

TWIN CITIES AREA SURVEY AND LOW INCOME SURVEY 1984

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

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EXECUTIVE SUMMARY ON ENERGY AND ENVIRONMENT

The results in this report are based on the 1984 Twin Cities Area Survey and the Low Income Survey. This portion of the 1984 Twin Cities Area Survey dealt with three topics: recycling behavior, solid waste disposal, and energy conservation.

Recycling Behavior

About 60% of the households in the Twin Cities area reported recycling some portion of their household trash in the past year. The significant determinants of recycling behavior were age and income. Younger persons, those born since 1960, had a significantly lower incidence of recycling than those who were older. There was a positive relationship between income and incidence of recycling; the higher the income, the greater the likelihood the household recycled.

The most common reasons cited for not recycling were too much trouble and personal reasons, such as specific problems with storage or living situation, a general lack of awareness, and a feeling that it is the government's responsibility to recycle once the garbage has been put out.

Although 60% of the households recycled, 64% of those recycled only every two to three months or less. Further, 50% of those who recycled reported recycling only one item. Persons who lived in areas with curb or alley pickup programs did not have a higher incidence of recycling, but did recycle more frequently than those who lived in areas without pickup programs.

The most common method of recycling was to take items to a recycling center, the second most common was a variety of informal methods recorded as "other". Metal, paper and glass, respectively, were the most commonly recycled items. The only variation in item recycling was that areas which did not have curb or alley pickup programs had a lower incidence of paper and glass recycling.

Most people who currently put their grass clippings and leaves in the garbage would save them for independent pickup and a significant percentage of those would pay extra for this service.

Finally, there was broad public support for mandatory recycling requirements.

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Solid Waste Disposal

About two-thirds of the Twin Citians who were interviewed were aware of county plans to burn garbage. More than half felt they wanted more information about these plans. Few people favored landfilling as a disposal method and a large majority favored recycling, while about half favored garbage burning.

Almost all Twin Citians felt that developing ways to dispose of garbage to limit the need for new landfills was important, and about two-thirds were willing to pay extra for this development activity. In addition, there was broad-based support for municipal control over the garbage collection system, although a small minority felt strongly that they wanted to continue to choose their own garbage hauler.

Energy Conservation

Almost all the respondents felt the need for the United States to save energy was serious. Most kept their thermostats at 68 degrees or less during the day and about 60% of those with thermostats turned them down at night.

Conclusion

In order to increase the number of people who recycle, and the frequency and amount of recycling, it will be necessary to target those age and income groups which are below average in recycling activity. The information about why people do not recycle points to the need for public education to promote recycling, improvements in the convenience of recycling programs and increased requirements for recycling, for which there is strong public support. It also appears that there is public acceptance for programs to collect grass clippings and leaves for alternative disposal such as composting, and some indication of willingness to pay for such programs. One area for concern should be the low percentage who report recycling waste oil. Further study is indicated to find out what is happening to waste oil generated in the Twin Cities area.

There appears to be a high level of public awareness of solid waste disposal issues and a good deal of support for measures that will reduce the use of landfills, including a willingness to pay for the development of alternatives to landfills and allowing more public control over the garbage collection system. Finally, energy conservation was an almost universally accepted concept among Twin Cities area residents.

Specific topics for additional research that would be a logical follow-up to this study include: testing the tolerance for and attitude toward more requirements for recycling, paying the costs for solutions to solid waste problems, and selecting disposal methods for garbage which cannot be recycled.

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

Introduction

Background

The results in this report are based on the 1984 Twin Cities Area Survey (TCAS'84) and the Low Income Survey (LIS'84). A short summary of these surveys and their methodology appears in Appendix A. The actual questions from the surveys and the corresponding percentages are included as Appendix B. In referring to Appendix B, care must be taken to distinguish between percentages of the total sample and percentages of a portion of the sample, since not all questions were asked of each respondent. Finally, tables which are discussed in this report appear in Appendix C. The crosstabular analyses for this report were done only on the responses of the Twin Cities Area Survey respondents, although the percentaged responses for the Low Income Survey are sometimes noted in the text and are shown in Appendix B. In addition, the tables for this report are based on household, or unweighted, data. Analyses which were done but showed no significant results are not presented here, but are available on request.

Further details may be found in the MCSR Technical Report 85-1, Codebook and Methods of the 1984 Twin Cities Area Survey.

Objectives

This portion of the public policy section of the 1984 Twin Cities Area Survey dealt with three topics: recycling behavior, solid waste disposal, and energy conservation. It was developed with the assistance of a group of local government staff persons actively working in the areas of energy conservation and solid waste disposal. The group had a high level of technical knowledge about the subject areas, and developed the topics and questions for the survey in order to gather information which would help them with their immediate tasks, such as designing and implementing recycling programs, meeting state mandates to end reliance on landfilling, and developing a system for burning garbage to recover energy.

Despite the fact that the group represented various jurisdictions in the Twin Cities area, they developed a common set of questions which were asked of all respondents, reflecting the metropolitan nature of the concerns dealt with in this portion of the survey. The responses to the questions asked in this section were analyzed by age, sex, location, income, education, housing tenure, household composition, presence of curb/alley pickup programs and responses to other questions in the section.

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Recycling Behavior

The first series of questions focused on the specific recycling activities of the respondent; whether they recycled at all, what and where they recycled, how frequently, and if they did not recycle, why they didn't.

Who Recycles (Questions E1, E1d)

Sixty-two percent of the general population sample and 52% of the low income sample said they had recycled at least some portion of their household trash in the past year. The percentage of those who said they recycled was about the same across the Twin Cities area (Table 1). The incidence of recycling, that is, the percentage of households reporting they recycled some portion of their household trash in the past year, was the same whether or not a curb or alley pickup program was operating in the municipality in which the household was located (Table 13). Persons living in areas with curb or alley pickup programs did recycle more frequently, however, as discussed in the next sections.

The significant determinants of recycling behavior were age and income. For the purposes of analysis, the respondents were divided into three age categories, those born before the baby boom, those born during the baby boom (1946-1959), and those born in 1960 or later. About the same percentage of those born pre-boom (61%) and during the baby boom (63%) recycled, but only 46% of those born since 1960 recycled (Table 2). Married people tended to recycle more than those who were unmarried (Table 3), and homeowner households recycled more than households which rented (Table 4). Further, there was a positive relationship between amount of income and whether a household recycled: the higher the income, the greater the likelihood of recycling (Table 5).

Of those who did not recycle, both the general population and the low income population ranked the reasons in the following order: too much trouble, other, not enough recyclables, not enough information, no convenient place to recycle, and bad experiences with recycling. Those who didn't recycle, in addition to the reasons already indicated, made a variety of responses recorded in the "other" category. An analysis of their verbatim responses showed there were three main reasons indicated. They were: specific problems with storage, living situation or some other personal factor; a general lack of awareness, "never thought of it" was a recurring answer; and the notion that the respondent's responsibility was over once they put the trash out or down the chute, if the government or someone else wanted to recycle it, they should do it.

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Frequency and Amount of Recycling (Questions E1b, E1c)

While a majority of households in the Twin Cities Area (62%) recycled at least some portion of their household trash in the last year, 64% of these households recycled only every 2 - 3 months or less often (Table 6). A more significant finding is that 50% of those who recycled reported recycling only one item, 28% reported recycling two items, and only 4% said they recycled four items or more (Table 7). Not surprisingly, there is a positive association between the number of items recycled and the frequency of recycling; the more items recycled, the more frequent recycling tended to be. For example, 62% of those who reported recycling three items recycled once a month or more, while only 28% of those who recycled one item recycled that often (Table 8).

People who lived in Minneapolis and St. Paul tended to recycle more frequently than other Twin Citians, and persons living in areas with curb or alley pickup programs recycled more frequently than those living in areas which did not have such programs (Tables 9,10). Since both Minneapolis and St. Paul have curb or alley pickup programs, these results are probably inter-related (Table 11). Although persons with curb or alley pickup programs available tended to recycle more frequently, approximately the same percentage of persons who did not recycle said it is too much trouble, whether or not they lived in an area with curbside pickup (Table 12).

Recycling Methods and Items Recycled (Questions E1a, E1b)

Of the general population, including those who did not recycle, 31% had used recycling centers, 13% had used curb or alley pickup programs, and 22% had been involved in other types of recycling programs. An examination of the types of recycling mentioned in the "other" category indicated that a good deal of informal recycling took place; paper drives and bins at stores and other drop-off locations, collections by churches and civic organizations, and the giving of recyclables to children and others who do recycle were frequently mentioned.

The most commonly recycled items, in order of percentage of persons reporting recycling the item, are metal, paper, and glass, with "other" and waste oil mentioned, but far less frequently. The only variation in item recycling was that areas which did not have curb and alley pickup programs had a lower incidence of paper and glass recycling, as discussed below.

An important consideration in the analysis of recycling behavior is the effect of the presence of curb or alley pickup programs. About forty percent of Twin Citians lived in cities which had curbside pickup programs, 27% in Hennepin County, 13% in Ramsey County. Cities with curbside pickup had the same percentage of households reporting recycling some portion of their household trash in the last year as cities that didn't have pickup programs (Table 13). However, those who lived in cities with curbside pickup tended to recycle somewhat more frequently. For example, 38% of those who lived in cities with curbside pickup in Hennepin County recycled once a month, while only 18% of those who lived in areas without curbside pickup recycled this often (Table 14).

