the form (100) (x/y) where x is not a subclass of y, an approximation to the standard error of the ratio is given by:

100 
$$\left(\frac{x}{y}\right)\sqrt{\left(\frac{\sigma x^2}{x}\right)^+\left(\frac{\sigma y^2}{y}\right)}$$

Where

x =the numerator of the ratio

y = the denominator of the ratio

 $\sigma x = the standard error of the numerator$ 

σy = the standard error of the denominator

Standard Errors of Differences. The standard error of a difference between estimates is approximately equal to the square root of the sum of the squares of the standard errors considered separately.

Table 2. Standard Error of Estimated Counts

(68 Chances Out of 100) Size of Estimate (in millions) Standard Error (in millions) 1 .20 5 .44 10 .62 15 .71 20 .79 25 .83 30 .86 35 .86 40 .85 45 .81 50 .76 55 .67 60 .54 65 .30 67.5 .20

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