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There was variation in the use of available pickup programs between Hennepin and Ramsey counties. Twice as many Hennepin County residents reported using curbside pickup programs as those who lived in Ramsey County, which may be accounted for partly by the extent of coverage of the area by programs (Table 15). However, a general pattern of a higher level of use for areas in Hennepin County which have curb or alley pickup programs holds across all frequency of recycling categories (Table 16).

The presence of curb or alley pickup programs did have an apparent effect on the types of items recycled. Eighty-five percent of those who recycled using curb or alley pickup programs reported recycling paper materials, whereas only 47% of those using recycling centers mentioned paper (Tables 17-18). Sixty-four percent of those indicating "other" ways of recycling reported recycling paper (Table 19). As mentioned earlier, Boy Scout, school and church paper drives and bin drop-offs were frequently mentioned paper recycling methods. Glass was also most frequently recycled through curb or alley pickup programs. Sixty-one percent of those using these programs reported recycling glass, but only 27% and 18% using recycling centers and "other" methods recycled glass (Tables 20-22). Metal and cans, the most frequently recycled items, were recycled by 89% of those using recycling centers and about 70% of those using curb or alley pickup programs and "other" methods (Tables 23-25).

Recycling Grass Clippings and Leaves (Questions E3a, E3a1, E4a, E4a1)

Since grass clippings and leaves constitute a significant portion of the material going into landfills, several questions were asked regarding the generation and disposal of grass clippings and leaves, and willingness to change disposal behavior. An interesting finding regarding the general population sample is that of those who put grass clippings in the garbage (32% of those who generate grass clippings) 92% would save them for pickup by an independent collection service if this would reduce the need for landfills. Forty-two percent of those who said they would save their clippings would also be willing to pay a fee for this service. The findings for the low income sample are similar, except that only 31% said they would be willing to pay. It is significant, however, that close to a third of low income respondents who were willing to save their clippings indicated a willingness to bear additional expense to reduce the need for landfills.

A higher percentage of households that rake leaves dispose of them as garbage, but almost all said they would save them for an independent pickup. Of those who would save their leaves, almost half in the general population and a third in the low income sample indicated that they would be willing to pay for the service. Older persons tended to be more willing to pay to have grass clippings and leaves picked up to limit the need for new landfills (Tables 26,27).

The major variation in grass clipping and leaf disposal across counties was that Hennepin County residents tended to put the material in the garbage more than Ramsey County residents or the residents of other metro counties (Tables 28,29).

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Attitudes Toward Mandatory Recycling (Question E2)

On the general questions of support for a requirement for garbage separation and recycling (mandatory recycling) 80 percent of the general population supported such a requirement, with over 40 percent of both the general and low income samples indicating strong support. Elderly people were more likely than younger people to support mandatory recycling; 48% of those born before the baby boom expressed strong support for such a law while only 28% of those born after the baby boom expressed similar support (Table 30).

Solid Waste Disposal

Awareness of Plans to Burn Garbage (Questions E5, E5a, E5b)

A corollary to reducing the use of landfills is the development of new ways to dispose of garbage. Only a portion of the garbage generated can be recycled, so in addition to increasing the amount of trash recycled, other disposal technologies must be developed. Burning garbage for resource recovery is one method slated for implementation in the Twin Cities area, a plan which is not without controversy. A series of questions were asked which tested the level of awareness of the issue, attitudes toward the importance of the shift to other disposal methods, and willingness to pay for the development of new disposal technology.

Sixty-five percent of the general population sample and 55% of the low income sample had read or heard about county government plans to burn garbage to recover energy. Most had learned about the issue from television or by reading newspapers. Of those who had heard about county plans for garbage burning, 43% of the general population felt they had enough or too much information about the plans, while 54% has less information than they wanted. The rest did not know if they had enough information. In Hennepin County, about half the respondents (52%) who had heard about the plans said they had less information than they wanted about county plans to burn garbage; about the same as the five metro counties outside of Hennepin and Ramsey. By comparison, 64% of Ramsey County residents said they had less information than they wanted (Table 31).

Alternative Disposal Methods (Questions E6, E7, E8, E8a)

In response to a question regarding preference for solid waste disposal alternatives, with more than one response being allowed, only 20% of the general population and 17% of the low income population selected landfilling as one of their preferred alternatives. The corresponding figures for recycling were 67% and 61%, respectively. Burning was selected as a preferred alternative by 44% of the general population and 43% of the low income group. Of those who favored burning garbage, 53% also favored recycling; of those who did not favor burning, 84% favored recycling (Table 32).

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Ninety-three percent of the general population sample and 89% of the low income sample felt that developing ways to limit the need for landfills was important. Well over half of both samples thought it was very important. Persons in the Twin Cities area were very similar in their opinions about how important it is to limit the need for new landfills regardless of whether they own or rent their housing unit (Table 33). Over 60% of both homeowners and renters thought it was very important, and another 30% thought it was at least somewhat important.

Further, 67% of the general population and 47% of the low income population indicated a willingness to pay more than the current \$90 per year per household for garbage collection/landfilling to develop new disposal methods which are alternatives to landfills. Those below the age of 60 were more willing to pay to reduce the need for new landfills than those aged 60 or more, with the baby boomers more willing to pay than the pre- or post-boom generations (Tables 34,35). Those with higher incomes and more education indicated more willingness to pay to develop ways to reduce the need for new landfills than other respondents (Tables 36,37). In response to being asked how much they would be willing to pay, most picked the second lowest (\$10-25 per year) rather than the lowest cost category proposed.

Control Over the Garbage Collection System (Questions E9, E9a, E9a1)

About half (52%) of the residents of the Twin Cities area selected the garbage collection firm which picks up their garbage. Many local energy experts feel that if garbage collection is controlled by the municipalities, rather than residents having individual arrangements with a group of independent haulers, it will be easier to control the system and facilitate resource recovery; both the separate pickup of recyclables and the hauling of garbage to energy recovery plants.

Survey results show there was broad-based support for municipal control, with 77% of those respondents who now select their garbage hauler willing to let the city decide, although some agree only if it reduces their cost. There was a small minority, about 11% of the population, or about 20% of those respondents who selected their garbage hauler, who felt strongly that they wanted to retain the choice. This group should be studied further to see if their concerns could be addressed during any conversions to municipally controlled garbage collection systems.

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Energy Conservation

Attitudes Toward Energy Conservation (Question E10)

When asked the more general questions about how serious the need is for the country to save energy, 96% of the general population and 94% of the low income sample responded that the need to save energy was serious. Almost two-thirds of both samples said they felt it was very serious. Persons living in Hennepin and Ramsey counties were slightly more likely to say the need was very serious than those in the other five counties (Table 38). In addition, elderly persons tended to have a stronger opinion about the importance of saving energy than younger persons (Table 39).

Thermostat Settings (Question E11)

As a check of the results of the energy opinion question, some questions were asked about thermostat settings, to see if behavior was consistent with opinion. Of those who had heat thermostats, 77% of the general population and 65% of the low income sample kept their thermostats set at 68 degrees or less. A closer examination of thermostat settings by income showed that 60-66% of those households with incomes below \$20,000 per year kept their thermostats set at 68 degrees or less during the day, whereas about 80% of those with incomes above \$20,000 reported this setting (Table 40). This was because elderly people tended to keep their homes warmer (Table 41). Elderly persons with incomes under \$20,000 per year were least likely to turn down their thermostats (Table 42). Finally, 61% of the general population households and 53% of the low income households who had thermostats usually turned them down at night.

Conclusion

All three major topic areas of this survey, recycling, solid waste disposal and energy conservation, produced significant information for analysis.

In order to increase the number of people who recycle, and the frequency and amount of recycling, it will be necessary to target those age and income groups which are below average in recycling activity. The information about why people do not recycle points to the need for public education to promote recycling, improvements in the convenience of recycling programs and increased requirements for recycling, for which there is strong public support. Extension of curb or alley pickup programs would increase the frequency of recycling and increase recycling of glass, according to these survey results. It also appears that there is public acceptance for programs to collect grass clippings and leaves for alternative disposal such as composting, and some indication of willingness to pay for such programs.

One area for concern should be the low percentage who report recycling waste oil. Further study is indicated to find out what is happening to waste oil generated in the Twin Cities area.

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

There appears to be a high level of public awareness of solid waste disposal issues and a good deal of support for measures that will reduce the use of landfills, including a willingness to pay for the development of alternatives to landfills and allowing more public control over the garbage collection system. Specific topics for additional research that would be a logical follow-up to this study include: testing the tolerance for and attitude toward more requirements for recycling, paying the costs for solutions to solid waste problems, and selecting disposal methods for garbage which cannot be recycled.

Energy conservation appears to be an idea which is almost universally accepted, and which a majority of the public say they support with conservation activity, such as lowered thermostat settings. This wide public acceptance could provide a base for public education efforts for specific conservation measures and programs.

Finally, Twin Citians are generally homogenous in their behavior and attitudes concerning the energy and environment issues examined in this survey. Most differences can be explained by the expected characteristics of different groups; for example, persons with higher incomes would be expected to be more willing to pay for services than those with lower incomes. The major findings are the high level of consciousness concerning these issues and the significant support for alternative measures.

APPENDIX A: METHODOLOGY

A BRIEF SUMMARY OF THE TCAS'84 AND LIS'84 METHODOLOGY

Twin Cities Area Survey (TCAS'84)

The 1984 Twin Cities Area Survey (TCAS'84) was an omnibus survey of adults age 18 and over, who reside in the seven county Minneapolis/St. Paul metropolitan area. TCAS'84 was conducted October through December 1984 by the Minnesota Center for Social Research (MCSR), a research unit within the Department of Sociology, University of Minnesota. The survey consisted primarily of telephone interviews, which were supplemented by field interviews for households that could not be reached by telephone.

Low Income Survey (LIS'84)

TCAS'84 was complemented by a special survey of 974 low income persons which was called the Low Income Survey (LIS). LIS contained identical questions to TCAS'84 on most topics, including housing, human services, economy and employment, and energy and environment. The Low Income Survey respondents were persons with household incomes below certain levels that were established by household size. For example, a household of four members had to have an annual 1983 income that was below \$17,000 to be eligible for inclusion in the Low Income Survey.

Sampling Design

Selection of respondents occurred in two stages: first a household in the Twin Cities seven county metropolitan area was randomly selected; then a person was randomly selected for interviewing from within the household. These sampling procedures guaranteed that every household in the Twin Cities area had an equal chance to be included in the survey, and that once the household was sampled, every adult had an equal chance of being selected. The TCAS sample had two components: the panel (persons who had been interviewed in the preceding year and who had agreed to be interviewed again) and the panel replacements (persons selected at random from the seven county population). The Low Income Survey consisted of persons screened for income eligibility from a general random sample of over 6,000 households.

Sampling Error

The margin of error for a simple random sample of the size of the Twin Cities Area Survey may be as high as plus or minus three percent, depending on the distribution of sample responses. This sampling error presumes the conventional 95% degree of desired confidence, which is equivalent to a "significance level" of .05.

The importance of sample size in estimating sampling error also needs to be mentioned, since many of the organizations using the TCAS'84 and LIS'84 data will be interested in subgroups, rather than the total sample of 1,000 completed interviews. Essentially, as the size of the sample decreases, there is a corresponding increase in the estimated sampling error. For example, for a subset of 200 persons the estimated error may be as high as plus or minus seven percent.

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APPENDIX B: PERCENTAGED RESPONSES TO QUESTIONS

E. ENERGY AND ENVIRONMENT

The next few questions are about recycling and energy conservation.

El. Did you recycle <u>any</u> portion of your household trash during the past 12 months?	Yes.	1	<u>TC%</u>	<u>LI%</u>
	No	2	62	52
	(IF NO, GO TO E1d)		38	48

E1a. (IF YES) Where did you take things for recycling ... the curb or alley, a recycling center, or somewhere else?
 (CIRCLE ALL MENTIONS)

	Yes	No	DK	RA	NA	ROW TOTAL	
	1	2	8	9	0		
E1a. The curb or alley .	13	48	0	0	38	100%	TC
	12	39	1	0	48	100%	LI
E1b. Recycling center. .	31	30	0	0	38	100%	TC
	24	27	1	0	48	100%	LI
E1c. Other (SPECIFY) . .	22	39	0	0	38	100%	TC
	16	35	1	0	48	100%	LI

E1b. (IF YES) What kinds of items did you recycle?
 (CIRCLE ALL MENTIONS, DO NOT READ LIST)

	Yes	No	DK	RA	NA	ROW TOTAL	
	1	2	8	9	0		
E1b1. Paper; cardboard; magazines.	36	26	0	0	38	100%	TC
	24	27	0	0	48	100%	LI
E1b2. Glass	18	43	0	0	38	100%	TC
	16	36	0	0	48	100%	LI
E1b3. Metal; cans	49	13	0	0	38	100%	TC
	43	9	0	0	48	100%	LI
E1b4. Oil.	2	59	0	0	38	100%	TC
	1	50	0	0	48	100%	LI
E1b5. Other (SPECIFY).	3	59	0	0	38	100%	TC
	3	49	0	0	48	100%	LI

E1c. (IF YES) In general, did you recycle things more often than once a month, once a month, once every two to three months, or less often than that? (IF RECYCLE, GO TO E2)	More than once/month. . .	1	<u>TC%</u>	<u>LI%</u>
	Once a month.	2	6	8
	Every 2-3 months.	3	16	15
	Less often.	4	22	15
	DK	8	18	13
	NA	0	0	1
			38	48

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Eld.	(IF NO TO 1) Why did you <u>not</u> recycle? NOT READ LIST)	(CIRCLE ALL MENTIONS, DO NOT READ LIST)					ROW TOTAL
		Yes	No	DK	RA	NA	
		1	2	8	9	0	
Eld1	Too much trouble	12	24	2	0	62	100% TC
		14	33	2	0	52	100% LI
Eld2	Don't know how/where	5	31	2	0	62	100% TC
		9	37	2	0	52	100% LI
Eld3	Not enough recyclables	6	30	2	0	62	100% TC
		11	36	2	0	52	100% LI
Eld4	Had bad experience with recycling.	0	36	2	0	62	100% TC
		1	43	2	0	52	100% LI
Eld5	No convenient place to take it . .	5	32	2	0	62	100% TC
		4	43	2	0	52	100% LI
Eld6	Other (SPECIFY)	11	25	2	0	62	100% TC
		14	32	2	0	52	100% LI

		<u>TC%</u>	<u>LI%</u>
E2.	Some cities and states require people to separate and recycle things that can be recycled. Would you strongly support, slightly support, slightly oppose, or strongly oppose such a requirement?		
	Strongly support	41	41
	Slightly support	39	37
	Slightly oppose	12	12
	Strongly oppose	6	6
	DK	2	5

		<u>TC%</u>	<u>LI%</u>
E3.	Does anyone in your household cut the grass?		
	Yes	82	53
	No	18	47
	(IF NO, GO TO E4)		

		<u>TC%</u>	<u>LI%</u>
E3a.	(IF YES) Are the clippings usually left on the ground, composted, or put out with the garbage?		
	Left on ground	37	22
	Composted	17	10
	(IF LEFT OR COMPOST, GO TO E4)		
	Garbage	26	20
	NA	18	48

		<u>TC%</u>	<u>LI%</u>
E3a1	(IF GARBAGE) Would you save your clippings for pickup by an independent collection service if this would reduce the need for landfills?		
	Yes	24	16
	No	2	3
	(IF NO, GO TO E4)		
	DK	1	1
	NA	74	80

		<u>TC%</u>	<u>LI%</u>
E3ala	(IF YES) Would you be willing to pay an additional fee for this service?		
	Yes	10	5
	No	13	11
	DK	1	1
	NA	76	84

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E4.	Does anyone in your household rake the leaves in the fall?	Yes 1						<u>TC%</u>	<u>LI%</u>
		No 2						69	47
		(IF NO, GO TO E5)						31	53
E4a.	(IF YES) Are they usually composted or put out with the garbage?	Composted 1						<u>TC%</u>	<u>LI%</u>
		(IF COMPOSTED, GO TO E5)						27	19
		Garbage 2						40	26
		Both 3						1	1
		DK 8						0	1
		NA 0						31	53
E4a1	(IF GARBAGE) Would you save your leaves for pickup by an independent collection service if this would reduce the need for landfills?	Yes 1						<u>TC%</u>	<u>LI%</u>
		No 2						37	23
		(IF NO, GO TO E5)						3	2
		DK 8						1	1
		NA 0						60	74
E4ala	(IF YES) Would you be willing to pay a fee for this service?	Yes 1						<u>TC%</u>	<u>LI%</u>
		No 2						17	7
		DK 8						18	14
		NA 0						2	1
								63	77
E5.	Have you read or heard about county government plans to burn garbage to recover energy in the Twin Cities Area?	Yes 1						<u>TC%</u>	<u>LI%</u>
		No 2						65	55
		(IF NO, GO TO E6)						35	45
		DK 8						0	1
E5a.	(IF YES) Where did you hear about it? (CIRCLE ALL MENTIONS, DO NOT PROBE)	Yes	No	DK	RA	NA			
		1	2	8	9	0			ROW TOTAL
E5a1	Television . . .	30	34	0	0	35	100%	TC	
		27	27	1	0	45	100%	LI	
E5a2	Newspaper . . .	44	21	0	0	35	100%	TC	
		29	25	1	0	45	100%	LI	
E5a3	Radio	6	58	0	0	35	100%	TC	
		4	50	1	0	45	100%	LI	
E5a4	Public meeting .	1	63	0	0	35	100%	TC	
		1	53	1	0	45	100%	LI	
E5a5	Other (SPECIFY).	6	58	0	0	35	100%	TC	
		7	47	1	0	45	100%	LI	
E5b.	(IF YES) Would you say that the information you have about these plans is more than you want, about right, or less than you want?	More than want . . 1						<u>TC%</u>	<u>LI%</u>
		About right . . . 2						2	3
		Less than want . . 3						26	25
		DK 8						35	23
		NA 0						2	4
								35	45

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

E6. Local governments can dispose of garbage by burying it in landfills, recycling, or burning. Which one or combination of these would you prefer?
(CIRCLE ALL MENTIONS, DO NOT READ LIST)

	Yes 1	No 2	DK 8	RA 9	NA 0	ROW TOTAL
E6a. Landfilling.	20	76	4	0	0	100% TC
	17	76	6	0	1	100% LI
E6b. Recycling.	67	29	4	0	0	100% TC
	61	33	6	0	0	100% LI
E6c. Burning.	44	52	4	0	0	100% TC
	43	51	6	0	0	100% LI

		TC%	LI%
E7. Do you think that developing ways to limit the need for new landfills is very important, somewhat important, not very important, or not at all important?	Very important	60	57
	Somewhat important	33	32
	Not very important	3	4
	Not important.	1	2
	DK	3	5

		TC%	LI%
E8. It now costs about \$90 per year per household to collect garbage and bury it in landfills. Would you be willing to pay any <u>more</u> than you do now so that new ways of disposing of garbage can be used rather than using landfills?	Yes.	67	47
	NO	29	44
	(IF NO, GO TO E9) DK	4	8

		TC%	LI%
E8a. (IF YES) How much more would you be willing to pay each year ... less than \$10, \$10 to \$25, \$25 to \$50, or more than \$50?	Less than \$10.	11	13
	\$10 to \$25	40	24
	\$25 to \$50	11	5
	More than \$50.	5	3
	DK	1	3
	NA	33	52

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

		<u>TC%</u>	<u>LI%</u>
E9. Do you decide which hauling firm collects your garbage or does the city decide?	Respondent decides 1	52	22
	City decides . . . 2	36	50
	Landlord decides . 3	8	21
	(IF CITY OR LANDLORD DECIDES, GO TO E10)		
	DK . . . 8	4	7

		<u>TC%</u>	<u>LI%</u>
E9a. (IF RESPONDENT DECIDES) Would you be willing to let your city decide which firm collects your garbage if it did not affect your cost for garbage collection?	Yes. 1	34	15
	(IF YES, GO TO E10)		
	No 2	18	7
	DK 8	1	1
	NA 0	47	77

		<u>TC%</u>	<u>LI%</u>
E9a1 (IF NO) Would you be willing to let your city decide if it <u>reduced</u> your cost for garbage collection?	Yes. 1	6	3
	No 2	11	4
	DK 8	1	0
	NA 0	82	93

The next few questions are about energy conservation.

		<u>TC%</u>	<u>LI%</u>
E10. In your opinion, how serious is the need for this country to save energy? Is it very serious, somewhat serious, not too serious, or not at all serious?	Very serious . . . 1	64	67
	Somewhat serious . 2	32	27
	Not too serious. . 3	2	2
	Not at all serious 4	1	1
	DK 8	1	2

		<u>TC%</u>	<u>LI%</u>
E11. Do you have a heat thermostat in your home?	Yes. 1	96	89
	No 2	4	11
	(IF NO, GO TO NEXT SECTION)		

		<u>TC%</u>	<u>LI%</u>
E11a. (IF YES) In the daytime during the winter, is your thermostat set at 68 degrees or less, or is it above 68 degrees?	68 or less 1	74	58
	Above 68 2	21	29
	DK 8	1	2
	NA 0	4	11

		<u>TC%</u>	<u>LI%</u>
E11b. (IF YES) At night, does someone usually turn down the thermostat?	Yes. 1	59	47
	No 2	36	41
	(IF NO, GO TO NEXT SECTION)		
	DK 8	0	1
	NA 0	4	12

E11b1. (IF YES) What temperature is it turned down to?	Temperature _____		See App. A for results on E11b.
	DK88		
	RA99		
	NA00		

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

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SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

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SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

- - - **CROSSTABS** - - -

**TABLE 1. E1 RECYCLE ANY PORTION OF TRASH IN PAST YEAR
BY MSPAREA COUNTY, CITY RESIDE IN**

COUNT COL PCT	MSPAREA					ROW TOTAL
	HENN & MPLS 1.	HENN NOT MPLS 2.	RAMSEY, ST. PAUL 3.	RAMSEY, NOT ST. PAUL 4.	OTHER 5.	
E1						
1.	152	171	78	59	182	642
YES	58.9	61.3	59.1	70.2	58.7	60.4
2.	106	108	54	25	128	421
NO	41.1	38.7	40.9	29.8	41.3	39.6
COLUMN	258	279	132	84	310	1063
TOTAL	24.3	26.2	12.4	7.9	29.2	100.0

RAW CHI SQ = 4.19426 WITH 4 D.F., SIG. = .3804

MISSING OBSERVATIONS - 1

**TABLE 2. E1 RECYCLE ANY PORTION OF TRASH IN PAST YEAR
BY BOOMERS YEAR OF BIRTH BEFORE, AFTER DURING BABY**

COUNT COL PCT	BOOMERS			ROW TOTAL
	BORN PRE-BOOM 1.	BOOMERS- '46-'59 2.	BORN IN 60 3.	
E1				
1.	325	273	44	642
YES	60.9	62.9	46.3	60.4
2.	209	161	51	421
NO	39.1	37.1	53.7	39.6
COLUMN	534	434	95	1063
TOTAL	50.2	40.8	8.9	100.0

RAW CHI SQ = 9.06287 WITH 2 D.F., SIG. = .0108

MISSING OBSERVATIONS - 1

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

TABLE 3A. E1 RECYCLE ANY PORTION OF TRASH IN PAST YEAR
BY BOOMERS YEAR OF BIRTH BEFORE, AFTER DURING BABY

CONTROLLING FOR..
I5 LEGALLY MARRIED OR SINGLE?
VALUE 1. MARRIED

		BOOMERS			ROW TOTAL
COUNT COL	PCT	BORN PRE-BOOM 1.	BOOMERS- '46-'59 2.	BORN IN '60- 3.	
E1					
YES	1.	230 66.1	193 66.8	13 44.8	436 65.5
NO	2.	118 33.9	96 33.2	16 55.2	230 34.5
	COLUMN TOTAL	348 52.3	289 43.4	29 4.4	666 100.0

RAW CHI SQ = 5.74537 WITH 2 D.F., SIG. = .0565

TABLE 3B. E1 RECYCLE ANY PORTION OF TRASH IN PAST YEAR
BY BOOMERS YEAR OF BIRTH BEFORE, AFTER DURING BABY

CONTROLLING FOR..
I5 LEGALLY MARRIED OR SINGLE?
VALUE 2. SINGLE

		BOOMERS			ROW TOTAL
COUNT COL	PCT	BORN PRE-BOOM 1.	BOOMERS- '46-'59 2.	BORN IN '60- 3.	
E1					
YES	1.	94 51.1	80 55.2	31 47.0	205 51.9
NO	2.	90 48.9	65 44.8	35 53.0	190 48.1
	COLUMN TOTAL	184 46.6	145 36.7	66 16.7	395 100.0

RAW CHI SQ = 1.31338 WITH 2 D.F., SIG. = .5186

MISSING OBSERVATIONS - 3

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

**TABLE 4. E1 RECYCLE ANY PORTION OF TRASH IN PAST YEAR
BY B2 OWN OR RENT HOUSING UNIT**

	COUNT COL PCT	B2		ROW TOTAL
		OWN	RENT	
		1.	2.	
E1				
YES	1.	510 64.7	131 48.0	641 60.4
NO	2.	278 35.3	142 52.0	420 39.6
	COLUMN TOTAL	788 74.3	273 25.7	1061 100.0
CORRECTED CHI SQ =		23.05039 1 D.F., SIG. = .0000		
RAW CHI SQ =		23.74502 1 D.F., SIG. = .0000		
MISSING OBSERVATIONS -		3		

**TABLE 5. E1 RECYCLE ANY PORTION OF TRASH IN PAST YEAR
BY INCOME10**

	COUNT COL PCT	INCOME10				ROW TOTAL
		10K OR UNDER 10.	10-20K 20.	20-30K 30.	30-40K 40.	
E1						
YES	1.	56 48.3	106 52.5	183 62.0	125 67.9	603 60.9
NO	2.	60 51.7	96 47.5	112 38.0	59 32.1	387 39.1
	COLUMN TOTAL	116 11.7	202 20.4	295 29.8	184 18.6	990 100.0
(CONTINUED)						

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

**TABLE 5. E1 RECYCLE ANY PORTION OF TRASH IN PAST YEAR
BY INCOME10**

E1	COUNT COL PCT	INCOME10		ROW TOTAL
		40-50K	50K+	
		50.	60.	
YES	1.	59 64.8	74 72.5	603 60.9
NO	2.	32 35.2	28 27.5	387 39.1
	COLUMN TOTAL	91 9.2	102 10.3	990 100.0

RAW CHI SQ = 24.82477 WITH 6 D.F., SIG. = .0004

MISSING OBSERVATIONS - 74

- - - FREQUENCIES - - -

**TABLE 6.
REFREQ FREQUENCY OF RECYCLING, E1C RECODED**

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
MORE THAN ONCE A MONTH	1.	65	6.1	10.2	10.2
1 PER MONTH	2.	163	15.3	25.5	35.7
EVERY 2-3 MON.	3.	220	20.7	34.4	70.1
LESS OFTEN	4.	191	18.0	29.9	100.0
NEVER	5.	422	39.7	MISSING	
	8.	3	.3	MISSING	
	TOTAL	1064	100.0	100.0	

VALID CASES 639 MISSING CASES 425

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

TABLE 7.
NRECYCLE NUMBER OF ITEMS HOUSEHOLD RECYCLES

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
	1.	324	30.5	50.5	50.5
	2.	179	16.8	27.9	78.5
	3.	114	10.7	17.8	96.3
4 OR MORE	4.	24	2.3	3.7	100.0
	0	423	39.8	MISSING	
	TOTAL	1064	100.0	100.0	

VALID CASES 641 MISSING CASES 423

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

- - - CROSSTABS - - -

TABLE 8. RECFREQ BY NRECYCLE FREQUENCY OF RECYCLING, E1C RECODED
BY NRECYCLE NUMBER OF ITEMS HOUSEHOLD RECYCLES

COUNT COL PCT	NRECYCLE				ROW TOTAL
	1.	2.	3.	4 OR MORE 4.	
RECFREQ					
1. MORE THAN ONCE A MONTH	23 7.1	20 11.2	17 15.0	5 20.8	65 10.2
2. ONCE PER MONTH	66 20.4	34 19.0	53 46.9	10 41.7	163 25.5
3. EVERY 2-3 MONTHS	109 33.7	73 40.8	29 25.7	9 37.5	220 34.4
4. LESS OFTEN	125 38.7	52 29.1	14 12.4	0 0	191 29.9
COLUMN TOTAL	323 50.5	179 28.0	113 17.7	24 3.8	639 100.0

RAW CHI SQ = 69.33357 WITH 9 D.F., SIG. = .0000

MISSING OBSERVATIONS - 425

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

**TABLE 9. E1C FREQUENCY OF RECYCLING
BY MSPAREA COUNTY, CITY RESIDE IN**

COUNT COL PCT	MSPAREA					ROW TOTAL
	HENN & MPLS	HENN NOT MPLS	RAMSEY, ST.PAUL	RAMSEY, NOT ST.PAUL	OTHER	
	1.	2.	3.	4.	5.	
E1C						
1. MORE THAN ONCE A MONTH	16 10.6	22 12.9	9 11.7	4 6.8	14 7.7	65 10.2
2. ONCE A MONTH	56 37.1	38 22.4	26 33.8	13 22.0	30 16.5	163 25.5
3. EVERY 2-3 MONTHS.	46 30.5	59 34.7	23 29.9	22 37.3	70 38.5	220 34.4
4. LESS OFTEN	33 21.9	51 30.0	19 24.7	20 33.9	68 37.4	191 29.9
COLUMN TOTAL	151 23.6	170 26.6	77 12.1	59 9.2	182 28.5	639 100.0

RAW CHI SQ = 29.83556 WITH 12 D.F., SIG. = .0030

MISSING OBSERVATIONS - 425

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

**TABLE 10. E1C FREQUENCY OF RECYCLING
BY CURB AREAS WITH OPERATING PICKUP PROGRAMS**

COUNT COL PCT	CURB				ROW TOTAL
	OTHER	HENN CO CITIES	RAMSEY CO CITIES	1. 2.	
E1C	0	1.	2.		
1. MORE THAN	36 9.4	20 11.5	9 10.7		65 10.2
2. ONCE A MON	70 18.4	66 37.9	27 32.1		163 25.5
3. EVERY 2-3	146 38.3	49 28.2	25 29.8		220 34.4
4. LESS OFTEN	129 33.9	39 22.4	23 27.4		191 29.9
COLUMN TOTAL	381 59.6	174 27.2	84 13.1		639 100.0

RAW CHI SQ = 29.73105 WITH 6 D.F., SIG. = .0000

MISSING OBSERVATIONS - 425

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

**TABLE 11A. E1C FREQUENCY OF RECYCLING
BY MSPAREA COUNTY, CITY RESIDE IN**

CONTROLLING FOR..

CURB AREAS WITH OPERATING PICKUP PROGRAMS
VALUE 0 OTHER

E1C	COUNT COL PCT	MSPAREA			ROW TOTAL
		HENN NOT MPLS	RAMSEY, NOT ST.PA	OTHER	
		2.	4.	5.	
MORE THAN	1. 18 12.2	4 7.7	14 7.7	36 9.4	
ONCE A MON	2. 28 19.0	12 23.1	30 16.5	70 18.4	
EVERY 2-3	3. 56 38.1	20 38.5	70 38.5	146 38.3	
LESS OFTEN	4. 45 30.6	16 30.8	68 37.4	129 33.9	
COLUMN TOTAL	147 38.6	52 13.6	182 47.8	381 100.0	

RAW CHI SQ = 4.26400 WITH 6 D.F., SIG. = .6410

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

**TABLE 11B. E1C FREQUENCY OF RECYCLING
BY MSPAREA COUNTY, CITY RESIDE IN**

CONTROLLING FOR..

CURB AREAS WITH OPERATING PICKUP PROGRAMS
VALUE 1. HENN CO CITIES

E1C	COUNT COL PCT	MSPAREA		ROW TOTAL
		HENN & M PLS	HENN NOT MPLS	
		1.	2.	
MORE THAN	1. 10.6	16 10.6	4 17.4	20 11.5
ONCE A MON	2. 37.1	56 37.1	10 43.5	66 37.9
EVERY 2-3	3. 30.5	46 30.5	3 13.0	49 28.2
LESS OFTEN	4. 21.9	33 21.9	6 26.1	39 22.4
	COLUMN	151	23	174
	TOTAL	86.8	13.2	100.0

RAW CHI SQ = 3.32724 WITH 3 D.F., SIG. = .3439

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

TABLE 11C. E1C FREQUENCY OF RECYCLING BY MSPAREA COUNTY, CITY RESIDE IN

CONTROLLING FOR.. CURB AREAS WITH OPERATING PICKUP PROGRAMS
 VALUE 2. RAMSEY CO CITIES

	MSPAREA			ROW TOTAL
	COUNT COL PCT	RAMSEY,S T.PAUL 3.	RAMSEY,N OT ST.PA 4.	
E1C				
1. MORE THAN	9 11.7	0 0	9 10.7	
2. ONCE A MON	26 33.8	1 14.3	27 32.1	
3. EVERY 2-3	23 29.9	2 28.5	25 29.8	
4. LESS OFTEN	19 24.7	4 57.1	23 27.4	
COLUMN TOTAL	77 91.7	7 8.3	84 100.0	

RAW CHI SQ = 4.04975 WITH 3 D.F., SIG. = .2561

MISSING OBSERVATIONS - 425

TABLE 12. E1D1 WHY NOT RECYCLE: TOO MUCH TROUBLE BY CURB AREAS WITH OPERATING PICKUP PROGRAMS

	COUNT COL PCT	CURB			ROW TOTAL
		OTHER 0	HENN CO CITIES 1.	RAMSEY CO CITIES 2.	
E1D1					
1. YES	79 33.2	36 31.9	15 28.8	130 32.3	
2. NO	159 66.8	77 68.1	37 71.2	273 67.7	
COLUMN TOTAL	238 59.1	113 28.0	52 12.9	403 100.0	

RAW CHI SQ = .38053 WITH 2 D.F., SIG. = .8267

MISSING OBSERVATIONS - 661

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

TABLE 13. E1 RECYCLE ANY PORTION OF TRASH IN PAST YEAR BY CURB AREAS WITH OPERATING PICKUP PROGRAMS

	COUNT COL PCT	CURB			ROW TOTAL
		OTHER	HENN CO CITIES	RAMSEY C O CITIES	
		0	1.	2.	
E1					
YES	1. 60.5	382 60.5	175 60.1	85 60.3	642 60.4
NO	2. 39.5	249 39.5	116 39.9	56 39.7	421 39.6
	COLUMN TOTAL	631 59.4	291 27.4	141 13.3	1063 100.0
RAW CHI SQ = .01426 WITH 2 D.F., SIG. = .9929					
MISSING OBSERVATIONS - 1					

TABLE 14. RECFREQ FREQUENCY OF RECYCLING, E1C RECODED BY CURB AREAS WITH OPERATING PICKUP PROGRAMS

	COUNT COL PCT	CURB			ROW TOTAL
		OTHER	HENN CO CITIES	RAMSEY CO CITIES	
		0	1.	2.	
RECFREQ					
MORE THAN ONCE A MONTH	1. 9.4	36 9.4	20 11.5	9 10.7	65 10.2
ONCE PER MONTH	2. 18.4	70 18.4	66 37.9	27 32.1	163 25.5
EVERY 2-3 MONTHS	3. 38.3	146 38.3	49 28.2	25 29.8	220 34.4
LESS OFTEN	4. 33.9	129 33.9	39 22.4	23 27.4	191 29.9
	COLUMN TOTAL	381 59.6	174 27.2	84 13.1	639 100.0
RAW CHI SQ = 29.73105 WITH 6 D.F., SIG. = .0000					
MISSING OBSERVATIONS - 425					

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

**TABLE 15. E1A1 WHERE RECYCLED: CURB OR ALLEY
BY COUNTY**

COUNT COL PCT	COUNTY			ROW TOTAL
	HENN	RAMSEY	OTHER	
	4.	5.	6.	
E1A1				
1.	112	19	11	142
YES	35.1	14.2	6.0	22.4
2.	207	115	171	493
NO	64.9	85.8	94.0	77.6
COLUMN	319	134	182	635
TOTAL	50.2	21.1	28.7	100.0

RAW CHI SQ = 62.94044 WITH 2 D.F., SIG. = .0000

MISSING OBSERVATIONS - 429

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

TABLE 16A. E1A1 WHERE RECYCLED: CURB OR ALLEY
BY COUNTY

CONTROLLING FOR...
REFCFREQ FREQUENCY OF RECYCLING, E1C RECODED
VALUE 1. MORE THAN ONCE A MONTH

	COUNT COL PCT	COUNTY			ROW TOTAL
		HENN	RAMSEY	OTHER	
		4.	5.	6.	
E1A1					
YES	1.	15 39.5	3 23.1	1 7.1	19 29.2
NO	2.	23 60.5	10 76.9	13 92.9	46 70.8
	COLUMN TOTAL	38 58.5	13 20.0	14 21.5	65 100.0

RAW CHI SQ = 5.46709 WITH 2 D.F., SIG. = .0650

TABLE 16B. E1A1 WHERE RECYCLED: CURB OR ALLEY
BY COUNTY

CONTROLLING FOR...
REFCFREQ FREQUENCY OF RECYCLING, E1C RECODED
VALUE 2. ONCE PER MONTH

	COUNT COL PCT	COUNTY			ROW TOTAL
		HENN	RAMSEY	OTHER	
		4.	5.	6.	
E1A1					
YES	1.	50 53.8	13 34.2	4 13.3	67 41.6
NO	2.	43 46.2	25 65.8	26 86.7	94 58.4
	COLUMN TOTAL	93 57.8	38 23.6	30 18.6	161 100.0

RAW CHI SQ = 16.38248 WITH 2 D.F., SIG. = .0003

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

**TABLE 16C. E1A1 WHERE RECYCLED: CURB OR ALLEY
BY COUNTY**

CONTROLLING FOR...
 RECFREQ FREQUENCY OF RECYCLING, E1C RECODED
 VALUE 3. EVERY 2-3 MONTHS

	COUNT COL PCT	COUNTY			ROW TOTAL
		HENN	RAMSEY	OTHER	
E1A1		4.	5.	6.	
YES	1.	30	2	3	35
		28.8	4.4	4.3	16.0
NO	2.	74	43	57	184
		71.2	95.6	95.7	84.0
COLUMN		104	45	70	219
TOTAL		47.5	20.5	32.0	100.0

RAW CHI SQ = 24.41021 WITH 2 D.F., SIG. = .0000

**TABLE 16D. E1A1 WHERE RECYCLED: CURB OR ALLEY
BY COUNTY**

CONTROLLING FOR...
 RECFREQ FREQUENCY OF RECYCLING, E1C RECODED
 VALUE 4. LESS OFTEN

	COUNT COL PCT	COUNTY			ROW TOTAL
		HENN	RAMSEY	OTHER	
E1A1		4.	5.	6.	
YES	1.	17	1	3	21
		20.5	2.7	4.4	11.2
NO	2.	66	36	65	167
		79.5	97.3	95.6	88.8
COLUMN		83	37	68	188
TOTAL		44.1	19.7	36.2	100.0

RAW CHI SQ = 13.05685 WITH 2 D.F., SIG. = .0015

MISSING OBSERVATIONS - 431

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

TABLE 17. E1B1 WHAT RECYCLED: PAPER MATERIAL
BY E1A1 WHERE RECYCLED: CURB OR ALLEY

	COUNT COL PCT	E1A1		ROW TOTAL
		YES	NO	
		1.	2.	
E1B1				
YES	1.	121 85.2	251 51.0	372 58.7
NO	2.	21 14.8	241 49.0	262 41.3
	COLUMN TOTAL	142 22.4	492 77.6	634 100.0
CORRECTED CHI SQ = 51.73939 1 D.F., SIG. = .0000				
RAW CHI SQ = 53.14028 1 D.F., SIG. = .0000				
MISSING OBSERVATIONS - 430				

TABLE 18. E1B1 WHAT RECYCLED: PAPER MATERIAL
BY E1A2 WHERE RECYCLED: RECYCLING CENTER

	COUNT COL PCT	E1A2		ROW TOTAL
		YES	NO	
		1.	2.	
E1B1				
YES	1.	147 47.3	225 69.7	372 58.7
NO	2.	164 52.7	98 30.3	262 41.3
	COLUMN TOTAL	311 49.1	323 50.9	634 100.0
CORRECTED CHI SQ = 31.84841 1 D.F., SIG. = .0000				
RAW CHI SQ = 32.76540 1 D.F., SIG. = .0000				
MISSING OBSERVATIONS - 430				

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

TABLE 19. E1B1 WHAT RECYCLED: PAPER MATERIAL
BY E1A3 WHERE RECYCLED: OTHER

	COUNT COL PCT	E1A3		ROW TOTAL
		YES	NO	
		1.	2.	
E1B1				
YES	1.	152 64.1	220 55.3	372 58.6
NO	2.	85 35.9	178 44.7	263 41.4
	COLUMN TOTAL	237 37.3	398 62.7	635 100.0
CORRECTED CHI SQ =		4.44625		1 D.F., SIG. = .0350
RAW CHI SQ =		4.80441		1 D.F., SIG. = .0284
MISSING OBSERVATIONS -		429		

TABLE 20. E1B2 WHAT RECYCLED: GLASS
BY E1A1 WHERE RECYCLED: CURB OR ALLEY

	COUNT COL PCT	E1A1		ROW TOTAL
		YES	NO	
		1.	2.	
E1B2				
YES	1.	87 61.3	102 20.7	189 29.8
NO	2.	55 38.7	390 79.3	445 70.2
	COLUMN TOTAL	142 22.4	492 77.6	634 100.0
CORRECTED CHI SQ =		84.61028		1 D.F., SIG. = .0000
RAW CHI SQ =		86.53673		1 D.F., SIG. = .0000
MISSING OBSERVATIONS -		430		

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

TABLE 21. E1B2 WHAT RECYCLED: GLASS
BY E1A2 WHERE RECYCLED: RECYCLING CENTER

		E1A2		ROW TOTAL
COUNT COL PCT	YES	NO		
		1.	2.	
E1B2				
YES	1.	84 27.0	105 32.5	189 29.8
NO	2.	227 73.0	218 67.5	445 70.2
	COLUMN TOTAL	311 49.1	323 50.9	634 100.0
CORRECTED CHI SQ =		2.03382 1 D.F., SIG. =		.1538
RAW CHI SQ =		2.28905 1 D.F., SIG. =		.1303
MISSING OBSERVATIONS -		430		

TABLE 22. E1B2 WHAT RECYCLED: GLASS
BY E1A3 WHERE RECYCLED: OTHER

		E1A3		ROW TOTAL
COUNT COL PCT	YES	NO		
		1.	2.	
E1B2				
YES	1.	42 17.7	147 36.9	189 29.8
NO	2.	195 82.3	251 63.1	446 70.2
	COLUMN TOTAL	237 37.3	398 62.7	635 100.0
CORRECTED CHI SQ =		25.31943 1 D.F., SIG. =		.0000
RAW CHI SQ =		26.23046 1 D.F., SIG. =		.0000
MISSING OBSERVATIONS -		429		

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

TABLE 23. E1B3 WHAT RECYCLED: METAL, CANS
BY E1A1 WHERE RECYCLED: CURB OR ALLEY

COUNT COL PCT	E1A1		ROW TOTAL
	YES	NO	
	1.	2.	
E1B3			
1.	100	395	495
YES	70.4	80.3	78.1
2.	42	97	139
NO	29.6	19.7	21.9
COLUMN	142	492	634
TOTAL	22.4	77.6	100.0
CORRECTED CHI SQ = 5.69827 1 D.F., SIG. = .0170			
RAW CHI SQ = 6.26115 1 D.F., SIG. = .0123			
MISSING OBSERVATIONS - 430			

TABLE 24. E1B3 WHAT RECYCLED: METAL, CANS
BY E1A2 WHERE RECYCLED: RECYCLING CENTER

COUNT COL PCT	E1A2		ROW TOTAL
	YES	NO	
	1.	2.	
E1B3			
1.	277	218	495
YES	89.1	67.5	78.1
2.	34	105	139
NO	10.9	32.5	21.9
COLUMN	311	323	634
TOTAL	49.1	50.9	100.0
CORRECTED CHI SQ = 41.83562 1 D.F., SIG. = .0000			
RAW CHI SQ = 43.08682 1 D.F., SIG. = .0000			
MISSING OBSERVATIONS - 430			

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

TABLE 25. E1B3 WHAT RECYCLED: METAL, CANS
BY FE1A3 WHERE RECYCLED: OTHER

COUNT COL PCT	E1A3			ROW TOTAL
	YES	NO		
	1.	2.		
E1B3				
1.	168	328		496
YES	70.9	82.4		78.1
	2.			
NO	69	70		139
	29.1	17.6		21.9
COLUMN	237	398		635
TOTAL	37.3	62.7		100.0
CORRECTED CHI SQ = 10.87730 1 D.F., SIG. = .0010				
RAW CHI SQ = 11.54157 1 D.F., SIG. = .0007				
MISSING OBSERVATIONS - 429				

TABLE 26. E3A1A CLIPPINGS PICKED UP: WILLING TO PAY FOR
BY BOOMERS YEAR OF BIRTH BEFORE, AFTER DURING BABY

COUNT COL PCT	BOOMERS				ROW TOTAL
	BORN PRE-BOOM	BOOMERS- '46-'59	BORN IN '60-		
	1.	2.	3.		
E3A1A					
1.	56	32	8		96
YES	50.5	32.3	44.4		42.1
	2.				
NO	55	67	10		132
	49.5	67.7	55.6		57.9
COLUMN	111	99	18		228
TOTAL	48.7	43.4	7.9		100.0
RAW CHI SQ = 7.09771 WITH 2 D.F., SIG. = .0288					
MISSING OBSERVATIONS - 836					

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

TABLE 27. E4A1A LEAVES PICKED UP: WILLING TO PAY FOR BY BOOMERS YEAR OF BIRTH BEFORE, AFTER DURING BABY

COUNT COL PCT	BOOMERS			ROW TOTAL
	BORN PRE-BOOM	BOOMERS- '46-'59	BORN IN '60-	
	1.	2.	3.	
E4A1A				
YES	1. 93 53.8	69 44.5	13 37.1	175 48.2
NO	2. 80 46.2	86 55.5	22 62.9	188 51.8
COLUMN TOTAL	173 47.7	155 42.7	35 9.6	363 100.0

RAW CHI SQ = 4.69614 WITH 2 D.F., SIG. = .0956

MISSING OBSERVATIONS - 701

TABLE 28. E3A HOW ARE GRASS CLIPPINGS DISPOSED OF BY COUNTY

COUNT COL PCT	COUNTY			ROW TOTAL
	HENN	RAMSEY	OTHER	
	4.	5.	6.	
E3A				
LEFT ON GROUND	1. 176 45.4	71 44.1	128 49.0	375 46.3
COMPOSTED	2. 56 14.4	39 24.2	67 25.7	162 20.0
GARBAGE	3. 152 39.2	48 29.8	62 23.8	262 32.3
OTHER	4. 4 1.0	3 1.9	4 1.5	11 1.4
COLUMN TOTAL	388 47.9	161 19.9	261 32.2	810 100.0

RAW CHI SQ = 24.84719 WITH 6 D.F., SIG. = .0004

MISSING OBSERVATIONS - 254

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

TABLE 29. E4A HOW ARE LEAVES DISPOSED OF BY COUNTY

COUNT COL PCT	COUNTY			ROW TOTAL
	HENN	RAMSEY	OTHER	
	4.	5.	6.	
E4A				
1. COMPOSTED	110 30.9	68 49.6	87 44.2	265 38.4
2. GARBAGE	241 67.7	67 48.9	106 53.8	414 60.0
3. BOTH	5 1.4	2 1.5	4 2.0	11 1.6
COLUMN TOTAL	356 51.6	137 19.9	197 28.6	690 100.0

RAW CHI SQ = 19.33735 WITH 4 D.F., SIG. = .0007

MISSING OBSERVATIONS - 374

TABLE 30. E2 SUPPORT-OPPOSE MANDATORY RECYCLING LAW BY BOOMERS YEAR OF BIRTH BEFORE, AFTER DURING BABY

COUNT COL PCT	BOOMERS			ROW TOTAL
	BORN PRE-BOOM	BOOMERS- '46-'59	BORN IN '60-	
	1.	2.	3.	
E2				
1. STRONG SUP	243 47.5	175 40.8	26 28.0	444 42.9
2. SLIGHT SUP	202 39.5	163 38.0	44 47.3	409 39.6
3. SLIGHT OPP	45 8.8	57 13.3	20 21.5	122 11.8
4. STRONG OPP	22 4.3	34 7.9	3 3.2	59 5.7
COLUMN TOTAL	512 49.5	429 41.5	93 9.0	1034 100.0

RAW CHI SQ = 28.08951 WITH 6 D.F., SIG. = .0001

MISSING OBSERVATIONS - 30

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

TABLE 31. E5B COUNTY GARBAGE-BURNING PLANS: INFO DESIRED
BY COUNTY

		COUNTY			
COUNT	COL PCT	HENN	RAMSEY	OTHER	ROW TOTAL
		4.	5.	6.	
E5B					
1.		9	3	7	19
MORE THAN		2.7	2.3	3.4	2.8
2.		152	44	88	284
ABOUT RIGH		45.5	33.8	42.7	42.4
3.		173	83	111	367
LESS THAN		51.8	63.8	53.9	54.8
COLUMN		334	130	206	670
TOTAL		49.9	19.4	30.7	100.0

RAW CHI SQ = 5.91526 WITH 4 D.F., SIG. = .2056

MISSING OBSERVATIONS - 394

TABLE 32. E6B PREFERRED MODE OF GARBAGE DISPOSAL: RECYCLING
BY E6C PREFERRED MODE OF GARBAGE DISPOSAL: BURNING

		E6C		
COUNT	COL PCT	YES	NO	ROW TOTAL
		1.	2.	
E6B				
1.		244	473	717
YES		53.0	84.3	70.2
2.		216	88	304
NO		47.0	15.7	29.8
COLUMN		460	561	1021
TOTAL		45.1	54.9	100.0

CORRECTED CHI SQ = 116.70890 1 D.F., SIG. = 0
RAW CHI SQ = 118.19969 1 D.F., SIG. = 0

MISSING OBSERVATIONS - 43

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

**TABLE 33. E7 IMPORTANCE OF WAYS TO LIMIT NEW LANDFILL
BY B2 OWN OR RENT HOUSING UNIT**

	COUNT COL PCT	B2		ROW TOTAL
		OWN	RENT	
		1.	2.	
E7				
1.	473	169	642	
VERY	61.7	64.8	62.5	
IMPORTANT				
2.	262	78	340	
SOMEWHAT	34.2	29.9	33.1	
IMPORTANT				
3.	22	10	32	
NOT VERY	2.9	3.8	3.1	
IMPORTANT				
4.	10	4	14	
NOT	1.3	1.5	1.4	
IMPORTANT				
COLUMN	767	261	1028	
TOTAL	74.6	25.4	100.0	

RAW CHI SQ = 2.02686 WITH 3 D.F., SIG. = .5669

MISSING OBSERVATIONS - 36

**TABLE 34. E8 WILLING TO PAY MORE TO REDUCE NEW LANDFILL
BY AGED AGE COLLAPSED INTO DECADE CATEGORIES**

	COUNT COL PCT	AGED					ROW TOTAL
		20'S	30'S	40'S	50'S	60'S	
		2.	3.	4.	5.	6.	
E8							
1.	184	218	116	77	69	694	
YES	73.0	75.2	69.0	68.8	59.5	68.6	
2.	68	72	52	35	47	318	
NO	27.0	24.8	31.0	31.3	40.5	31.4	
COLUMN	252	290	168	112	116	1012	
TOTAL	24.9	28.7	16.6	11.1	11.5	100.0	

(CONTINUED)

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

TABLE 34. E8 WILLING TO PAY MORE TO REDUCE NEW LANDFILL
BY AGED AGE COLLAPSED INTO DECADE CATEGORIES

		AGED	
E8	COUNT COL PCT	70+'S	ROW
			TOTAL
		7.	
YES	1.	30 40.5	694 68.6
NO	2.	44 59.5	318 31.4
	COLUMN TOTAL	74 7.3	1012 100.0

RAW CHI SQ = 39.62226 WITH 5 D.F., SIG. = .0000

MISSING OBSERVATIONS - 52

TABLE 35. E8 WILLING TO PAY MORE TO REDUCE NEW LANDFILL
BY BOOMERS YEAR OF BIRTH BEFORE, AFTER DURING BABY

		BOOMERS			
E8	COUNT COL PCT	BORN	BOOMERS-	BORN	ROW TOTAL
		PRE-BOOM	'46-'59	IN '60-	
		1.	2.	3.	
YES	1.	310 62.1	328 77.2	58 63.0	696 68.5
NO	2.	189 37.9	97 22.8	34 37.0	320 31.5
	COLUMN TOTAL	499 49.1	425 41.8	92 9.1	1016 100.0

RAW CHI SQ = 25.49962 WITH 2 D.F., SIG. = .0000

MISSING OBSERVATIONS - 48

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

TABLE 36. E8 WILLING TO PAY MORE TO REDUCE NEW LANDFILL
BY INCOME10

		INCOME10				
	COUNT COL PCT	10K OR UNDER 10.	10-20K 20.	20-30K 30.	30-40K 40.	ROW TOTAL
E8						
YES	1.	48 46.2	125 64.8	198 69.5	143 79.0	662 69.7
NO	2.	56 53.8	68 35.2	87 30.5	38 21.0	288 30.3
	COLUMN TOTAL	104 10.9	193 20.3	285 30.0	181 19.0	950 100.0

(CONTINUED)

TABLE 36. E8 WILLING TO PAY MORE TO REDUCE NEW LANDFILL
BY INCOME10

		INCOME10		
	COUNT COL PCT	40-50K 50.	50K+ 60.	ROW TOTAL
E8				
YES	1.	70 78.7	78 79.6	662 69.7
NO	2.	19 21.3	20 20.4	288 30.3
	COLUMN TOTAL	89 9.4	98 10.3	950 100.0

RAW CHI SQ = 45.32017 WITH 6 D.F., SIG. = .0000

MISSING OBSERVATIONS - 114

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

TABLE 37. E8 WILLING TO PAY MORE TO REDUCE NEW LANDFILL BY EDEGREE HIGHEST EDUCATIONAL DEGREE ATTAINED

COUNT COL PCT	EDEGREE					ROW TOTAL
	NO H.S. GRAD 1.	H.S.GRAD DIPLOMA 2.	SOME OR 2 YR COL 3.	BA 4.	GRAD 5.	
E8						
YES	1. 40	275	160	166	50	691
	45.5	63.5	72.4	79.4	84.7	68.4
NO	2. 48	158	61	43	9	319
	54.5	36.5	27.6	20.6	15.3	31.6
COLUMN TOTAL	88 8.7	433 42.9	221 21.9	209 20.7	59 5.8	1010 100.0

RAW CHI SQ = 46.92031 WITH 4 D.F., SIG. = .0000

MISSING OBSERVATIONS - 54

TABLE 38. E10 HOW SERIOUS IS NEED IN USA TO SAVE ENERGY BY COUNTY

COUNT COL PCT	COUNTY			ROW TOTAL
	HENN 4.	RAMSEY 5.	OTHER 6.	
E10				
VERY SERIO	1. 361	146	184	691
	67.5	68.5	59.4	65.3
SOMEWHAT S	2. 157	62	113	332
	29.3	29.1	36.5	31.4
NOT TOO SE	3. 11	4	10	25
	2.1	1.9	3.2	2.4
NOT AT ALL	4. 6	1	3	10
	1.1	.5	1.0	.9
COLUMN TOTAL	535 50.6	213 20.1	310 29.3	1058 100.0

RAW CHI SQ = 8.09549 WITH 6 D.F., SIG. = .2312

MISSING OBSERVATIONS - 6

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

TABLE 39. E10 HOW SERIOUS IS NEED IN USA TO SAVE ENERGY
BY AGES AGE, IN 4 CATEGORIES

COUNT COL PCT	AGES				ROW TOTAL
	18-24	25-38	39-64	65+	
	1.	2.	3.	4.	
E10					
1. VERY SERIOUS	50 53.2	276 63.6	251 67.1	110 72.4	687 65.2
2. SOMEWHAT SERIOUS	42 44.7	147 33.9	105 28.1	38 25.0	332 31.5
3. NOT TOO SERIOUS	2 2.1	8 1.8	12 3.2	3 2.0	25 2.4
4. NOT AT ALL SERIOUS	0 0	3 .7	6 1.6	1 .7	10 .9
COLUMN TOTAL	94 8.9	434 41.2	374 35.5	152 14.4	1054 100.0

RAW CHI SQ = 17.81508 WITH 9 D.F., SIG. = .0374

MISSING OBSERVATIONS - 10

TABLE 40. E11A IS DAYTIME THERMOSTAT SETTING ABOVE OR BELOW 68 DEGREES
BY INCOME10

COUNT COL PCT	INCOME10					ROW TOTAL
	10K OR UNDER 10.	10-20K 20.	20-30K 30.	30-40K 40.	40-50K 50.	
E11A						
1. 68 OR LESS	62 60.8	120 66.3	236 83.1	143 80.3	77 86.5	723 77.3
2. ABOVE 68	40 39.2	61 33.7	48 16.9	35 19.7	12 13.5	212 22.7
COLUMN TOTAL	102 10.9	181 19.4	284 30.4	178 19.0	89 9.5	935 100.0

(CONTINUED)

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

TABLE 40. E11A IS DAYTIME THERMOSTAT SETTING ABOVE OR BELOW 68 DEGREES BY INCOME10

	INCOME10		ROW TOTAL
	COUNT COL PCT	50K+	
		60.	
E11A			
1.	85	723	
68 OR LESS	84.2	77.3	
2.	16	212	
ABOVE 68	15.8	22.7	
COLUMN TOTAL	101 10.8	935 100.0	

RAW CHI SQ = 41.76841 WITH 5 D.F., SIG. = .0000

MISSING OBSERVATIONS - 129

TABLE 41. E11A IS DAYTIME THERMOSTAT SETTING ABOVE OR BELOW 68 DEGREES BY AGES AGE, IN 4 CATEGORIES

	COUNT COL PCT	AGES				ROW TOTAL
		18-24	25-38	39-64	65+	
		1.	2.	3.	4.	
E11A						
1.	65	340	285	77	767	
68 OR LESS	76.5	84.4	78.5	53.5	77.1	
2.	20	63	78	67	228	
ABOVE 68	23.5	15.6	21.5	46.5	22.9	
COLUMN TOTAL	85 8.5	403 40.5	363 36.5	144 14.5	995 100.0	

RAW CHI SQ = 57.98999 WITH 3 D.F., SIG. = .0000

MISSING OBSERVATIONS - 69

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

TABLE 42A. E11A IS DAYTIME THERMOSTAT SETTING ABOVE OR BELOW 68 DEGREES BY INCOME2

CONTROLLING FOR..
 AGES AGE, IN 4 CATEGORIES
 VALUE 1. 18-24

		INCOME2		
COUNT	COL PCT	\$20K OR	OVER	ROW
		LESS	\$20K	
		1.	2.	
E11A				
	1.	27	30	57
68 OR LESS		69.2	83.3	76.0
	2.	12	6	18
ABOVE 68		30.8	16.7	24.0
	COLUMN	39	36	75
	TOTAL	52.0	48.0	100.0

CORRECTED CHI SQ = 1.34121 1 D.F., SIG. = .2468
 RAW CHI SQ = 2.04116 1 D.F., SIG. = .1531

TABLE 42B. E11A IS DAYTIME THERMOSTAT SETTING ABOVE OR BELOW 68 DEGREES BY INCOME2

CONTROLLING FOR..
 AGES AGE, IN 4 CATEGORIES
 VALUE 2. 25-38

		INCOME2		
COUNT	COL PCT	\$20K OR	OVER	ROW
		LESS	\$20K	
		1.	2.	
E11A				
	1.	56	273	329
68 OR LESS		74.7	86.7	84.4
	2.	19	42	61
ABOVE 68		25.3	13.3	15.6
	COLUMN	75	315	390
	TOTAL	19.2	80.8	100.0

CORRECTED CHI SQ = 5.73291 1 D.F., SIG. = .0167
 RAW CHI SQ = 6.61109 1 D.F., SIG. = .0101

SUMMARY OF FINDINGS ON ENERGY AND ENVIRONMENT

TABLE 42C. E11A IS DAYTIME THERMOSTAT SETTING ABOVE OR BELOW 68 DEGREES BY INCOME2

CONTROLLING FOR..
 AGES AGE, IN 4 CATEGORIES
 VALUE 3. 39-64

		INCOME2		
COUNT		\$20K OR	OVER	ROW
COL PCT		LESS	\$20K	TOTAL
		1.	2.	
E11A				
	1.	52	213	265
68 OR LESS		68.4	81.6	78.6
	2.	24	48	72
ABOVE 68		31.6	18.4	21.4
	COLUMN	76	261	337
	TOTAL	22.6	77.4	100.0

CORRECTED CHI SQ = 5.33387 1 D.F., SIG. = .0209
 RAW CHI SQ = 6.09359 1 D.F., SIG. = .0136

TABLE 42D. E11A IS DAYTIME THERMOSTAT SETTING ABOVE OR BELOW 68 DEGREES BY INCOME2

CONTROLLING FOR..
 AGES AGE, IN 4 CATEGORIES
 VALUE 4. 65+

		INCOME2		
COUNT		\$20K OR	OVER	ROW
COL PCT		LESS	\$20K	TOTAL
		1.	2.	
E11A				
	1.	45	24	69
68 OR LESS		49.5	61.5	53.1
	2.	46	15	61
ABOVE 68		50.5	38.5	46.9
	COLUMN	91	39	130
	TOTAL	70.0	30.0	100.0

CORRECTED CHI SQ = 1.15308 1 D.F., SIG. = .2829
 RAW CHI SQ = 1.60167 1 D.F., SIG. = .2057

MISSING OBSERVATIONS - 132